

2007 Index IEEE Electron Device Letters Vol. 28

This index covers all technical items — papers, correspondence, reviews, etc. — that appeared in this periodical during 2007, and items from previous years that were commented upon or corrected in 2007. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

AUTHOR INDEX

A

- Abdi, Y.,** see Jamei, M., *EDL March 2007* 207-210
Abe, K., see Ofuji, M., *EDL April 2007* 273-275
Abelein, U., Born, M., Bhuwalka, K. K., Schindler, M., Schlosser, M., Sulima, T., and Eisele, I., Improved Reliability by Reduction of Hot-Electron Damage in the Vertical Impact-Ionization MOSFET (I-MOS); *EDL Jan. 2007* 65-67
Aberg, I., see Gomez, L., *EDL April 2007* 285-287
Abrokwah, J., see Rajagopalan, K., *EDL Feb. 2007* 100-102
Abrokwah, J., see Hill, R. J. W., *EDL Dec. 2007* 1080-1082
Absil, P., see Lousberg, G. P., *EDL Feb. 2007* 123-125
Absil, P. P., see Veloso, A., *EDL Nov. 2007* 980-983
Absil, P., see Yu, H. Y., *EDL Feb. 2007* 154-156
Absil, P., see Shickova, A., *EDL March 2007* 242-244
Absil, P., see Chang, S. Z., *EDL July 2007* 634-636
Absil, P., see Yu, H. Y., *EDL July 2007* 656-658
Absil, P., see Yu, H. Y., *EDL Nov. 2007* 957-959
Adelmann, C., see Yu, H. Y., *EDL July 2007* 656-658
Adelmann, C., see Yu, H. Y., *EDL Nov. 2007* 957-959
Adelmann, C., see Veloso, A., *EDL Nov. 2007* 980-983
Adivarahan, V., see Koudymov, A., *EDL Jan. 2007* 5-7
Adivarahan, V., see Tipirneni, N., *EDL Sept. 2007* 784-786
Adivarahan, V., Gaevski, M., Koudymov, A., Yang, J., Simin, G., and Khan, M. A., Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET; *EDL March 2007* 192-194
Agarwal, A., Fatima, H., Haney, S., and Ryu, S.-H., A New Degradation Mechanism in High-Voltage SiC Power MOSFETs; *EDL July 2007* 587-589
Agarwal, P., see Hurkx, G. A. M., *EDL April 2007* 312-314
Ahlgren, D., see Kim, D., *EDL June 2007* 520-522
Ahn, T. K., see Jeong, J. K., *EDL May 2007* 389-391
Akbar, M. S., Choi, C. H., Rhee, S. J., Krishnan, S. A., Kang, C. Y., Zhang, M. H., Lee, T., Ok, I. J., Zhu, F., Kim, H.-S., and Lee, J. C., A Novel Approach in Separating the Roles of Electrons and Holes in Causing Degradation in Hf-Based MOSFET Devices by Using Stress-Anneal Technique; *EDL Feb. 2007* 132-134
Alam, M. A., see Pimparkar, N., *EDL Feb. 2007* 157-160
Alam, M. A., see Pimparkar, N., *EDL July 2007* 593-595
Alexandrov, P., see Zhang, Y., *EDL May 2007* 404-407
Ali, M. Y., see Song, G., *EDL Jan. 2007* 71-73
Allerstam, F., see Lee, H.-S., *EDL Nov. 2007* 1007-1009
Alt, A. R., see Sun, H. F., *EDL May 2007* 350-353
Ang, K.-W., Chui, K.-J., Madan, A., Wong, L.-Y., Tung, C.-H., Balasubramanian, N., Li, M.-F., Samudra, G. S., and Yeo, Y.-C., Strained Thin-Body p-MOSFET With Condensed Silicon-Germanium Source/Drain for Enhanced Drive Current Performance; *EDL June 2007* 509-512
Ang, K.-W., Chui, K.-J., Tung, C.-H., Balasubramanian, N., Li, M.-F., Samudra, G. S., and Yeo, Y.-C., Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner; *EDL April 2007* 301-304
Ang, K.-W., Tung, C.-H., Balasubramanian, N., Samudra, G. S., and Yeo, Y.-C., Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure; *EDL July 2007* 609-612

Ang, K.-W., Wan, C., Balasubramanian, N., Samudra, G. S., and Yeo, Y.-C., Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon ($\text{Si}_{1-y}\text{C}_y$) Source/Drain Stressors and Its Orientation Dependence; *EDL Nov. 2007* 996-999

- Anthony, J. E.,** see Park, S. K., *EDL Oct. 2007* 877-879
Antoniadis, D. A., see Ritenour, A., *EDL Aug. 2007* 746-749
Antoniadis, D. A., see Yu, H. P., *EDL Dec. 2007* 1098-1101
Aoulache, M., Houssa, M., Deweerdt, W., Trojman, L., Conard, T., Maes, J. W., De Gendt, S., Groeseneken, G., Maes, H., and Heyns, M. M., Nitrogen Incorporation in $\text{HfSiO}(\text{N})/\text{TaN}$ Gate Stacks: Impact on Performances and NBTI; *EDL July 2007* 613-615
Appenzeller, J., see Zhang, M., *EDL March 2007* 223-225
Arezoo Emadi, T., see Vukusic, J., *EDL May 2007* 340-342
Armstrong, G. A., see Kranti, A., *EDL Feb. 2007* 139-141
Arpatzianis, N., see Hatzopoulos, A. T., *EDL Sept. 2007* 803-805
Aseenov, A., see Hill, R. J. W., *EDL Dec. 2007* 1080-1082
Augendre, E., see Lousberg, G. P., *EDL Feb. 2007* 123-125
Augendre, E., see Severi, S., *EDL March 2007* 198-200
Aumer, M. E., see Jessen, G. H., *EDL May 2007* 354-356
Avcı, U., see Lin, H., *EDL June 2007* 506-508
Axisa, F., see Brosteaux, D., *EDL July 2007* 552-554

B

- Babic, D.,** see Felbinger, J. G., *EDL Nov. 2007* 948-950
Baek, T. J., see Lim, B. O., *EDL July 2007* 546-548
Bai, W., and Kwong, D.-L., Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO_2 Gate Dielectric on Nitrided Germanium; *EDL May 2007* 369-372
Bakeroot, B., Doutreligne, J., Vanmeerbeek, P., and Moens, P., A New Lateral-IGBT Structure With a Wider Safe Operating Area; *EDL May 2007* 416-418
Balaji, S., and Karmalkar, S., Effects of Oxide-Fixed Charge on the Breakdown Voltage of Superjunction Devices; *EDL March 2007* 229-231
Balasubramanian, N., see Fang, W. W., *EDL March 2007* 211-213
Balasubramanian, N., see Ang, K.-W., *EDL April 2007* 301-304
Balasubramanian, N., see Ang, K.-W., *EDL June 2007* 509-512
Balasubramanian, N., see Singh, N., *EDL July 2007* 558-561
Balasubramanian, N., see Ang, K.-W., *EDL July 2007* 609-612
Balasubramanian, N., see Rustagi, S. C., *EDL Oct. 2007* 909-912
Balasubramanian, N., see Tan, K.-M., *EDL Oct. 2007* 905-908
Balasubramanian, N., see Rustagi, S. C., *EDL Nov. 2007* 1021-1024
Balasubramanian, N., see Ang, K.-W., *EDL Nov. 2007* 996-999
Balasubramanian, N., see Liow, T.-Y., *EDL Nov. 2007* 1014-1017
Baldi, A., see Garcia-Canton, J., *EDL Jan. 2007* 27-29
Banerjee, S., see Oh, J., *EDL Nov. 2007* 1044-1046
Banerjee, S. K., see Joshi, S., *EDL April 2007* 308-311
Banerjee, S. K., see Sarkar, J., *EDL May 2007* 449-451
Banerjee, S. K., see Shahjerdi, D., *EDL Sept. 2007* 793-796
Banerjee, S. K., see Zaman, R. J., *EDL Oct. 2007* 916-918
Barsky, M., see Mei, X. B., *EDL June 2007* 470-472
Baus, M., see Lemme, M. C., *EDL April 2007* 282-284
Beaucarne, G., see Carnel, L., *EDL Oct. 2007* 899-901
Beer, C. S., see Nicholas, G., *EDL Sept. 2007* 825-827
Bennett, J., see Huang, Y.-T., *EDL Sept. 2007* 815-817
Benvenuti, A., see Ventrice, D., *EDL Nov. 2007* 973-975
Bera, L. K., see Fang, W. W., *EDL March 2007* 211-213
Bersuker, G., see Heh, D., *EDL March 2007* 245-247
Bersuker, G., see Heh, D., *EDL Aug. 2007* 734-736
Beug, M. F., see Duane, R., *EDL May 2007* 440-442
Bhuwalka, K. K., see Abelein, U., *EDL Jan. 2007* 65-67
Biesemans, S., see Lousberg, G. P., *EDL Feb. 2007* 123-125
Biesemans, S., see Yu, H. Y., *EDL Feb. 2007* 154-156
Biesemans, S., see Masahara, M., *EDL March 2007* 217-219
Biesemans, S., see Wang, X. P., *EDL April 2007* 258-260
Biesemans, S., see Ragnarsson, L.-A., *EDL June 2007* 486-488
Biesemans, S., see Chang, S. Z., *EDL July 2007* 634-636
Biesemans, S., see Collaert, N., *EDL July 2007* 646-648
Biesemans, S., see Yu, H. Y., *EDL July 2007* 656-658
Biesemans, S., see Yu, H. Y., *EDL Nov. 2007* 957-959

- Biesemans, S.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
Birnstock, J., *see* Chaji, G. R., *EDL Dec. 2007* 1108-1110
Biswas, N., *see* Lee, B., *EDL July 2007* 555-557
Blekker, K., *see* Do, Q.-T., *EDL Aug. 2007* 682-684
Blochwitz-Nimoth, J., *see* Chaji, G. R., *EDL Dec. 2007* 1108-1110
Boero, M., *see* Umezawa, N., *EDL May 2007* 363-365
Bolognesi, C. R., *see* Sun, H. F., *EDL May 2007* 350-353
Bolognesi, C. R., *see* Zhou, W., *EDL July 2007* 539-542
Bolognesi, C. R., *see* Liu, H. G., *EDL Oct. 2007* 852-855
Born, M., *see* Abelein, U., *EDL Jan. 2007* 65-67
Boukhanoufa, A., *see* Pichon, L., *EDL Aug. 2007* 716-718
Brassard, D., Ouellet, L., and El Khakani, M. A., Room-Temperature Deposited Titanium Silicate Thin Films for MIM Capacitor Applications; *EDL April 2007* 261-263
Brostiaux, D., Axisa, F., Gonzalez, M., and Vanfleteren, J., Design and Fabrication of Elastic Interconnections for Stretchable Electronic Circuits; *EDL July 2007* 552-554
Brown, D., *see* Lian, C., *EDL Jan. 2007* 8-10
Brown, D., *see* Chu, R., *EDL Sept. 2007* 781-783
Brown, G. A., *see* Wang, Y., *EDL Jan. 2007* 51-53
Brown, G. A., *see* Wang, Y., *EDL April 2007* 279-281
Brown, G. A., *see* Wang, Y., *EDL July 2007* 640-642
Brus, S., *see* Veloso, A., *EDL Nov. 2007* 980-983
Brus, S., *see* Yu, H. Y., *EDL Nov. 2007* 957-959
Bryllert, T., *see* Vukusic, J., *EDL May 2007* 340-342
Buddharaju, K. D., *see* Rustagi, S. C., *EDL Nov. 2007* 1021-1024
Budharaju, K. D., *see* Singh, N., *EDL July 2007* 558-561

C

- Cai, Y.**, *see* Li, Y., *EDL July 2007* 622-624
Cai, Y., Cheng, Z., Yang, Z., Tang, C. W., Lau, K. M., and Chen, K. J., High-Temperature Operation of AlGaN/GaN HEMTs Direct-Coupled FET Logic (DCFL) Integrated Circuits; *EDL May 2007* 328-331
Callegari, A., *see* Sun, Y., *EDL June 2007* 473-475
Cao, Q., *see* Pimparkar, N., *EDL Feb. 2007* 157-160
Capasso, C., *see* Winstead, B., *EDL Aug. 2007* 719-721
Carin, R., *see* Guo, W., *EDL April 2007* 288-291
Carnel, L., Gordon, I., Van Gestel, D., Vanhaeren, D., Eyben, P., Beaucarne, G., and Poortmans, J., Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells; *EDL Oct. 2007* 899-901
Cayrefoureq, I., *see* Collaert, N., *EDL July 2007* 646-648
Celler, G. K., *see* Yuan, H.-C., *EDL July 2007* 590-592
Chae, Y., Choe, K., Kim, B., and Han, G., Sensitivity Controllable CMOS Image Sensor Pixel Using Control Gate Overlaid on Photodiode; *EDL June 2007* 495-498
Chaji, G. R., Ng, C., Nathan, A., Werner, A., Birnstock, J., Schneider, O., and Blochwitz-Nimoth, J., Electrical Compensation of OLED Luminance Degradation; *EDL Dec. 2007* 1108-1110
Chan, D. S. H., *see* Song, Y., *EDL Feb. 2007* 107-110
Chan, D. S. H., *see* Jiang, Y., *EDL July 2007* 603-605
Chan, L., *see* Wong, H.-S., *EDL Aug. 2007* 703-705
Chan, L., *see* Wong, H.-S., *EDL Dec. 2007* 1102-1104
Chan, Y.-J., *see* Lin, H.-T., *EDL July 2007* 569-571
Chan, Y.-J., *see* Lin, H.-T., *EDL Nov. 2007* 951-953
Chandra, M. V. S., *see* Felbinger, J. G., *EDL Nov. 2007* 948-950
Chang, C. Y., *see* Chu, L. H., *EDL Feb. 2007* 82-85
Chang, C. Y., *see* Hsu, H.-T., Chang, E. Y., Kuo, C.-I., Datta, S., Radosavljevic, M., Miyamoto, Y., and Huang, G.-W., Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications; *EDL Oct. 2007* 856-858
Chang, C.-L., *see* Chang, C.-W., *EDL Nov. 2007* 993-995
Chang, C.-P., and Wu, Y. C. S., Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation; *EDL Nov. 2007* 990-992
Chang, C.-T., *see* Shiu, J.-Y., *EDL June 2007* 476-478
Chang, C.-W., Deng, C.-K., Chang, H.-R., Chang, C.-L., and Lei, T.-F., A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels; *EDL Nov. 2007* 993-995
Chang, C.-Y., *see* Lien, Y.-C., *EDL Feb. 2007* 93-95
Chang, C.-Y., *see* Chen, S.-C., *EDL Sept. 2007* 809-811
Chang, E. Y., *see* Chu, L. H., *EDL Feb. 2007* 82-85

- Chang, E. Y.**, *see* Lien, Y.-C., *EDL Feb. 2007* 93-95
Chang, E. Y., *see* Shiu, J.-Y., *EDL June 2007* 476-478
Chang, E. Y., *see* Chang, C. Y., *EDL Oct. 2007* 856-858
Chang, H.-R., *see* Chang, C.-W., *EDL Nov. 2007* 993-995
Chang, I. Y., *see* Hsu, H., *EDL Nov. 2007* 964-966
Chang, J.-W., *see* Lee, J.-W., *EDL May 2007* 379-382
Chang, K. M., Lin, G. M., Chen, C. G., and Hsieh, M. F., A Novel Four-Mask-Step Low-Temperature Polysilicon Thin-Film Transistor With Self-Aligned Raised Source/Drain (SARSD); *EDL Jan. 2007* 39-41
Chang, K. M., Lin, G. M., and Yang, G. L., A Novel Low-Temperature Polysilicon Thin-Film Transistors With a Self-Aligned Gate and Raised Source/Drain Formed by the Damascene Process; *EDL Sept. 2007* 806-808
Chang, L., *see* Chu, L. H., *EDL Feb. 2007* 82-85
Chang, L., *see* Su, K.-H., *EDL Feb. 2007* 96-99
Chang, M. H., *see* Zhang, J. F., *EDL April 2007* 298-300
Chang, M., Jo, M., Park, H., Hwang, H., Lee, B.H., and Choi, R., Effect of F_2 Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric; *EDL Jan. 2007* 21-23
Chang, S. J., *see* Wang, Y. P., *EDL Jan. 2007* 36-38
Chang, S. Z., *see* Yu, H. Y., *EDL July 2007* 656-658
Chang, S. Z., *see* Yu, H. Y., *EDL Nov. 2007* 957-959
Chang, S. Z., *see* Veloso, A., *EDL Nov. 2007* 980-983
Chang, S. Z., Yu, H. Y., Veloso, A., Lauwers, A., Delabie, A., Everaert, J.-L., Kerner, C., Absil, P., Hoffmann, T., and Biesemans, S., The Application of an Ultrathin ALD HfSiON Cap Layer on SiON Dielectrics for Ni-FUSI CMOS Technology Targeting at Low-Power Applications; *EDL July 2007* 634-636
Chang, T.-C., *see* Tsai, C.-T., *EDL July 2007* 584-586
Chang, T.-C., *see* Chen, S.-C., *EDL Sept. 2007* 809-811
Chang, V. S., *see* Yen, F. Y., *EDL March 2007* 201-203
Chang, V. S., *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
Chang, V. S., *see* Yu, H. Y., *EDL July 2007* 656-658
Chang, Y.-W., *see* Liao, Y.-Y., *EDL Sept. 2007* 828-830
Chang-Liao, K.-S., *see* Lu, C.-Y., *EDL May 2007* 432-435
Chao, D. Y.-S., *see* Wang, J.-S., *EDL Nov. 2007* 1040-1043
Chao, D.-S., Chen, Y.-C., Chen, F., Chen, M.-J., Yen, P. H., Lee, C.-M., Chen, W.-S., Lien, C., Kao, M.-J., and Tsai, M.-J., Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure; *EDL Oct. 2007* 871-873
Chao, T.-S., *see* Ma, M.-W., *EDL March 2007* 238-241
Chao, T.-S., *see* Wu, W.-C., *EDL March 2007* 214-216
Chao, T.-S., *see* Lin, Y.-H., *EDL April 2007* 267-269
Chau, R., *see* Datta, S., *EDL Aug. 2007* 685-687
Chen, B.-T., *see* Tsai, C.-C., *EDL July 2007* 599-602
Chen, C., *see* Lin, Y.-T., *EDL Sept. 2007* 790-792
Chen, C. C., *see* Yen, F. Y., *EDL March 2007* 201-203
Chen, C. G., *see* Chang, K. M., *EDL Jan. 2007* 39-41
Chen, C.-Y., Lee, J.-W., Lee, P.-H., Chen, W.-C., Lin, H.-Y., Yeh, K.-L., Ma, M.-W., Wang, S.-D., and Lei, T.-F., A Reliability Model for Low-Temperature Polycrystalline Silicon Thin-Film Transistors; *EDL May 2007* 392-394
Chen, F., *see* Chao, D.-S., *EDL Oct. 2007* 871-873
Chen, G., *see* Yang, C., *EDL July 2007* 652-655
Chen, H., *see* Xu, C., *EDL Nov. 2007* 942-944
Chen, H.-H., *see* Tsai, C.-C., *EDL July 2007* 599-602
Chen, H.-H., *see* Tsai, C.-C., *EDL Nov. 2007* 1010-1013
Chen, H.-P., *see* Chen, M.-J., *EDL Feb. 2007* 177-179
Chen, H.-T., Hsieh, S.-I., Lin, C.-J., and King, Y.-C., Embedded TFT NAND-Type Nonvolatile Memory in Panel; *EDL June 2007* 499-501
Chen, J. F., Lee, J. R., Wu, K.-M., Huang, T.-Y., Liu, C. M., and Hsu, S. L., OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors; *EDL Nov. 2007* 1033-1035
Chen, J.-F., *see* Su, K.-H., *EDL Feb. 2007* 96-99
Chen, J.-H., *see* Wu, W.-C., *EDL March 2007* 214-216
Chen, J.-R., *see* Lin, H.-T., *EDL Nov. 2007* 951-953
Chen, J., Wang, X. P., Li, M.-F., Lee, S. J., Yu, M. B., Shen, C., and Yeo, Y.-C., NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric; *EDL Oct. 2007* 862-864
Chen, K. J., *see* Song, D., *EDL March 2007* 189-191
Chen, K. J., *see* Cai, Y., *EDL May 2007* 328-331
Chen, K.-C., *see* Liao, Y.-Y., *EDL Sept. 2007* 828-830
Chen, L.-W., *see* Lin, C.-T., *EDL Feb. 2007* 111-113
Chen, M.-J., *see* Hsieh, C.-Y., *EDL Sept. 2007* 818-820
Chen, M.-J., *see* Chao, D.-S., *EDL Oct. 2007* 871-873
Chen, M.-J., *see* Lin, D.-W., *EDL Dec. 2007* 1132-1134

- Chen, M.-J.**, Yan, S.-G., Chen, R.-T., Hsieh, C.-Y., Huang, P.-W., and Chen, H.-P., Temperature-Oriented Experiment and Simulation as Corroborating Evidence of MOSFET Backscattering Theory; *EDL Feb. 2007* 177-179
- Chen, M.-S.**, *see* Lin, C.-T., *EDL Feb. 2007* 111-113
- Chen, P. S.**, *see* Chen, Y. H., *EDL Dec. 2007* 1111-1113
- Chen, R.-T.**, *see* Chen, M.-J., *EDL Feb. 2007* 177-179
- Chen, S.**, *see* Feng, J., *EDL July 2007* 637-639
- Chen, S. C.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Chen, S. C.**, *see* Wu, C. H., *EDL April 2007* 292-294
- Chen, S. H.**, *see* Chu, L. H., *EDL Feb. 2007* 82-85
- Chen, S.-C.**, Chang, T.-C., Liu, P.-T., Wu, Y.-C., Lin, P.-S., Tseng, B.-H., Shy, J.-H., Sze, S. M., Chang, C.-Y., and Lien, C.-H., A Novel Nanowire Channel Poly-Si TFT Functioning as Transistor and Nonvolatile SONOS Memory; *EDL Sept. 2007* 809-811
- Chen, S.-H.**, *see* Lien, Y.-C., *EDL Feb. 2007* 93-95
- Chen, S.-H.**, Wang, S.-Y., Hsieh, R.-J., and Chyi, J.-I., InGaAsSb/InP Double Heterojunction Bipolar Transistors Grown by Solid-Source Molecular Beam Epitaxy; *EDL Aug. 2007* 679-681
- Chen, W. J.**, *see* Yang, H. J., *EDL Oct. 2007* 913-915
- Chen, W. M.**, *see* Cheng, C. Y., *EDL May 2007* 408-411
- Chen, W. P.-N.**, *see* Wang, J.-S., *EDL Nov. 2007* 1040-1043
- Chen, W.-C.**, *see* Chen, C.-Y., *EDL May 2007* 392-394
- Chen, W.-S.**, *see* Chao, D.-S., *EDL Oct. 2007* 871-873
- Chen, Y.**, *see* Fu, Y., *EDL Feb. 2007* 174-176
- Chen, Y. H.**, Hwang, J. D., Kung, C. Y., Chen, P. S., Wei, C. S., Wu, C. K., and Liu, J. C., Improving the Performance of SiGe Metal-Semiconductor-Metal Photodetectors by Using an Amorphous Silicon Passivation Layer; *EDL Dec. 2007* 1111-1113
- Chen, Y.-C.**, *see* Lin, C.-L., *EDL Feb. 2007* 129-131
- Chen, Y.-C.**, *see* Liu, P.-T., *EDL May 2007* 401-403
- Chen, Y.-C.**, *see* Chao, D.-S., *EDL Oct. 2007* 871-873
- Chen, Y.-Y.**, and Chien, C.-H., Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics; *EDL Aug. 2007* 700-702
- Cheng, C. F.**, *see* Yang, H. J., *EDL Oct. 2007* 913-915
- Cheng, C. F.**, Wu, C. H., Su, N. C., Wang, S. J., McAlister, S. P., and Chin, A., HfLaON n-MOSFETs Using a Low Work Function HfSi_x Gate; *EDL Dec. 2007* 1092-1094
- Cheng, C. H.**, *see* Chiang, K. C., *EDL March 2007* 235-237
- Cheng, C. H.**, *see* Chiang, K. C., *EDL Aug. 2007* 694-696
- Cheng, C. H.**, Pan, H. C., Yang, H. J., Hsiao, C. N., Chou, C. P., McAlister, S. P., and Chin, A., Improved High-Temperature Leakage in High-Density MIM Capacitors by Using a TiLaO Dielectric and an Ir Electrode; *EDL Dec. 2007* 1095-1097
- Cheng, C. Y.**, Fang, Y. K., Hsieh, J. C., Hsia, H., Sheu, Y. M., Lu, W. T., Chen, W. M., and Lin, S. S., Investigation and Localization of the SiGe Source/Drain (S/D) Strain-Induced Defects in PMOSFET With 45-nm CMOS Technology; *EDL May 2007* 408-411
- Cheng, H.-C.**, *see* Tsai, C.-C., *EDL July 2007* 599-602
- Cheng, H.-C.**, *see* Tsai, C.-C., *EDL Nov. 2007* 1010-1013
- Cheng, I.-C.**, *see* Kattamis, A. Z., *EDL July 2007* 606-608
- Cheng, K.-Y.**, *see* Lai, H.-C., *EDL Sept. 2007* 837-839
- Cheng, L.-W.**, *see* Lin, C.-T., *EDL Feb. 2007* 111-113
- Cheng, L.-W.**, *see* Lin, C.-T., *EDL May 2007* 376-378
- Cheng, L.-W.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Cheng, L.-W.**, *see* Lin, C.-T., *EDL Sept. 2007* 831-833
- Cheng, M.-L.**, *see* Lin, D.-W., *EDL Dec. 2007* 1132-1134
- Cheng, O.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Cheng, X.**, *see* Fu, Y., *EDL Feb. 2007* 174-176
- Cheng, Z.**, *see* Song, D., *EDL March 2007* 189-191
- Cheng, Z.**, *see* Cai, Y., *EDL May 2007* 328-331
- Cherenack, K. H.**, *see* Kattamis, A. Z., *EDL July 2007* 606-608
- Cherenack, K. H.**, Kattamis, A. Z., Hekmatshao, B., Sturm, J. C., and Wagner, S., Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic; *EDL Nov. 2007* 1004-1006
- Cheung, K. P.**, *see* Wang, Y., *EDL April 2007* 279-281
- Cheung, K. P.**, *see* Wang, Y., *EDL Jan. 2007* 51-53
- Cheung, K. P.**, *see* Wang, Y., *EDL July 2007* 640-642
- Chew, H.G.**, *see* Yu, H. P., *EDL Dec. 2007* 1098-1101
- Chi, D. Z.**, *see* Lee, R. T. P., *EDL Feb. 2007* 164-167
- Chi, D. Z.**, *see* Yu, H. P., *EDL Dec. 2007* 1098-1101
- Chi, S.**, *see* Liu, P.-T., *EDL May 2007* 401-403
- Chi, T.-W.**, *see* Su, K.-H., *EDL Feb. 2007* 96-99
- Chi, Y.**, *see* Huang, F., *EDL Nov. 2007* 1025-1028
- Chiang, K. C.**, Cheng, C. H., Jhou, K. Y., Pan, H. C., Hsiao, C. N., Chou, C. P., McAlister, S. P., Chin, A., and Hwang, H. L., Use of a High-Work-Function Ni Electrode to Improve the Stress Reliability of Analog SrTiO₃ Metal-Insulator-Metal Capacitors; *EDL Aug. 2007* 694-696
- Chiang, K. C.**, Cheng, C. H., Pan, H. C., Hsiao, C. N., Chou, C. P., Chin, A., and Hwang, H. L., High-Temperature Leakage Improvement in Metal-Insulator-Metal Capacitors by Work-Function Tuning; *EDL March 2007* 235-237
- Chiang, S.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Chien, C.**, *see* Lai, S., *EDL July 2007* 643-645
- Chien, C.-H.**, *see* Lin, Y.-H., *EDL April 2007* 267-269
- Chien, C.-H.**, *see* Chen, Y.-Y., *EDL Aug. 2007* 700-702
- Chien, C.-H.**, *see* Yang, M.-J., *EDL Oct. 2007* 902-904
- Chikyow, T.**, *see* Umezawa, N., *EDL May 2007* 363-365
- Chin, A.**, *see* Chiang, K. C., *EDL March 2007* 235-237
- Chin, A.**, *see* Wang, X. P., *EDL April 2007* 258-260
- Chin, A.**, *see* Wu, C. H., *EDL April 2007* 292-294
- Chin, A.**, *see* Chiang, K. C., *EDL Aug. 2007* 694-696
- Chin, A.**, *see* Yang, H. J., *EDL Oct. 2007* 913-915
- Chin, A.**, *see* Cheng, C. H., *EDL Dec. 2007* 1095-1097
- Chin, A.**, *see* Cheng, C. F., *EDL Dec. 2007* 1092-1094
- Chin, T. P.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Chiou, Y.**, *see* Lai, S., *EDL July 2007* 643-645
- Chiou, Y. Z.**, Lin, Y. C., and Wang, C. K., AlGaN Photodetectors Prepared on Si Substrates; *EDL April 2007* 264-266
- Chiu, F.-C.**, *see* Liu, C.-H., *EDL Jan. 2007* 62-64
- Chiu, S.-C.**, *see* Yang, M.-J., *EDL Oct. 2007* 902-904
- Cho, B. J.**, *see* Zang, H., *EDL Dec. 2007* 1117-1119
- Cho, B.-J.**, *see* Maji, D., *EDL Aug. 2007* 731-733
- Cho, C.**, *see* Kim, D., *EDL June 2007* 520-522
- Cho, C.**, *see* Kim, D., *EDL July 2007* 616-618
- Cho, H.-J.**, *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
- Cho, H.-J.**, *see* Yu, H. Y., *EDL July 2007* 656-658
- Cho, K.**, *see* Kim, H., *EDL Jan. 2007* 42-44
- Cho, K. H.**, Suk, S. D., Yeoh, Y. Y., Li, M., Yeo, K. H., Kim, D.-W., Park, D., Lee, W.-S., Jung, Y. C., Hong, B. H., and Hwang, S. W., Temperature-Dependent Characteristics of Cylindrical Gate-All-Around Twin Silicon Nanowire MOSFETs (TSNWFETs); *EDL Dec. 2007* 1129-1131
- Cho, W.-S.**, Lee, H.-J., Lee, Y.-D., Park, J.-H., Kim, J.-K., Lee, Y.-H., and Ju, B. K., Carbon Nanotube-Based Triode Field Emission Lamps Using Metal Meshes With Spacers; *EDL May 2007* 386-388
- Choe, K.**, *see* Chae, Y., *EDL June 2007* 495-498
- Choi, C. H.**, *see* Akbar, M. S., *EDL Feb. 2007* 132-134
- Choi, L. J.**, Van Huylenbroeck, S., Piontek, A., Sibaja-Hernandez, A., Kunnen, E., Meunier-Beillard, P., van Noort, W. D., Hijzen, E., and Decoutere, S., On the Use of a SiGe Spike in the Emitter to Improve the $f_T \times V_{BV,CEO}$ Product of High-Speed SiGe HBTs; *EDL April 2007* 270-272
- Choi, R.**, *see* Chang, M., *EDL Jan. 2007* 21-23
- Choi, R.**, *see* Wang, Y., *EDL Jan. 2007* 51-53
- Choi, R.**, *see* Heh, D., *EDL March 2007* 245-247
- Choi, R.**, *see* Wang, Y., *EDL April 2007* 279-281
- Choi, R.**, *see* Wang, Y., *EDL July 2007* 640-642
- Choi, R.**, *see* Heh, D., *EDL Aug. 2007* 734-736
- Choi, S.**, *see* Kim, M., *EDL Nov. 2007* 967-969
- Choi, W. K.**, *see* Yu, H. P., *EDL Dec. 2007* 1098-1101
- Choi, W. Y.**, Park, B.-G., Lee, J. D., and Liu, T.-J. K., Tunneling Field-Effect Transistors (TFETs) With Subthreshold Swing (SS) Less Than 60 mV/dec; *EDL Aug. 2007* 743-745
- Choi, Y.-K.**, *see* Han, J.-W., *EDL July 2007* 625-627
- Chou, C. P.**, *see* Chiang, K. C., *EDL March 2007* 235-237
- Chou, C. P.**, *see* Chiang, K. C., *EDL Aug. 2007* 694-696
- Chou, C. P.**, *see* Cheng, C. H., *EDL Dec. 2007* 1095-1097
- Chou, T. H.**, *see* Lai, C.-M., *EDL Feb. 2007* 142-144
- Chou, T.-H.**, *see* Lin, Y.-H., *EDL April 2007* 267-269
- Chow, L. L. W.**, Volakis, J. L., Saitou, K., and Kurabayashi, K., Lifetime Extension of RF MEMS Direct Contact Switches in Hot Switching Operations by Ball Grid Array Dimple Design; *EDL June 2007* 479-481
- Chu, J.-T.**, *see* Lu, T.-C., *EDL Oct. 2007* 884-886
- Chu, L. H.**, Chang, E. Y., Chang, L., Wu, Y. H., Chen, S. H., Hsu, H. T., Lee, T. L., Lien, Y. C., and Chang, C. Y., Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT; *EDL Feb. 2007* 82-85
- Chu, L.-H.**, *see* Lien, Y.-C., *EDL Feb. 2007* 93-95
- Chu, R.**, *see* Poblenz, C., *EDL Nov. 2007* 945-947

- Chu, R.**, Suh, C. S., Wong, M. H., Fichtenbaum, N., Brown, D., McCarthy, L., Keller, S., Wu, F., Speck, J. S., and Mishra, U. K., Impact of CF₄ Plasma Treatment on GaN; *EDL Sept. 2007* 781-783
- Chua, K. T.**, *see* Loh, W. Y., *EDL Nov. 2007* 984-986
- Chui, K.-J.**, *see* Ang, K.-W., *EDL April 2007* 301-304
- Chui, K.-J.**, *see* Ang, K.-W., *EDL June 2007* 509-512
- Chung, H. K.**, *see* Jeong, J. K., *EDL May 2007* 389-391
- Chung, T. M.**, *see* Simoen, E., *EDL Oct. 2007* 919-921
- Chi, J.-L.**, *see* Chen, S.-H., *EDL Aug. 2007* 679-681
- Claeys, C.**, *see* Guo, W., *EDL April 2007* 288-291
- Claeys, C.**, *see* Simoen, E., *EDL Oct. 2007* 919-921
- Claeys, C.**, *see* Simoen, E., *EDL Nov. 2007* 987-989
- Clark, W. F.**, *see* Erturk, M., *EDL Sept. 2007* 812-814
- Clavelier, L.**, *see* Mayer, F., *EDL July 2007* 619-621
- Collaert, N.**, *see* Kapila, G., *EDL March 2007* 232-234
- Collaert, N.**, *see* Kilchytska, V., *EDL May 2007* 419-421
- Collaert, N.**, *see* Rudenko, T., *EDL Sept. 2007* 834-836
- Collaert, N.**, Rooyackers, R., De Keersgieter, A., Leyns, F. E., Cayrefourcq, I., Ghyselen, B., Loo, R., Jurczak, M., and Biesemans, S., Stress Hybridization for Multigate Devices Fabricated on Supercritical Strained-SOI (SC-SSOI); *EDL July 2007* 646-648
- Compagnoni, C. M.**, Spinelli, A. S., and Lacaita, A. L., Experimental Study of Data Retention in Nitride Memories by Temperature and Field Acceleration; *EDL July 2007* 628-630
- Conard, T.**, *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
- Conard, T.**, *see* Aoulaiche, M., *EDL July 2007* 613-615
- Cooper, J. A.**, *see* Sui, Y., *EDL Aug. 2007* 728-730
- Cooper, S.**, *see* Yu, C., *EDL Jan. 2007* 45-47
- Cordier, C.**, *see* Pichon, L., *EDL Aug. 2007* 716-718
- Cornu-Frûleux, F.**, Penaud, J., Dubois, E., Coronel, P., Larrieu, G., and Skotnicki, T., Spacer-First Damascene-Gate FinFET Architecture Featuring Stringer-Free Integration; *EDL June 2007* 523-526
- Coronel, P.**, *see* Cornu-Frûleux, F., *EDL June 2007* 523-526
- Corrion, A. L.**, *see* Poblenz, C., *EDL Nov. 2007* 945-947
- Crespo, A.**, *see* Jessen, G. H., *EDL May 2007* 354-356
- Cretu, B.**, *see* Guo, W., *EDL April 2007* 288-291
- Cretu, B.**, *see* Pichon, L., *EDL Aug. 2007* 716-718
- Culurciello, E.**, and Weerakoon, P., Three-Dimensional Photodetectors in 3-D Silicon-On-Insulator Technology; *EDL Feb. 2007* 117-119
- Cumming, D. R. S.**, *see* Khalid, A., *EDL Oct. 2007* 849-851
- D**
- Dang, B.**, *see* Sekar, D. C., *EDL Aug. 2007* 767-769
- Dang, L.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Datta, A.**, Kumar, P. B., and Mahapatra, S., Dual-Bit/Cell SONOS Flash EEPROMs: Impact of Channel Engineering on Programming Speed and Bit Coupling Effect; *EDL May 2007* 446-448
- Datta, S.**, *see* Chang, C. Y., *EDL Oct. 2007* 856-858
- Datta, S.**, *see* Dewey, G., Fastenau, J. M., Hudait, M. K., Loubychev, D., Liu, W. K., Radosavljevic, M., Rachmady, W., and Chau, R., Ultrahigh-Speed 0.5 V Supply Voltage In_{0.7}Ga_{0.3}As Quantum-Well Transistors on Silicon Substrate; *EDL Aug. 2007* 685-687
- Davis, J. A.**, *see* Sekar, D. C., *EDL Aug. 2007* 767-769
- Dawood, M. K.**, *see* Yu, H. P., *EDL Dec. 2007* 1098-1101
- De Gendt, S.**, *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
- De Gendt, S.**, *see* Aoulaiche, M., *EDL July 2007* 613-615
- De Gendt, S.**, *see* Yu, H. Y., *EDL July 2007* 656-658
- De Jaeger, B.**, *see* Guo, W., *EDL April 2007* 288-291
- De Keersgieter, A.**, *see* Lousberg, G. P., *EDL Feb. 2007* 123-125
- De Keersgieter, A.**, *see* Collaert, N., *EDL July 2007* 646-648
- De Meyer, K.**, *see* Severi, S., *EDL March 2007* 198-200
- De Meyer, K.**, *see* Furnemont, A., *EDL April 2007* 276-278
- De Meyer, K.**, *see* Yu, H. Y., *EDL July 2007* 656-658
- De Meyer, K.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- De Meyer, K.**, *see* Singanamalla, R., *EDL Dec. 2007* 1089-1091
- DeVoe, D. L.**, *see* Marshall, J. C., *EDL Nov. 2007* 960-963
- Deal, W. R.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Decoutere, S.**, *see* Choi, L. J., *EDL April 2007* 270-272
- Delabie, A.**, *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
- Delabie, A.**, *see* Chang, S. Z., *EDL July 2007* 634-636
- Deleonibus, S.**, *see* Mayer, F., *EDL July 2007* 619-621
- Demand, M.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- Demeurisse, C.**, *see* Yu, H. Y., *EDL Feb. 2007* 154-156
- Deng, C.-K.**, *see* Chang, C.-W., *EDL Nov. 2007* 993-995
- Denning, L.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Desmaris, V.**, *see* Shiu, J.-Y., *EDL June 2007* 476-478
- Devriendt, K.**, *see* Masahara, M., *EDL March 2007* 217-219
- Deweerd, W.**, *see* Aoulaiche, M., *EDL July 2007* 613-615
- Dewey, G.**, *see* Datta, S., *EDL Aug. 2007* 685-687
- Dey, S.**, *see* Sarkar, J., *EDL May 2007* 449-451
- Dimitriadis, C. A.**, *see* Hatzopoulos, A. T., *EDL Sept. 2007* 803-805
- Do, Q.-T.**, Blekker, K., Regolin, I., Prost, W., and Tegude, F. J., High Transconductance MISFET With a Single InAs Nanowire Channel; *EDL Aug. 2007* 682-684
- Domeij, M.**, *see* Lee, H.-S., *EDL Nov. 2007* 1007-1009
- Dong, Y.-W.**, *see* Guo, P., *EDL July 2007* 572-574
- Dong, Z.**, *see* Xu, C., *EDL Nov. 2007* 942-944
- Doornbos, G.**, *see* Masahara, M., *EDL March 2007* 217-219
- Doutreligne, J.**, *see* Bakeroor, B., *EDL May 2007* 416-418
- Droopad, R.**, *see* Rajagopalan, K., *EDL Feb. 2007* 100-102
- Droopad, R.**, *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
- Duan, F.**, *see* Yu, C., *EDL Jan. 2007* 45-47
- Duane, R.**, Rafhay, Q., Beug, M. F., and van Duuren, M., Intrinsic Mismatch Between Floating-Gate Nonvolatile Memory Cell and Equivalent Transistor; *EDL May 2007* 440-442
- Dubois, E.**, *see* Cornu-Frûleux, F., *EDL June 2007* 523-526
- Duffy, R.**, *see* Severi, S., *EDL March 2007* 198-200
- Dunn, G. M.**, *see* Khalid, A., *EDL Oct. 2007* 849-851
- Duttagupta, S. P.**, *see* Maji, D., *EDL Aug. 2007* 731-733
- E**
- Eastman, L. F.**, *see* Felbinger, J. G., *EDL Nov. 2007* 948-950
- Echtermeyer, T. J.**, *see* Lemme, M. C., *EDL April 2007* 282-284
- Eisele, I.**, *see* Abelein, U., *EDL Jan. 2007* 65-67
- Eisenstein, G.**, *see* Mikhelashvili, V., *EDL Jan. 2007* 24-26
- Ejeckam, F.**, *see* Felbinger, J. G., *EDL Nov. 2007* 948-950
- El Khakani, M. A.**, *see* Brassard, D., *EDL April 2007* 261-263
- Endo, K.**, *see* Ishikawa, Y., *EDL June 2007* 517-519
- Endo, K.**, Ishikawa, Y., Liu, Y. X., Matsukawa, T., Ouchi, S., Ishii, K., Masahara, M., Tsukada, J., Yamauchi, H., Sekigawa, T., Koike, H., and Suzuki, E., A Dynamical Power-Management Demonstration Using Four-Terminal Separated-Gate FinFETs; *EDL May 2007* 452-454
- Endo, K.**, Ishikawa, Y., Liu, Y., Masahara, M., Matsukawa, T., Ouchi, S.-I., Ishii, K., Yamauchi, H., Tsukada, J., and Suzuki, E., Experimental Evaluation of Effects of Channel Doping on Characteristics of FinFETs; *EDL Dec. 2007* 1123-1125
- Eneman, G.**, *see* Shickova, A., *EDL March 2007* 242-244
- Erturk, M.**, Xia, T., and Clark, W. F., Gate Voltage Dependence of MOSFET 1/f Noise Statistics; *EDL Sept. 2007* 812-814
- Esseni, D.**, *see* Zilli, M., *EDL Nov. 2007* 1036-1039
- Everaert, J.-L.**, *see* Chang, S. Z., *EDL July 2007* 634-636
- Eyben, P.**, *see* Carnel, L., *EDL Oct. 2007* 899-901
- F**
- Faili, F.**, *see* Felbinger, J. G., *EDL Nov. 2007* 948-950
- Fainbrun, A.**, *see* Stopel, A., *EDL May 2007* 357-359
- Fan, J.-F.**, *see* Lin, H.-T., *EDL Nov. 2007* 951-953
- Fang, W. W.**, *see* Singh, N., *EDL July 2007* 558-561
- Fang, W. W.**, *see* Rustagi, S. C., *EDL Nov. 2007* 1021-1024
- Fang, W. W.**, Singh, N., Bera, L. K., Nguyen, H. S., Rustagi, S. C., Lo, G. Q., Balasubramanian, N., and Kwong, D.-L., Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors; *EDL March 2007* 211-213
- Fang, Y. K.**, *see* Cheng, C. Y., *EDL May 2007* 408-411
- Fang, Y.-K.**, *see* Lai, C.-M., *EDL Feb. 2007* 142-144
- Fang, Y.-K.**, *see* Lin, C.-T., *EDL Feb. 2007* 111-113
- Fang, Y.-K.**, *see* Lin, C.-T., *EDL May 2007* 376-378
- Fang, Y.-K.**, *see* Lin, C.-T., *EDL Sept. 2007* 831-833
- Fantini, P.**, *see* Ventrice, D., *EDL Nov. 2007* 973-975
- Fantini, P.**, Ghetti, A., Marinoni, A., Ghidini, G., Visconti, A., and Marmiroli, A., Giant Random Telegraph Signals in Nanoscale Floating-Gate Devices; *EDL Dec. 2007* 1114-1116

- Farrokh-Baroughi, M.**, and Sivoththaman, S., A Novel Silicon Photovoltaic Cell Using a Low-Temperature Quasi-Epitaxial Silicon Emitter; *EDL July 2007* 575-577
- Fastenau, J. M.**, *see* Datta, S., *EDL Aug. 2007* 685-687
- Fatima, H.**, *see* Agarwal, A., *EDL July 2007* 587-589
- Fay, P.**, *see* Su, N., *EDL May 2007* 336-339
- Fejes, P.**, *see* Rajagopalan, K., *EDL Feb. 2007* 100-102
- Felbinger, J. G.**, Chandra, M. V. S., Sun, Y., Eastman, L. F., Wasserbauer, J., Faili, F., Babic, D., Francis, D., and Ejecckam, F., Comparison of GaN HEMTs on Diamond and SiC Substrates; *EDL Nov. 2007* 948-950
- Feng, H.-G.**, *see* Yang, C., *EDL July 2007* 652-655
- Feng, J.**, Woo, R., Chen, S., Liu, Y., Griffin, P. B., and Plummer, J. D., P-Channel Germanium FinFET Based on Rapid Melt Growth; *EDL July 2007* 637-639
- Feng, Y. P.**, *see* Wang, X. P., *EDL April 2007* 258-260
- Fichou, D.**, *see* Tiwari, S. P., *EDL Oct. 2007* 880-883
- Fichtenbaum, N.**, *see* Chu, R., *EDL Sept. 2007* 781-783
- Fiori, G.**, and Iannaccone, G., Simulation of Graphene Nanoribbon Field-Effect Transistors; *EDL Aug. 2007* 760-762
- Fitzgerald, E. A.**, *see* Yu, H. P., *EDL Dec. 2007* 1098-1101
- Flandre, D.**, *see* Kilchytska, V., *EDL May 2007* 419-421
- Flandre, D.**, *see* Rudenko, T., *EDL Sept. 2007* 834-836
- Flandre, D.**, *see* Simoen, E., *EDL Oct. 2007* 919-921
- Fogel, K. E.**, *see* Sun, Y., *EDL June 2007* 473-475
- Foisy, M.**, *see* Winstead, B., *EDL Aug. 2007* 719-721
- Fompeyrine, J.**, *see* Sun, Y., *EDL June 2007* 473-475
- Forchel, A.**, *see* Muller, C. R., *EDL Oct. 2007* 859-861
- Forrest, S. R.**, *see* Sun, Y., *EDL June 2007* 473-475
- Fossum, J. G.**, *see* Lu, Z., *EDL Feb. 2007* 145-147
- Fossum, J. G.**, Lu, Z., and Trivedi, V. P., New Insights on "Capacitorless" Floating-Body DRAM Cells; *EDL June 2007* 513-516
- Francis, D.**, *see* Felbinger, J. G., *EDL Nov. 2007* 948-950
- Freeman, G.**, *see* Kim, D., *EDL June 2007* 520-522
- Freeman, M.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Froment, B.**, *see* Lousberg, G. P., *EDL Feb. 2007* 123-125
- Fu, Y.-C.**, *see* Kuo, P.-S., *EDL July 2007* 596-598
- Fu, Y.**, Cheng, X., Chen, Y., Liou, J. J., and Shen, Z. J., A 20-V CMOS-Based Monolithic Bidirectional Power Switch; *EDL Feb. 2007* 174-176
- Fujiwara, A.**, *see* Nishiguchi, K., *EDL Jan. 2007* 48-50
- Fulde, M.**, *see* Nirschl, Th., *EDL April 2007* 315-315
- Fulgoni, D. J. F.**, *see* Nicholas, G., *EDL Sept. 2007* 825-827
- Fung, A.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Furnemont, A.**, Rosmeulen, M., van der Zanden, K., Van Houdt, J., De Meyer, K., and Maes, H., New Operating Mode Based on Electron/Hole Profile Matching in Nitride-Based Nonvolatile Memories; *EDL April 2007* 276-278
- Fursin, L.**, *see* Zhang, Y., *EDL May 2007* 404-407
- Furst, J.**, *see* Tedde, S., *EDL Oct. 2007* 893-895
- Fuyuki, T.**, *see* Sugawara, Y., *EDL May 2007* 395-397
- G**
- Gaevski, M.**, *see* Adivarahan, V., *EDL March 2007* 192-194
- Gaier, T.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Gaitan, M.**, *see* Marshall, J. C., *EDL Nov. 2007* 960-963
- Ganguly, U.**, *see* Hou, T.-H., *EDL Feb. 2007* 103-106
- Garcia-Canton, J.**, Merlos, A., and Baldi, A., High-Quality Factor Electrolyte Insulator Silicon Capacitor for Wireless Chemical Sensing; *EDL Jan. 2007* 27-29
- Garcia-Gutierrez, D. I.**, *see* Shahjerdi, D., *EDL Sept. 2007* 793-796
- Geng, C.-Q.**, *see* Li, R., *EDL May 2007* 360-362
- Germann, R.**, *see* Sun, Y., *EDL June 2007* 473-475
- Ghetti, A.**, *see* Fantini, P., *EDL Dec. 2007* 1114-1116
- Ghidini, G.**, *see* Fantini, P., *EDL Dec. 2007* 1114-1116
- Ghyselen, B.**, *see* Collaert, N., *EDL July 2007* 646-648
- Gillespie, J. K.**, *see* Jessen, G. H., *EDL May 2007* 354-356
- Gleskova, H.**, *see* Kattamis, A. Z., *EDL July 2007* 606-608
- Gomez, L.**, Aberg, I., and Hoyt, J. L., Electron Transport in Strained-Silicon Directly on Insulator Ultrathin-Body n-MOSFETs With Body Thickness Ranging From 2 to 25 nm; *EDL April 2007* 285-287
- Gonzalez, M.**, *see* Brosteaux, D., *EDL July 2007* 552-554
- Goo, J.-S.**, *see* Yu, C., *EDL Jan. 2007* 45-47
- Gordon, I.**, *see* Carnel, L., *EDL Oct. 2007* 899-901
- Goto, K.-I.**, *see* Wang, J.-S., *EDL Nov. 2007* 1040-1043
- Grasby, T. J.**, *see* Nicholas, G., *EDL Sept. 2007* 825-827
- Griffin, P. B.**, *see* Wang, Z., *EDL Jan. 2007* 14-16
- Griffin, P. B.**, *see* Feng, J., *EDL July 2007* 637-639
- Groeseneken, G.**, *see* Shickova, A., *EDL March 2007* 242-244
- Groeseneken, G. V.**, *see* Kapila, G., *EDL March 2007* 232-234
- Groeseneken, G.**, *see* Zhang, J. F., *EDL April 2007* 298-300
- Groeseneken, G.**, *see* Martens, K., *EDL May 2007* 436-439
- Groeseneken, G.**, *see* Aoulaliche, M., *EDL July 2007* 613-615
- Guan, X.-K.**, *see* Yang, C., *EDL July 2007* 652-655
- Guo, P.**, Dong, Y.-W., Ji, X., Lu, Y.-X., and Xu, W., Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices; *EDL July 2007* 572-574
- Guo, W.**, Nicholas, G., Kaczor, B., Todi, R. M., De Jaeger, B., Claeys, C., Mercha, A., Simoen, E., Creutz, B., Routoure, J.-M., and Carin, R., Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack; *EDL April 2007* 288-291
- Guo, X.**, and Silva, S. R. P., An Efficient Macromodeling Approach for Simulating Carbon-Nanotube Field-Emission Triode Devices in Display Applications; *EDL Aug. 2007* 710-712
- Guo, X.**, and Silva, S. R. P., A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry; *EDL Oct. 2007* 887-889
- Guo, Y.**, *see* Luo, X., *EDL May 2007* 422-424
- Gupta, J. A.**, *see* Lew, K. L., *EDL Dec. 2007* 1083-1085
- H**
- Hadjisavvas, G.**, Tsetseris, L., and Pantelides, S. T., The Origin of Electron Mobility Enhancement in Strained MOSFETs; *EDL Nov. 2007* 1018-1020
- Han, G.**, *see* Chae, Y., *EDL June 2007* 495-498
- Han, J.-W.**, Lee, J., Park, D., and Choi, Y.-K., Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET; *EDL July 2007* 625-627
- Han, M.**, *see* Lim, B. O., *EDL July 2007* 546-548
- Haney, S.**, *see* Agarwal, A., *EDL July 2007* 587-589
- Hao, Y.**, *see* Xu, C., *EDL Nov. 2007* 942-944
- Harris, H. R.**, *see* Joshi, S., *EDL April 2007* 308-311
- Harris, R.**, *see* Oh, J., *EDL Nov. 2007* 1044-1046
- Haruehanroengra, S.**, and Wang, W., Analyzing Conductance of Mixed Carbon-Nanotube Bundles for Interconnect Applications; *EDL Aug. 2007* 756-759
- Hatayama, T.**, *see* Sugawara, Y., *EDL May 2007* 395-397
- Hatzopoulos, A. T.**, Arpatzianis, N., Tassis, D. H., Dimitriadis, C. A., Templier, F., Oudwan, M., and Kamarinos, G., Stability of Amorphous-Silicon and Nanocrystalline Silicon Thin-Film Transistors Under DC and AC Stress; *EDL Sept. 2007* 803-805
- Hayafuji, T.**, *see* Sasa, S., *EDL July 2007* 543-545
- Hayashi, R.**, *see* Ofuji, M., *EDL April 2007* 273-275
- Hayashi, T.**, *see* Kawahara, T., *EDL Oct. 2007* 868-870
- Heh, D.**, *see* Joshi, S., *EDL April 2007* 308-311
- Heh, D.**, Choi, R., and Bersuker, G., Comparison of On-The-Fly, DC $I_d - V_g$, and Single-Pulse Methods for Evaluating Threshold Voltage Instability in High- κ nMOSFETs; *EDL March 2007* 245-247
- Heh, D.**, Young, C. D., Choi, R., and Bersuker, G., Extraction of the Threshold Voltage Shift by the Single-Pulse Technique; *EDL Aug. 2007* 734-736
- Hekmatshoar, B.**, *see* Kattamis, A. Z., *EDL July 2007* 606-608
- Hekmatshoar, B.**, *see* Cherenack, K. H., *EDL Nov. 2007* 1004-1006
- Hennessy, J.**, *see* Ritenour, A., *EDL Aug. 2007* 746-749
- Henry, H. G.**, *see* Jessen, G. H., *EDL May 2007* 354-356
- Henseler, D.**, *see* Tedde, S., *EDL Oct. 2007* 893-895
- Henson, K.**, *see* Severi, S., *EDL March 2007* 198-200
- Herman, D. L.**, *see* Marshall, J. C., *EDL Nov. 2007* 960-963
- Heyns, M. M.**, *see* Aoulaliche, M., *EDL July 2007* 613-615
- Heyns, M. M.**, *see* Nicholas, G., *EDL Sept. 2007* 825-827
- Higashi, M.**, *see* Kawahara, T., *EDL Oct. 2007* 868-870
- Hijzen, E.**, *see* Choi, L. J., *EDL April 2007* 270-272
- Hill, R. J. W.**, Moran, D. A. J., Li, X., Zhou, H., Macintyre, D., Thoms, S., Aseenov, A., Zurcher, P., Rajagopalan, K., Abrokwa, J., Droopad, R., Passlack, M., and Thayne, I. G., Enhancement-Mode GaAs MOSFETs With an In_{0.3}Ga_{0.7}As Channel, a Mobility of Over 5000 cm²/V·s, and Transconductance of Over 475 μS/μm; *EDL Dec. 2007* 1080-1082
- Hilton, K. P.**, *see* Kuball, M., *EDL Feb. 2007* 86-89
- Hiramoto, T.**, *see* Ohtou, T., *EDL Aug. 2007* 740-742

- Ho, C.-L.**, *see* Wu, M.-C., *EDL Sept. 2007* 797-799
- Hoang, T.**, *see* van der Steen, J.-L. P. J., *EDL Sept. 2007* 821-824
- Hoang, T.**, LeMinh, P., Holleman, J., and Schmitz, J., Strong Efficiency Improvement of SOI-EDLs Through Carrier Confinement; *EDL May 2007* 383-385
- Hoe, K. M.**, *see* Tan, K.-M., *EDL Oct. 2007* 905-908
- Hoffmann, T.**, *see* Chang, S. Z., *EDL July 2007* 634-636
- Hoffing, S.**, *see* Muller, C. R., *EDL Oct. 2007* 859-861
- Hohkawa, K.**, *see* Shigekawa, N., *EDL Feb. 2007* 90-92
- Holland, M. C.**, *see* Khalid, A., *EDL Oct. 2007* 849-851
- Holleman, J.**, *see* Hoang, T., *EDL May 2007* 383-385
- Holleman, J.**, *see* van der Steen, J.-L. P. J., *EDL Sept. 2007* 821-824
- Honda, K.**, *see* Kawahara, T., *EDL Oct. 2007* 868-870
- Hong, B. H.**, *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
- Hong, Y.-K.**, *see* Lee, K.-S., *EDL Aug. 2007* 672-675
- Hopfner, P.**, *see* Muller, C. R., *EDL Oct. 2007* 859-861
- Hornig, S.-F.**, *see* Liao, Y.-Y., *EDL Sept. 2007* 828-830
- Hosono, H.**, *see* Ofuji, M., *EDL April 2007* 273-275
- Hou, T.-H.**, Ganguly, U., and Kan, E. C., Fermi-Level Pinning in Nanocrystal Memories; *EDL Feb. 2007* 103-106
- Hou, Y. T.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Hou, Y. T.**, *see* Wu, C. H., *EDL April 2007* 292-294
- Houssa, M.**, *see* Aoulaliche, M., *EDL July 2007* 613-615
- Hoyt, J. L.**, *see* Gomez, L., *EDL April 2007* 285-287
- Hsia, H.**, *see* Cheng, C. Y., *EDL May 2007* 408-411
- Hsiao, C. N.**, *see* Chiang, K. C., *EDL March 2007* 235-237
- Hsiao, C. N.**, *see* Chiang, K. C., *EDL Aug. 2007* 694-696
- Hsiao, C. N.**, *see* Cheng, C. H., *EDL Dec. 2007* 1095-1097
- Hsiao, R.-S.**, *see* Su, K.-H., *EDL Feb. 2007* 96-99
- Hsiao, Y.-W.**, and Ker, M.-D., Bond Pad Design With Low Capacitance in CMOS Technology for RF Applications; *EDL Jan. 2007* 68-70
- Hsieh, C.-I.**, *see* Pan, T.-M., *EDL Nov. 2007* 954-956
- Hsieh, C.-Y.**, *see* Chen, M.-J., *EDL Feb. 2007* 177-179
- Hsieh, C.-Y.**, and Chen, M.-J., Measurement of Channel Stress Using Gate Direct Tunneling Current in Uniaxially Stressed nMOSFETs; *EDL Sept. 2007* 818-820
- Hsieh, I. J.**, *see* Yang, H. J., *EDL Oct. 2007* 913-915
- Hsieh, J.**, *see* Lai, S., *EDL July 2007* 643-645
- Hsieh, J. C.**, *see* Cheng, C. Y., *EDL May 2007* 408-411
- Hsieh, J.-Y.**, *see* Hsu, T.-H., *EDL May 2007* 443-445
- Hsieh, K.**, *see* Lai, S., *EDL July 2007* 643-645
- Hsieh, K.-Y.**, *see* Hsu, T.-H., *EDL May 2007* 443-445
- Hsieh, M. F.**, *see* Chang, K. M., *EDL Jan. 2007* 39-41
- Hsieh, R.-J.**, *see* Chen, S.-H., *EDL Aug. 2007* 679-681
- Hsieh, S.-I.**, *see* Chen, H.-T., *EDL June 2007* 499-501
- Hsieh, T.-M.**, *see* Wu, W.-C., *EDL March 2007* 214-216
- Hsu, C.-H.**, *see* Lin, C.-T., *EDL Feb. 2007* 111-113
- Hsu, C.-H.**, *see* Lin, C.-T., *EDL May 2007* 376-378
- Hsu, C.-H.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Hsu, C.-H.**, *see* Lin, C.-T., *EDL Sept. 2007* 831-833
- Hsu, H. T.**, *see* Chu, L. H., *EDL Feb. 2007* 82-85
- Hsu, H.-M.**, and Tseng, C.-W., Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance; *EDL Nov. 2007* 1029-1032
- Hsu, H.-T.**, *see* Chang, C. Y., *EDL Oct. 2007* 856-858
- Hsu, H.**, Chang, I. Y., and Lee, J. Y., Metal-Oxide-High- κ Dielectric-Oxide-Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications; *EDL Nov. 2007* 964-966
- Hsu, K. Y.-J.**, *see* Lai, K.-S., *EDL Sept. 2007* 800-802
- Hsu, P. F.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Hsu, S. L.**, *see* Chen, J. F., *EDL Nov. 2007* 1033-1035
- Hsu, T.-H.**, Lue, H. Y., King, Y.-C., Hsieh, J.-Y., Lai, E.-K., Hsieh, K.-Y., Liu, R., and Lu, C.-Y., A High-Performance Body-Tied FinFET Bandgap Engineered SONOS (BE-SONOS) for NAND-Type Flash Memory; *EDL May 2007* 443-445
- Hsu, W.-C.**, *see* Su, K.-H., *EDL Feb. 2007* 96-99
- Hu, C.**, *see* Lin, C.-Y., *EDL May 2007* 366-368
- Hu, C.-M.**, Wu, Y. C. S., and Lin, C.-C., Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate; *EDL Nov. 2007* 1000-1003
- Hu, C.-W.**, *see* Lee, F.-M., *EDL Feb. 2007* 120-122
- Huang, F.**, Lu, J., Zhu, Y., Jiang, N., Wang, X., and Chi, Y., Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors; *EDL Nov. 2007* 1025-1028
- Huang, G.-W.**, *see* Chang, C. Y., *EDL Oct. 2007* 856-858
- Huang, H.-W.**, *see* Lu, T.-C., *EDL Oct. 2007* 884-886
- Huang, J.**, *see* Yu, X., *EDL May 2007* 373-375
- Huang, J.-C.**, *see* Shiu, J.-Y., *EDL June 2007* 476-478
- Huang, J.-C.**, *see* Lai, K.-S., *EDL Sept. 2007* 800-802
- Huang, K.**, *see* Li, R., *EDL May 2007* 360-362
- Huang, K.-F.**, *see* Lee, F.-M., *EDL Feb. 2007* 120-122
- Huang, P.-W.**, *see* Chen, M.-J., *EDL Feb. 2007* 177-179
- Huang, R.**, *see* Li, Y., *EDL July 2007* 622-624
- Huang, R.**, *see* Li, C., *EDL Aug. 2007* 763-766
- Huang, S.-F.**, *see* Zhu, H., *EDL Feb. 2007* 168-170
- Huang, T.-Y.**, *see* Yang, M.-J., *EDL Oct. 2007* 902-904
- Huang, T.-Y.**, *see* Pan, T.-M., *EDL Nov. 2007* 954-956
- Huang, T.-Y.**, *see* Chen, J. F., *EDL Nov. 2007* 1033-1035
- Huang, W. L.**, *see* Yang, H. J., *EDL Oct. 2007* 913-915
- Huang, Y.-H.**, *see* Wu, M.-C., *EDL Sept. 2007* 797-799
- Huang, Y.-T.**, *see* Lin, C.-T., *EDL Sept. 2007* 831-833
- Huang, Y.-T.**, Pinto, A., Lin, C.-T., Hsu, C.-H., Ramin, M., Seacrist, M., Ries, M., Matthews, K., Nguyen, B., Freeman, M., Wilks, B., Stager, C., Johnson, C., Denning, L., Bennett, J., Joshi, S., Chiang, S., Cheng, L.-W., Lee, T.-H., Ma, M., Cheng, O., and Wise, R., PMOSFET Reliability Study for Direct Silicon Bond (DSB) Hybrid Orientation Technology (HOT); *EDL Sept. 2007* 815-817
- Hudait, M. K.**, *see* Datta, S., *EDL Aug. 2007* 685-687
- Huetting, R. J. E.**, *see* van der Steen, J.-L. P. J., *EDL Sept. 2007* 821-824
- Hung, B. F.**, *see* Wu, C. H., *EDL April 2007* 292-294
- Hung, C. L.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Hur, S.-H.**, *see* Park, M., *EDL Aug. 2007* 750-752
- Hurkx, G. A. M.**, and Agarwal, P., A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction; *EDL April 2007* 312-314
- Hwang, G.-W.**, *see* Lin, H.-T., *EDL Nov. 2007* 951-953
- Hwang, H.**, *see* Chang, M., *EDL Jan. 2007* 21-23
- Hwang, H. L.**, *see* Chiang, K. C., *EDL March 2007* 235-237
- Hwang, H. L.**, *see* Chiang, K. C., *EDL Aug. 2007* 694-696
- Hwang, J. D.**, *see* Chen, Y. H., *EDL Dec. 2007* 1111-1113
- Hwang, S. W.**, *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
- Hwang, W. S.**, *see* Lim, A. E.-J., *EDL June 2007* 482-485
- Hyun, J. W.**, *see* Padilla, A., *EDL June 2007* 502-505

I

- Iacoponi, J.**, *see* Pan, J., *EDL Aug. 2007* 691-693
- Iannaccone, G.**, *see* Fiori, G., *EDL Aug. 2007* 760-762
- Ielmini, D.**, *see* Mantegazza, D., *EDL Oct. 2007* 865-867
- Inokawa, H.**, *see* Nishiguchi, K., *EDL Jan. 2007* 48-50
- Inoue, M.**, *see* Sasa, S., *EDL July 2007* 543-545
- Inoue, M.**, *see* Kawahara, T., *EDL Oct. 2007* 868-870
- Ishii, K.**, *see* Endo, K., *EDL May 2007* 452-454
- Ishii, K.**, *see* Liu, Y., *EDL June 2007* 517-519
- Ishii, K.**, *see* Endo, K., *EDL Dec. 2007* 1123-1125
- Ishikawa, Y.**, *see* Endo, K., *EDL May 2007* 452-454
- Ishikawa, Y.**, *see* Liu, Y., *EDL June 2007* 517-519
- Ishikawa, Y.**, *see* Endo, K., *EDL Dec. 2007* 1123-1125
- Ito, M.**, *see* Mizutani, T., *EDL July 2007* 549-551
- Iwami, M.**, *see* Kambayashi, H., *EDL Dec. 2007* 1077-1079

J

- Jackson, T. N.**, *see* Park, S. K., *EDL Oct. 2007* 877-879
- Jaeger, N. A. F.**, *see* Ristic, S., *EDL Jan. 2007* 30-32
- Jamei, M.**, Karbassian, F., Mohajerzadeh, S., Abdi, Y., Robertson, M. D., and Yuill, S., The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes; *EDL March 2007* 207-210
- Jammy, R.**, *see* Joshi, S., *EDL April 2007* 308-311
- Jammy, R.**, *see* Oh, J., *EDL Nov. 2007* 1044-1046
- Jang, J.-H.**, *see* Kim, T.-W., *EDL Dec. 2007* 1086-1088
- Jang, S. M.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Jarndal, A.**, *see* Srinidhi, E. R., *EDL May 2007* 343-345
- Jayanarananan, S. K.**, *see* Yu, C., *EDL Jan. 2007* 45-47

- Jeong, J. K.**, Jin, D. U., Shin, H. S., Lee, H. J., Kim, M., Ahn, T. K., Lee, J., Mo, Y. G., and Chung, H. K., Flexible Full-Color AMOEDL on Ultrathin Metal Foil; *EDL May 2007* 389-391
- Jeong, Y. H.**, Lim, J. B., Nahm, S., Sun, H.-J., and Lee, H. J., High-Performance Metal-Insulator-Metal Capacitors Using Amorphous BaSm₂Ti₄O₁₂ Thin Film; *EDL Jan. 2007* 17-20
- Jeong, Y.-H.**, *see* Lee, K.-S., *EDL Aug. 2007* 672-675
- Jessen, G. H.**, Gillespie, J. K., Via, G. D., Crespo, A., Langley, D., Aumer, M. E., Ward, C. S., Henry, H. G., Thomson, D. B., and Partlow, D. P., RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz; *EDL May 2007* 354-356
- Jhou, K. Y.**, *see* Chiang, K. C., *EDL Aug. 2007* 694-696
- Ji, T.**, Jung, S., and Varadan, V. K., Field-Controllable Flexible Strain Sensors Using Pentacene Semiconductors; *EDL Dec. 2007* 1105-1107
- Ji, X.**, *see* Guo, P., *EDL July 2007* 572-574
- Jiang, J. C.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Jiang, N.**, *see* Huang, F., *EDL Nov. 2007* 1025-1028
- Jiang, Y.**, Loh, W. Y., Chan, D. S. H., Xiong, Y. Z., Ren, C., Lim, Y. F., Lo, G. Q., and Kwong, D. L., Flicker Noise and Its Degradation Characteristics Under Electrical Stress in MOSFETs With Thin Strained-Si/SiGe Dual-Quantum Well; *EDL July 2007* 603-605
- Jin, D. U.**, *see* Jeong, J. K., *EDL May 2007* 389-391
- Jin, Y.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Jin, Y.**, *see* Wu, C. H., *EDL April 2007* 292-294
- Jindal, R. P.**, What is in a Page Charge?; *EDL Jan. 2007* 1-1
- Jindal, R. P.**, A New Look for IEEE Transactions on Electron Devices Briefs; *EDL June 2007* 469-469
- Jindal, R. P.**, Confidentiality of the Review Process; *EDL Dec. 2007* 1076-1076
- Jo, M.**, *see* Chang, M., *EDL Jan. 2007* 21-23
- Johnson, C.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Joo, Y.**, *see* Park, D., *EDL Oct. 2007* 890-892
- Joshi, S.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Joshi, S.**, Krug, C., Heh, D., Na, H. J., Harris, H. R., Oh, J. W., Kirsch, P. D., Majhi, P., Lee, B. H., Tseng, H.-H., Jammy, R., Lee, J. C., and Banerjee, S. K., Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack; *EDL April 2007* 308-311
- Ju, B. K.**, *see* Cho, W.-S., *EDL May 2007* 386-388
- Ju, B.-K.**, *see* Shin, K.-S., *EDL July 2007* 581-583
- Jung, H.-A.-R.**, Park, K.-H., and Lee, J.-H., n⁺/p⁺ Gate Bulk FinFETs With Locally Separated Channel Structure for Sub-50-nm DRAM Cell Transistors; *EDL Dec. 2007* 1126-1128
- Jung, J.**, *see* Moon, C.-R., *EDL Feb. 2007* 114-116
- Jung, K.-D.**, Lee, C. A., Park, D.-W., Park, B.-G., Shin, H., and Lee, J. D., Admittance Measurements on OFET Channel and Its Modeling With R-C Network; *EDL March 2007* 204-206
- Jung, S.**, *see* Ji, T., *EDL Dec. 2007* 1105-1107
- Jung, Y. C.**, *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
- Jurczak, M.**, *see* Lousberg, G. P., *EDL Feb. 2007* 123-125
- Jurczak, M.**, *see* Shickova, A., *EDL March 2007* 242-244
- Jurczak, M.**, *see* Masahara, M., *EDL March 2007* 217-219
- Jurczak, M.**, *see* Kilchytska, V., *EDL May 2007* 419-421
- Jurczak, M.**, *see* Collaert, N., *EDL July 2007* 646-648
- Jurczak, M.**, *see* Rudenko, T., *EDL Sept. 2007* 834-836
- Jurczak, M.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- K**
- Kaczor, B.**, *see* Kapila, G., *EDL March 2007* 232-234
- Kaczor, B.**, *see* Shickova, A., *EDL March 2007* 242-244
- Kaczor, B.**, *see* Guo, W., *EDL April 2007* 288-291
- Kaczor, B.**, *see* Martens, K., *EDL May 2007* 436-439
- Kaji, N.**, *see* Ofuji, M., *EDL April 2007* 273-275
- Kakiuchi, Y.**, *see* Saito, W., *EDL Aug. 2007* 676-678
- Kamarinos, G.**, *see* Hatzopoulos, A. T., *EDL Sept. 2007* 803-805
- Kambayashi, H.**, Niizuma, Y., Ootomo, S., Nomura, T., Iwami, M., Satoh, Y., Kato, S., and Yoshida, S., Normally Off n-Channel GaN MOSFETs on Si Substrates Using an SAG Technique and Ion Implantation; *EDL Dec. 2007* 1077-1079
- Kamiya, T.**, *see* Ofuji, M., *EDL April 2007* 273-275
- Kan, E. C.**, *see* Hou, T.-H., *EDL Feb. 2007* 103-106
- Kang, C. Y.**, *see* Akbar, M. S., *EDL Feb. 2007* 132-134
- Kang, C. Y.**, *see* Oh, J., *EDL Nov. 2007* 1044-1046
- Kang, E. T.**, *see* Song, Y., *EDL Feb. 2007* 107-110
- Kang, I. M.**, Lee, J. D., and Shin, H., Extraction of π -Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz; *EDL May 2007* 425-427
- Kang, J. Y.**, *see* Shin, K.-S., *EDL July 2007* 581-583
- Kang, S. J.**, *see* Pimparkar, N., *EDL July 2007* 593-595
- Kao, C.-C.**, *see* Lu, T.-C., *EDL Oct. 2007* 884-886
- Kao, K.-H.**, *see* Ma, M.-W., *EDL March 2007* 238-241
- Kao, M.-J.**, *see* Chao, D.-S., *EDL Oct. 2007* 871-873
- Kao, T.-T.**, *see* Lu, T.-C., *EDL Oct. 2007* 884-886
- Kapila, G.**, Kaczor, B., Nackaerts, A., Collaert, N., and Groeseneken, G. V., Direct Measurement of Top and Sidewall Interface Trap Density in SOI FinFETs; *EDL March 2007* 232-234
- Karbassian, F.**, *see* Jamei, M., *EDL March 2007* 207-210
- Karim, K.**, *see* Sanaie, G., *EDL Jan. 2007* 33-35
- Karmalkar, S.**, *see* Balaji, S., *EDL March 2007* 229-231
- Kato, S.**, *see* Kambayashi, H., *EDL Dec. 2007* 1077-1079
- Kattamis, A. Z.**, *see* Cherenack, K. H., *EDL Nov. 2007* 1004-1006
- Kattamis, A. Z.**, Cherenack, K. H., Hekmatshoar, B., Cheng, I.-C., Gleskova, H., Sturm, J. C., and Wagner, S., Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability; *EDL July 2007* 606-608
- Kauerlauf, T.**, *see* Yu, H. Y., *EDL Nov. 2007* 957-959
- Kawahara, T.**, Nishida, Y., Sakashita, S., Mizutani, M., Inoue, M., Yamanari, S., Higashi, M., Hayashi, T., Murata, N., Honda, K., Yugami, J., Yoshimura, H., and Yoneda, M., Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks; *EDL Oct. 2007* 868-870
- Kawamura, T.**, *see* Zhu, H., *EDL Feb. 2007* 168-170
- Kawasaki, M.**, *see* Sasa, S., *EDL July 2007* 543-545
- Keller, S.**, *see* Chu, R., *EDL Sept. 2007* 781-783
- Kelsall, R. W.**, *see* Sadi, T., *EDL Sept. 2007* 787-789
- Ker, M.-D.**, *see* Hsiao, Y.-W., *EDL Jan. 2007* 68-70
- Kerner, C.**, *see* Chang, S. Z., *EDL July 2007* 634-636
- Khalid, A.**, Pilgrim, N. J., Dunn, G. M., Holland, M. C., Stanley, C. R., Thayne, I. G., and Cumming, D. R. S., A Planar Gunn Diode Operating Above 100 GHz; *EDL Oct. 2007* 849-851
- Khan, A.**, *see* Tipirneni, N., *EDL Sept. 2007* 784-786
- Khan, M. A.**, *see* Koudymov, A., *EDL Jan. 2007* 5-7
- Khan, M. A.**, *see* Adivarahan, V., *EDL March 2007* 192-194
- Khramtsov, A.**, *see* Stopel, A., *EDL May 2007* 357-359
- Kiewra, E. W.**, *see* Sun, Y., *EDL June 2007* 473-475
- Kilchytska, V.**, *see* Rudenko, T., *EDL Sept. 2007* 834-836
- Kilchytska, V.**, Paillony, G., EDLerer, D., Raskin, J.-P., Collaert, N., Jurczak, M., and Flandre, D., Frequency Variation of the Small-Signal Output Conductance of Decanometer MOSFETs Due to Substrate Crosstalk; *EDL May 2007* 419-421
- Kim, B.**, *see* Chae, Y., *EDL June 2007* 495-498
- Kim, D.-H.**, *see* Kim, T.-W., *EDL Dec. 2007* 1086-1088
- Kim, D.-J.**, *see* Lee, J.-W., *EDL May 2007* 379-382
- Kim, D.-W.**, *see* Kim, H., *EDL Jan. 2007* 42-44
- Kim, D.-W.**, *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
- Kim, D.**, Kim, J., Plouchart, J.-O., Cho, C., Trzcinski, R., Kumar, M., and Norris, C., Symmetric Vertical Parallel Plate Capacitors for On-Chip RF Circuits in 65-nm SOI Technology; *EDL July 2007* 616-618
- Kim, D.**, Kim, J., Plouchart, J.-O., Cho, C., Trzcinski, R., Lee, S., Kumar, M., Norris, C., Rieh, J.-S., Freeman, G., and Ahlgren, D., Manufacturable Parasitic-Aware Circuit-Level FETs in 65-nm SOI CMOS Technology; *EDL June 2007* 520-522
- Kim, H. S.**, *see* Zhang, M. H., *EDL March 2007* 195-197
- Kim, H.-S.**, *see* Akbar, M. S., *EDL Feb. 2007* 132-134
- Kim, H.**, Kim, D.-W., Cho, K., and Kim, S., HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates; *EDL Jan. 2007* 42-44
- Kim, J.**, *see* Kim, D., *EDL June 2007* 520-522
- Kim, J.-K.**, *see* Cho, W.-S., *EDL May 2007* 386-388
- Kim, J.-K.**, *see* Lee, J.-W., *EDL May 2007* 379-382
- Kim, J.-S.**, and Lee, H.-J., Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP; *EDL Oct. 2007* 896-898
- Kim, J.**, *see* Kim, D., *EDL July 2007* 616-618
- Kim, K.**, *see* Moon, C.-R., *EDL Feb. 2007* 114-116
- Kim, K.**, *see* Park, M., *EDL Aug. 2007* 750-752
- Kim, L.**, and Shin, M. W., Implementation of Side Effects in Thermal Characterization of RGB Full-Color EDLs; *EDL July 2007* 578-580

- Kim, M.**, *see* Jeong, J. K., *EDL May 2007* 389-391
- Kim, M.**, Choi, S., Ree, M., and Kim, O., Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films; *EDL Nov. 2007* 967-969
- Kim, O.**, *see* Kim, M., *EDL Nov. 2007* 967-969
- Kim, S.**, *see* Kim, H., *EDL Jan. 2007* 42-44
- Kim, S. C.**, *see* Lim, B. O., *EDL July 2007* 546-548
- Kim, S.**, and Wong, H.-S.P., Analysis of Temperature in Phase Change Memory Scaling; *EDL Aug. 2007* 697-699
- Kim, S.**, Xue, L., and Tiwari, S., Low-Temperature Polymer-Based Three-Dimensional Silicon Integration; *EDL Aug. 2007* 706-709
- Kim, T. H.**, Song, C. K., Park, J. S., and Suh, M. C., Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric; *EDL Oct. 2007* 874-876
- Kim, T.-S.**, *see* Shin, K.-S., *EDL July 2007* 581-583
- Kim, T.-W.**, Kim, D.-H., Park, S. D., Yeom, G. Y., Lim, B. O., Rhee, J.-K., Jang, J.-H., and Song, J.-I., Effect of a Two-Step Recess Process Using Atomic Layer Etching on the Performance of $In_{0.52}Al_{0.48}As/In_{0.53}Ga_{0.47}As$ p-HEMTs; *EDL Dec. 2007* 1086-1088
- Kim, Y. M.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Kim, Y.-S.**, *see* Na, K.-Y., *EDL Feb. 2007* 151-153
- Kim, Y.-S.**, *see* Lee, K.-S., *EDL Aug. 2007* 672-675
- Kim, Y.-S.**, *see* Na, K.-Y., *EDL Nov. 2007* 1047-1049
- King Liu, T.-J.**, *see* Padilla, A., *EDL June 2007* 502-505
- King Liu, T.-J.**, *see* Lai, J., *EDL Aug. 2007* 725-727
- King, Y.-C.**, *see* Hsu, T.-H., *EDL May 2007* 443-445
- King, Y.-C.**, *see* Chen, H.-T., *EDL June 2007* 499-501
- King, Y.-C.**, *see* Lai, H.-C., *EDL Sept. 2007* 837-839
- Kirsch, P. D.**, *see* Joshi, S., *EDL April 2007* 308-311
- Kishimoto, S.**, *see* Mizutani, T., *EDL July 2007* 549-551
- Knoch, J.**, *see* Zhang, M., *EDL March 2007* 223-225
- Ko, S.-C.**, *see* Lee, F.-M., *EDL Feb. 2007* 120-122
- Kocabas, C.**, *see* Pimparkar, N., *EDL July 2007* 593-595
- Koester, S. J.**, *see* Sun, Y., *EDL June 2007* 473-475
- Koike, H.**, *see* Endo, K., *EDL May 2007* 452-454
- Koike, K.**, *see* Sasa, S., *EDL July 2007* 543-545
- Kompa, G.**, *see* Srinidhi, E. R., *EDL May 2007* 343-345
- Kong, W.-R.**, *see* Li, R., *EDL May 2007* 360-362
- Koskenvuo, M.**, and Tittonen, I., Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification; *EDL Nov. 2007* 970-972
- Koudymov, A.**, *see* Adivarahan, V., *EDL March 2007* 192-194
- Koudymov, A.**, Shur, M. S., and Simin, G., Compact Model of Current Collapse in Heterostructure Field-Effect Transistors; *EDL May 2007* 332-335
- Koudymov, A.**, Wang, C. X., Adivarahan, V., Yang, J., Simin, G., and Khan, M. A., Power Stability of AlGaN/GaN HFETs at 20 W/mm in the Pinched-Off Operation Mode; *EDL Jan. 2007* 5-7
- Kranti, A.**, and Armstrong, G. A., Source/Drain Extension Region Engineering in FinFETs for Low-Voltage Analog Applications; *EDL Feb. 2007* 139-141
- Krishnan, S. A.**, *see* Akbar, M. S., *EDL Feb. 2007* 132-134
- Krug, C.**, *see* Joshi, S., *EDL April 2007* 308-311
- Kuball, M.**, Riedel, G. J., Pomeroy, J. W., Sarua, A., Uren, M. J., Martin, T., Hilton, K. P., Maclean, J. O., and Wallis, D. J., Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy; *EDL Feb. 2007* 86-89
- Kubicek, S.**, *see* Yu, H. Y., *EDL July 2007* 656-658
- Kubicek, S.**, *see* Singanamalla, R., *EDL Dec. 2007* 1089-1091
- Kubota, T.**, *see* Ohashi, T., *EDL July 2007* 562-564
- Kumakura, K.**, *see* Shiu, J.-Y., *EDL June 2007* 476-478
- Kumar, A.**, *see* Lin, H., *EDL June 2007* 506-508
- Kumar, A.**, *see* Lin, H., *EDL June 2007* 506-508
- Kumar, M.**, *see* Kim, D., *EDL June 2007* 520-522
- Kumar, M.**, *see* Kim, D., *EDL July 2007* 616-618
- Kumar, P. B.**, *see* Datta, A., *EDL May 2007* 446-448
- Kumar, S.**, *see* Pimparkar, N., *EDL Feb. 2007* 157-160
- Kumomi, H.**, *see* Ofuji, M., *EDL April 2007* 273-275
- Kung, C. Y.**, *see* Chen, Y. H., *EDL Dec. 2007* 1111-1113
- Kunnen, E.**, *see* Masahara, M., *EDL March 2007* 217-219
- Kunnen, E.**, *see* Choi, L. J., *EDL April 2007* 270-272
- Kuo, C.-I.**, *see* Chang, C. Y., *EDL Oct. 2007* 856-858
- Kuo, H.-C.**, *see* Lu, T.-C., *EDL Oct. 2007* 884-886
- Kuo, J. J.-Y.**, *see* Su, P., *EDL July 2007* 649-651
- Kuo, P.-S.**, *see* Pan, T.-M., *EDL Nov. 2007* 954-956
- Kuo, P.-S.**, Lin, C.-H., Peng, C.-Y., Fu, Y.-C., and Liu, C. W., Transport Mechanism of SiGe Dot MOS Tunneling Diodes; *EDL July 2007* 596-598
- Kurabayashi, K.**, *see* Chow, L. L. W., *EDL June 2007* 479-481
- Kurz, H.**, *see* Lemme, M. C., *EDL April 2007* 282-284
- Kwon, D.-W.**, *see* Moon, C.-R., *EDL Feb. 2007* 114-116
- Kwong, D. L.**, *see* Liu, J., *EDL Jan. 2007* 11-13
- Kwong, D. L.**, *see* Jiang, Y., *EDL July 2007* 603-605
- Kwong, D. L.**, *see* Rustagi, S. C., *EDL Nov. 2007* 1021-1024
- Kwong, D. L.**, *see* Loh, W. Y., *EDL Nov. 2007* 984-986
- Kwong, D.-L.**, *see* Fang, W. W., *EDL March 2007* 211-213
- Kwong, D.-L.**, *see* Wang, X. P., *EDL April 2007* 258-260
- Kwong, D.-L.**, *see* Bai, W., *EDL May 2007* 369-372
- Kwong, D.-L.**, *see* Lim, A. E.-J., *EDL June 2007* 482-485
- Kwong, D.-L.**, *see* Singh, N., *EDL July 2007* 558-561
- Kwong, D.-L.**, *see* Rustagi, S. C., *EDL Oct. 2007* 909-912

L

- Lacaita, A. L.**, *see* Compagnoni, C. M., *EDL July 2007* 628-630
- Lacaita, A. L.**, *see* Mantegazza, D., *EDL Oct. 2007* 865-867
- Lai, C.-M.**, *see* Lin, C.-T., *EDL Feb. 2007* 111-113
- Lai, C.-M.**, *see* Lin, C.-T., *EDL May 2007* 376-378
- Lai, C.-M.**, Fang, Y.-K., Yeh, W.-K., Lin, C. T., and Chou, T. H., The Investigation of Post-Annealing-Induced Defects Behavior on 90-nm In HalonMOSFETs With Low-Frequency Noise and Charge-Pumping Measuring; *EDL Feb. 2007* 142-144
- Lai, C.-S.**, *see* Wu, W.-C., *EDL March 2007* 214-216
- Lai, E.**, *see* Lai, S., *EDL July 2007* 643-645
- Lai, E.-K.**, *see* Hsu, T.-H., *EDL May 2007* 443-445
- Lai, H.-C.**, Cheng, K.-Y., King, Y.-C., and Lin, C.-J., A $0.26\text{-}\mu\text{m}^2$ U-Shaped Nitride-Based Programming Cell on Pure 90-nm CMOS Technology; *EDL Sept. 2007* 837-839
- Lai, J.**, and King Liu, T.-J., Defect Passivation by Selenium-Ion Implantation for Poly-Si Thin Film Transistors; *EDL Aug. 2007* 725-727
- Lai, K.-S.**, Huang, J.-C., and Hsu, K. Y.-J., High-Responsivity Photodetector in Standard SiGe BiCMOS Technology; *EDL Sept. 2007* 800-802
- Lai, R.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Lai, S.**, Lue, H., Hsieh, J., Yang, M., Chiou, Y., Wu, C., Wu, T., Luo, G., Chien, C., Lai, E., Hsieh, K., Liu, R., and Lu, C., Study of the Erase Mechanism of MANOS (Metal/ $Al_2O_3/SiN/SiO_2/Si$) Device; *EDL July 2007* 643-645
- Lange, M.**, *see* Mei, X. B., *EDL June 2007* 470-472
- Langley, D.**, *see* Jessen, G. H., *EDL May 2007* 354-356
- Larrieu, G.**, *see* Cornu-Fruloux, F., *EDL June 2007* 523-526
- Lau, K. M.**, *see* Song, D., *EDL March 2007* 189-191
- Lau, K. M.**, *see* Cai, Y., *EDL May 2007* 328-331
- Lau, K. M.**, *see* Zhou, W., *EDL July 2007* 539-542
- Lauwers, A.**, *see* Lousberg, G. P., *EDL Feb. 2007* 123-125
- Lauwers, A.**, *see* Yu, H. Y., *EDL Feb. 2007* 154-156
- Lauwers, A.**, *see* Chang, S. Z., *EDL July 2007* 634-636
- Lauwers, A.**, *see* Yu, H. Y., *EDL Nov. 2007* 957-959
- Lauwers, A.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- Le Carval, G.**, *see* Mayer, F., *EDL July 2007* 619-621
- Le Royer, C.**, *see* Mayer, F., *EDL July 2007* 619-621
- LeMinh, P.**, *see* Hoang, T., *EDL May 2007* 383-385
- EDLerer, D.**, *see* Kilchytska, V., *EDL May 2007* 419-421
- Lee, B. H.**, *see* Joshi, S., *EDL April 2007* 308-311
- Lee, B.-H.**, *see* Wang, Y., *EDL Jan. 2007* 51-53
- Lee, B.-H.**, *see* Wang, Y., *EDL April 2007* 279-281
- Lee, B.-H.**, *see* Wang, Y., *EDL July 2007* 640-642
- Lee, B.**, Biswas, N., Novak, S. R., and Misra, V., Characteristics of Ni/Gd FUSI for NMOS Gate Electrode Applications; *EDL July 2007* 555-557
- Lee, B.-H.**, *see* Chang, M., *EDL Jan. 2007* 21-23
- Lee, C. A.**, *see* Jung, K.-D., *EDL March 2007* 204-206
- Lee, C.-H.**, *see* Wu, W.-C., *EDL March 2007* 214-216
- Lee, C.-M.**, *see* Chao, D.-S., *EDL Oct. 2007* 871-873
- Lee, C.-S.**, *see* Su, K.-H., *EDL Feb. 2007* 96-99
- Lee, C.-T.**, *see* Lien, Y.-C., *EDL Feb. 2007* 93-95
- Lee, D.-H.**, *see* Moon, C.-R., *EDL Feb. 2007* 114-116
- Lee, F.-M.**, Tsai, C.-L., Hu, C.-W., Huang, K.-F., Wu, M.-C., and Ko, S.-C., $1.3\text{-}\mu\text{m}$ GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planarized and Surface-Relief Processes for Single-Mode Operation; *EDL Feb. 2007* 120-122
- Lee, H.**, *see* Oh, J., *EDL Nov. 2007* 1044-1046
- Lee, H. J.**, *see* Jeong, Y. H., *EDL Jan. 2007* 17-20
- Lee, H. J.**, *see* Jeong, J. K., *EDL May 2007* 389-391

- Lee, H.-J.**, *see Cho, W.-S.*, *EDL May 2007* 386-388
Lee, H.-J., *see Kim, J.-S.*, *EDL Oct. 2007* 896-898
Lee, H.-S., Domeij, M., Zetterling, C.-M., Ostling, M., Allerstam, F., and Sveinbjörnsson, E. O., 1200-V 5.2-mΩ·cm² 4H-SiC BJTs With a High Common-Emitter Current Gain; *EDL Nov. 2007* 1007-1009
Lee, I.-C., *see Tsai, C.-C.*, *EDL Nov. 2007* 1010-1013
Lee, J., *see Jeong, J. K.*, *EDL May 2007* 389-391
Lee, J. C., *see Akbar, M. S.*, *EDL Feb. 2007* 132-134
Lee, J. C., *see Zhang, M. H.*, *EDL March 2007* 195-197
Lee, J. C., *see Joshi, S.*, *EDL April 2007* 308-311
Lee, J. D., *see Jung, K.-D.*, *EDL March 2007* 204-206
Lee, J. D., *see Kang, I. M.*, *EDL May 2007* 425-427
Lee, J. D., *see Choi, W. Y.*, *EDL Aug. 2007* 743-745
Lee, J. R., *see Chen, J. F.*, *EDL Nov. 2007* 1033-1035
Lee, J. Y., *see Hsu, H.*, *EDL Nov. 2007* 964-966
Lee, J.-H., *see Park, K.-H.*, *EDL Feb. 2007* 148-150
Lee, J.-H., *see Jung, H.-A.-R.*, *EDL Dec. 2007* 1126-1128
Lee, J.-W., *see Chen, C.-Y.*, *EDL May 2007* 392-394
Lee, J.-W., Chang, J.-W., Kim, D.-J., Yoon, Y.-S., and Kim, J.-K., Performance Improvement of Organic Thin-Film Transistors by Electrode/Pentacene Interface Treatment Using a Hydrogen Plasma; *EDL May 2007* 379-382
Lee, J., *see Mei, X. B.*, *EDL June 2007* 470-472
Lee, J., *see Han, J.-W.*, *EDL July 2007* 625-627
Lee, K.-S., Kim, Y.-S., Hong, Y.-K., and Jeong, Y.-H., 35-nm Zigzag T-Gate In_{0.52}Al_{0.48}As/In_{0.53}Ga_{0.47}As Metamorphic GaAs HEMTs With an Ultrahigh f_{max} of 520 GHz; *EDL Aug. 2007* 672-675
Lee, M. K., *see Lim, B. O.*, *EDL July 2007* 546-548
Lee, P.-H., *see Chen, C.-Y.*, *EDL May 2007* 392-394
Lee, R. T. P., *see Lim, A. E.-J.*, *EDL June 2007* 482-485
Lee, R. T. P., *see Tan, K.-M.*, *EDL Oct. 2007* 905-908
Lee, R. T. P., *see Liow, T.-Y.*, *EDL Nov. 2007* 1014-1017
Lee, R. T. P., Lim, A. E.-J., Tan, K.-M., Liow, T.-Y., Lo, G.-Q., Samudra, G. S., Chi, D. Z., and Yeo, Y.-C., N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide; *EDL Feb. 2007* 164-167
Lee, S., *see Kim, D.*, *EDL June 2007* 520-522
Lee, S. J., *see Chen, J.*, *EDL Oct. 2007* 862-864
Lee, S. J., *see Loh, W. Y.*, *EDL Nov. 2007* 984-986
Lee, S., and Yang, K., Sub-1-V Supply Self-Adaptive CMOS Image Sensor Cell With 86-dB Dynamic Range; *EDL June 2007* 492-494
Lee, T., *see Akbar, M. S.*, *EDL Feb. 2007* 132-134
Lee, T. L., *see Chu, L. H.*, *EDL Feb. 2007* 82-85
Lee, T.-C., *see Lin, C.-Y.*, *EDL May 2007* 366-368
Lee, T.-H., *see Lin, C.-T.*, *EDL Feb. 2007* 111-113
Lee, T.-H., *see Huang, Y.-T.*, *EDL Sept. 2007* 815-817
Lee, W.-S., *see Park, M.*, *EDL Aug. 2007* 750-752
Lee, W.-S., *see Cho, K. H.*, *EDL Dec. 2007* 1129-1131
Lee, Y.-D., *see Cho, W.-S.*, *EDL May 2007* 386-388
Lee, Y.-H., *see Cho, W.-S.*, *EDL May 2007* 386-388
Lee, Y.-J., *see Tsai, C.-C.*, *EDL Nov. 2007* 1010-1013
Lehnen, P., *see Yu, H. Y.*, *EDL July 2007* 656-658
Lehnen, P., *see Yu, H. Y.*, *EDL Nov. 2007* 957-959
Lehnen, P., *see Veloso, A.*, *EDL Nov. 2007* 980-983
Lei, T.-F., *see Ma, M.-W.*, *EDL March 2007* 238-241
Lei, T.-F., *see Lin, Y.-H.*, *EDL April 2007* 267-269
Lei, T.-F., *see Chen, C.-Y.*, *EDL May 2007* 392-394
Lei, T.-F., *see Chang, C.-W.*, *EDL Nov. 2007* 993-995
Lemme, M. C., Echtermeyer, T. J., Baus, M., and Kurz, H., A Graphene Field-Effect Device; *EDL April 2007* 282-284
Leobandung, E., *see Zhu, H.*, *EDL Feb. 2007* 168-170
Lew, K. L., Yoon, S. F., Wang, H., Wicaksono, S., Gupta, J. A., and McAlister, S. P., High-Gain Low Turn-On Voltage AlGaAs/GaAsNSb/GaAs Heterojunction Bipolar Transistors Grown by Molecular Beam Epitaxy; *EDL Dec. 2007* 1083-1085
Leys, F. E., *see Collaert, N.*, *EDL July 2007* 646-648
Li, C., Liao, H., Wang, C., Yin, J., Huang, R., and Wang, Y., High-Q Integrated Inductor Using Post-CMOS Selectively Grown Porous Silicon (SGPS) Technique for RFIC Applications; *EDL Aug. 2007* 763-766
Li, D., *see Mei, X. B.*, *EDL June 2007* 470-472
Li, H., *see Sun, W.*, *EDL July 2007* 631-633
Li, H., *see Sun, W.*, *EDL Dec. 2007* 1135-1137
Li, L., *see Song, Y.*, *EDL Feb. 2007* 107-110
Li, M., *see Cho, K. H.*, *EDL Dec. 2007* 1129-1131
Li, M.-F., *see Lousberg, G. P.*, *EDL Feb. 2007* 123-125
Li, M.-F., *see Wang, X. P.*, *EDL April 2007* 258-260
Li, M.-F., *see Wu, C. H.*, *EDL April 2007* 292-294
Li, M.-F., *see Ang, K.-W.*, *EDL April 2007* 301-304
Li, M.-F., *see Ang, K.-W.*, *EDL June 2007* 509-512
Li, M.-F., *see Chen, J.*, *EDL Oct. 2007* 862-864
Li, R., Kong, W.-R., Tao, K., Yu, L.-J., Huang, K., Ning, J., Geng, C.-Q., and Wang, C.-D., Threshold Voltage Shift Due to Mechanical Stress-Enhanced Plasma Process-Induced Damage in 0.13-μm pMOSFET; *EDL May 2007* 360-362
Li, X., *see Hill, R. J. W.*, *EDL Dec. 2007* 1080-1082
Li, Y., Huang, R., Cai, Y., Zhou, F., Shan, X., Zhang, X., and Wang, Y., A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application; *EDL July 2007* 622-624
Li, Z., *see Luo, X.*, *EDL May 2007* 422-424
Lian, C., Xing, H., Wang, C. S., McCarthy, L., and Brown, D., DC Characteristics of AlGaAs/GaAs/GaN HBTs Formed by Direct Wafer Fusion; *EDL Jan. 2007* 8-10
Liang, M. S., *see Yen, F. Y.*, *EDL March 2007* 201-203
Liang, M. S., *see Wu, C. H.*, *EDL April 2007* 292-294
Liang, Q., *see Zhu, H.*, *EDL Feb. 2007* 168-170
Liao, H., *see Li, C.*, *EDL Aug. 2007* 763-766
Liao, Y.-Y., Horng, S.-F., Chang, Y.-W., Lu, T.-C., Chen, K.-C., Wang, T., and Lu, C.-Y., Profiling of Nitride-Trap-Energy Distribution in SONOS Flash Memory by Using a Variable-Amplitude Low-Frequency Charge-Pumping Technique; *EDL Sept. 2007* 828-830
Liaw, C.-W., Yeh, L., Lin, M.-J., and Lin, C. J., Pinch-Off Voltage-Adjustable High-Voltage Junction Field-Effect Transistor; *EDL Aug. 2007* 737-739
Lien, C., *see Chao, D.-S.*, *EDL Oct. 2007* 871-873
Lien, C.-H., *see Chen, S.-C.*, *EDL Sept. 2007* 809-811
Lien, C., *see Wang, J.-S.*, *EDL Nov. 2007* 1040-1043
Lien, Y. C., *see Chu, L. H.*, *EDL Feb. 2007* 82-85
Lien, Y.-C., Chen, S.-H., Chang, E. Y., Lee, C.-T., Chu, L.-H., and Chang, C.-Y., Fabrication of 0.15-μm Γ-Shaped Gate In_{0.52}Al_{0.48}As/In_{0.6}Ga_{0.4}As Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique; *EDL Feb. 2007* 93-95
Lim, A., *see Wang, X. P.*, *EDL April 2007* 258-260
Lim, A. E.-J., *see Lee, R. T. P.*, *EDL Feb. 2007* 164-167
Lim, A. E.-J., Lee, R. T. P., Wang, X. P., Hwang, W. S., Tung, C. H., Samudra, G. S., Kwong, D.-L., and Yeo, Y.-C., Yttrium- and Terbium-Based Interlayer on SiO₂ and HfO₂ Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET; *EDL June 2007* 482-485
Lim, B. O., *see Kim, T.-W.*, *EDL Dec. 2007* 1086-1088
Lim, B. O., Lee, M. K., Baek, T. J., Han, M., Kim, S. C., and Rhee, J.-K., 50-nm T-Gate InAlAs/InGaAs Metamorphic HEMTs With Low Noise and High f_T Characteristics; *EDL July 2007* 546-548
Lim, J. B., *see Jeong, Y. H.*, *EDL Jan. 2007* 17-20
Lim, P. S., *see Yen, F. Y.*, *EDL March 2007* 201-203
Lim, S. L., *see Song, Y.*, *EDL Feb. 2007* 107-110
Lim, Y. F., *see Jiang, Y.*, *EDL July 2007* 603-605
Lim, Y. F., *see Rustagi, S. C.*, *EDL Oct. 2007* 909-912
Lin, C. J., *see Liaw, C.-W.*, *EDL Aug. 2007* 737-739
Lin, C. T., *see Lai, C.-M.*, *EDL Feb. 2007* 142-144
Lin, C.-C., *see Hu, C.-M.*, *EDL Nov. 2007* 1000-1003
Lin, C.-H., *see Kuo, P.-S.*, *EDL July 2007* 596-598
Lin, C.-J., *see Chen, H.-T.*, *EDL June 2007* 499-501
Lin, C.-J., *see Lai, H.-C.*, *EDL Sept. 2007* 837-839
Lin, C.-L., and Chen, Y.-C., A Novel LTPS-TFT Pixel Circuit Compensating for TFT Threshold-Voltage Shift and OEDL Degradation for AMOEDL; *EDL Feb. 2007* 129-131
Lin, C.-L., and Tsai, T.-T., A Novel Voltage Driving Method Using 3-TFT Pixel Circuit for AMOEDL; *EDL June 2007* 489-491
Lin, C.-T., *see Huang, Y.-T.*, *EDL Sept. 2007* 815-817
Lin, C.-T., Fang, Y.-K., Yeh, W.-K., Lai, C.-M., Hsu, C.-H., Cheng, L.-W., and Ma, G. H., Impacts of Notched-Gate Structure on Contact Etch Stop Layer (CESL) Stressed 90-nm nMOSFET; *EDL May 2007* 376-378
Lin, C.-T., Fang, Y.-K., Yeh, W.-K., Lee, T.-H., Chen, M.-S., Lai, C.-M., Hsu, C.-H., Chen, L.-W., Cheng, L.-W., and Ma, M., A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance; *EDL Feb. 2007* 111-113
Lin, C.-T., Ramin, M., Pas, M., Wise, R., Fang, Y.-K., Hsu, C.-H., Huang, Y.-T., Cheng, L.-W., and Ma, M., CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI; *EDL Sept. 2007* 831-833

- Lin, C.-Y.**, Wu, C.-Y., Wu, C.-Y., Lee, T.-C., Yang, F.-L., Hu, C., and Tseng, T.-Y., Effect of Top Electrode Material on Resistive Switching Properties of ZrO₂ Film Memory Devices; *EDL May 2007* 366-368
- Lin, D.-W.**, Cheng, M.-L., Wang, S.-W., Wu, C.-C., and Chen, M.-J., A Constant-Mobility Method to Enable MOSFET Series-Resistance Extraction; *EDL Dec. 2007* 1132-1134
- Lin, G. M.**, see Chang, K. M., *EDL Jan. 2007* 39-41
- Lin, G. M.**, see Chang, K. M., *EDL Sept. 2007* 806-808
- Lin, H. C.**, see Xuan, Y., *EDL Nov. 2007* 935-938
- Lin, H. J.**, see Yen, F. Y., *EDL March 2007* 201-203
- Lin, H.-T.**, Pei, Z., and Chan, Y.-J., Carrier Transport Mechanism in a Nanoparticle-Incorporated Organic Bistable Memory Device; *EDL July 2007* 569-571
- Lin, H.-T.**, Pei, Z., Chen, J.-R., Hwang, G.-W., Fan, J.-F., and Chan, Y.-J., A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device; *EDL Nov. 2007* 951-953
- Lin, H.-Y.**, see Chen, C.-Y., *EDL May 2007* 392-394
- Lin, H.**, Liu, H., Kumar, A., Avci, U., Van Delden, J. S., Tiwari, S., and Kumar, A., Strained-Si Channel Super-Self-Aligned Back-Gate/Double-Gate Planar Transistors; *EDL June 2007* 506-508
- Lin, H.**, and Tiwari, S., A Novel Dual-Polarity Nonvolatile Memory; *EDL May 2007* 412-415
- Lin, L.-F.**, see Lu, T.-C., *EDL Oct. 2007* 884-886
- Lin, M.-J.**, see Liaw, C.-W., *EDL Aug. 2007* 737-739
- Lin, M.-R.**, see Pan, J., *EDL Aug. 2007* 691-693
- Lin, P.-S.**, see Chen, S.-C., *EDL Sept. 2007* 809-811
- Lin, S. S.**, see Cheng, C. Y., *EDL May 2007* 408-411
- Lin, Y. C.**, see Chiou, Y. Z., *EDL April 2007* 264-266
- Lin, Y.-H.**, Chien, C.-H., Chou, T.-H., Chao, T.-S., and Lei, T.-F., Impact of Channel Dangling Bonds on Reliability Characteristics of Flash Memory on Poly-Si Thin Films; *EDL April 2007* 267-269
- Lin, Y.-T.**, Shieh, J.-M., and Chen, C., Enhanced Hole Mobility and Reliability of Panel Epi-Like Silicon Transistors Using Backside Green Laser Activation; *EDL Sept. 2007* 790-792
- Lindsay, R.**, see Severi, S., *EDL March 2007* 198-200
- Ling, Q. D.**, see Song, Y., *EDL Feb. 2007* 107-110
- Liou, J. C.**, see Wu, W.-C., *EDL March 2007* 214-216
- Liou, J. J.**, see Fu, Y., *EDL Feb. 2007* 174-176
- Liou, J. J.**, see Lou, L., *EDL Dec. 2007* 1120-1122
- Liow, T.-Y.**, see Lee, R. T. P., *EDL Feb. 2007* 164-167
- Liow, T.-Y.**, see Tan, K.-M., *EDL Oct. 2007* 905-908
- Liow, T.-Y.**, Tan, K.-M., Lee, R. T. P., Tung, C.-H., Samudra, G. S., Balasubramanian, N., and Yeo, Y.-C., N-Channel (110)-Sidewall Strained Fin-FETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer; *EDL Nov. 2007* 1014-1017
- Liu, C. M.**, see Chen, J. F., *EDL Nov. 2007* 1033-1035
- Liu, C. W.**, see Kuo, P.-S., *EDL July 2007* 596-598
- Liu, C.-H.**, and Chiu, F.-C., Electrical Characterization of ZrO₂/Si Interface Properties in MOSFETs With ZrO₂ Gate Dielectrics; *EDL Jan. 2007* 62-64
- Liu, F.**, see Yang, C., *EDL July 2007* 652-655
- Liu, H.**, see Lin, H., *EDL June 2007* 506-508
- Liu, H. G.**, see Zhou, W., *EDL July 2007* 539-542
- Liu, H. G.**, Ostinelli, O., Zeng, Y. P., and Bolognesi, C. R., High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz; *EDL Oct. 2007* 852-855
- Liu, J.**, see Song, D., *EDL March 2007* 189-191
- Liu, J. C.**, see Chen, Y. H., *EDL Dec. 2007* 1111-1113
- Liu, J.**, and Kwong, D. L., Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate; *EDL Jan. 2007* 11-13
- Liu, L.-T.**, see Yang, C., *EDL July 2007* 652-655
- Liu, P. H.**, see Mei, X. B., *EDL June 2007* 470-472
- Liu, P.-T.**, see Tsai, C.-T., *EDL July 2007* 584-586
- Liu, P.-T.**, see Chen, S.-C., *EDL Sept. 2007* 809-811
- Liu, P.-T.**, Lu, H.-Y., Chen, Y.-C., and Chi, S., Degradation of Laser-Crystallized Laterally Grown Poly-Si TFT under Dynamic Stress; *EDL May 2007* 401-403
- Liu, P.-T.**, and Wu, H.-H., High-Performance Polycrystalline-Silicon TFT by Heat-Retaining Enhanced Lateral Crystallization; *EDL Aug. 2007* 722-724
- Liu, R.**, see Lai, S., *EDL July 2007* 643-645
- Liu, R.**, see Hsu, T.-H., *EDL May 2007* 443-445
- Liu, R.**, see Zhang, Z., *EDL July 2007* 565-568
- Liu, T.-J. K.**, see Choi, W. Y., *EDL Aug. 2007* 743-745
- Liu, W.**, see Mei, X. B., *EDL June 2007* 470-472
- Liu, W. K.**, see Datta, S., *EDL Aug. 2007* 685-687
- Liu, Y.**, see Luo, X., *EDL May 2007* 422-424
- Liu, Y. X.**, see Endo, K., *EDL May 2007* 452-454
- Liu, Y.**, see Feng, J., *EDL July 2007* 637-639
- Liu, Y.**, see Endo, K., *EDL Dec. 2007* 1123-1125
- Liu, Y.**, Matsukawa, T., Endo, K., Masahara, M., Ouchi, S., Ishii, K., Yamauchi, H., Tsukada, J., Ishikawa, Y., and Suzuki, E., Cointegration of High-Performance Tied-Gate Three-Terminal FinFETs and Variable Threshold-Voltage Independent-Gate Four-Terminal FinFETs With Asymmetric Gate-Oxide Thicknesses; *EDL June 2007* 517-519
- Lo, G. Q.**, see Fang, W. W., *EDL March 2007* 211-213
- Lo, G. Q.**, see Wang, X. P., *EDL April 2007* 258-260
- Lo, G. Q.**, see Singh, N., *EDL July 2007* 558-561
- Lo, G. Q.**, see Jiang, Y., *EDL July 2007* 603-605
- Lo, G. Q.**, see Rustagi, S. C., *EDL Oct. 2007* 909-912
- Lo, G. Q.**, see Rustagi, S. C., *EDL Nov. 2007* 1021-1024
- Lo, G. Q.**, see Loh, W. Y., *EDL Nov. 2007* 984-986
- Lo, G. Q.**, see Zang, H., *EDL Dec. 2007* 1117-1119
- Locquet, J.-P.**, see Sun, Y., *EDL June 2007* 473-475
- Loh, T. H.**, see Loh, W. Y., *EDL Nov. 2007* 984-986
- Loh, W. Y.**, see Wang, X. P., *EDL April 2007* 258-260
- Loh, W. Y.**, see Jiang, Y., *EDL July 2007* 603-605
- Loh, W. Y.**, see Zang, H., *EDL Dec. 2007* 1117-1119
- Loh, W. Y.**, Wang, J., Ye, J. D., Yang, R., Nguyen, H. S., Chua, K. T., Song, J. F., Loh, T. H., Xiong, Y. Z., Lee, S. J., Yu, M. B., Lo, G. Q., and Kwong, D. L., Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget; *EDL Nov. 2007* 984-986
- Loiko, K.**, see Winstead, B., *EDL Aug. 2007* 719-721
- Loo, R.**, see Collaert, N., *EDL July 2007* 646-648
- Loo, R.**, see Simoen, E., *EDL Nov. 2007* 987-989
- Lou, C.**, see Wei, L., *EDL Aug. 2007* 688-690
- Lou, C.-C.**, see Yang, M.-J., *EDL Oct. 2007* 902-904
- Lou, L.**, and Liou, J. J., An Unassisted, Low Trigger-, and High Holding-Voltage SCR (uSCR) for On-Chip ESD-Protection Applications; *EDL Dec. 2007* 1120-1122
- Loubichev, D.**, see Datta, S., *EDL Aug. 2007* 685-687
- Lousberg, G. P.**, Yu, H. Y., Froment, B., Augendre, E., De Keersgieter, A., Lauwers, A., Li, M.-F., Absil, P., Jurczak, M., and Biesemans, S., Schottky-Barrier Height Lowering by an Increase of the Substrate Doping in PtSi Schottky Barrier Source/Drain FETs; *EDL Feb. 2007* 123-125
- Lu, C.**, see Lai, S., *EDL July 2007* 643-645
- Lu, C.-C.**, see Lu, C.-Y., *EDL May 2007* 432-435
- Lu, C.-Y.**, see Hsu, T.-H., *EDL May 2007* 443-445
- Lu, C.-Y.**, Chang-Liao, K.-S., Lu, C.-C., Tsai, P.-H., and Wang, T.-K., Detection of Border Trap Density and Energy Distribution Along the Gate Di-electric Bulk of High- κ Gated MOS Devices; *EDL May 2007* 432-435
- Lu, C.-Y.**, see Shiu, J.-Y., *EDL June 2007* 476-478
- Lu, C.-Y.**, see Liao, Y.-Y., *EDL Sept. 2007* 828-830
- Lu, H.-Y.**, see Liu, P.-T., *EDL May 2007* 401-403
- Lu, J.**, see Huang, F., *EDL Nov. 2007* 1025-1028
- Lu, T.-C.**, see Liao, Y.-Y., *EDL Sept. 2007* 828-830
- Lu, T.-C.**, Kao, T.-T., Kao, C.-C., Chu, J.-T., Yeh, K.-F., Lin, L.-F., Peng, Y.-C., Huang, H.-W., Kuo, H.-C., and Wang, S.-C., GaN-Based High-Q Vertical-Cavity Light-Emitting Diodes; *EDL Oct. 2007* 884-886
- Lu, W. T.**, see Cheng, C. Y., *EDL May 2007* 408-411
- Lu, Y.-H.**, see Yang, M.-J., *EDL Oct. 2007* 902-904
- Lu, Y.-X.**, see Guo, P., *EDL July 2007* 572-574
- Lu, Z.**, see Fossum, J. G., *EDL June 2007* 513-516
- Lu, Z.**, and Fossum, J. G., Short-Channel Effects in Independent-Gate FinFETs; *EDL Feb. 2007* 145-147
- Lue, H.**, see Lai, S., *EDL July 2007* 643-645
- Lue, H. Y.**, see Hsu, T.-H., *EDL May 2007* 443-445
- Lugli, P.**, see Tedde, S., *EDL Oct. 2007* 893-895
- Luo, G.**, see Lai, S., *EDL July 2007* 643-645
- Luo, G.-L.**, see Yang, M.-J., *EDL Oct. 2007* 902-904
- Luo, X.**, Zhang, B., Li, Z., Guo, Y., Tang, X., and Liu, Y., A Novel 700-V SOI LDMOS With Double-Sided Trench; *EDL May 2007* 422-424

M**Ma, G. H.**, see Lin, C.-T., *EDL May 2007* 376-378

- Ma, M.**, *see* Lin, C.-T., *EDL Feb. 2007* 111-113
Ma, M.-W., *see* Chen, C.-Y., *EDL May 2007* 392-394
Ma, M.-W., Wu, C.-H., Yang, T.-Y., Kao, K.-H., Wu, W.-C., Wang, S.-J., Chao, T.-S., and Lei, T.-F., Impact of High- κ Offset Spacer in 65-nm Node SOI Devices; *EDL March 2007* 238-241
Ma, M., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
Ma, M., *see* Lin, C.-T., *EDL Sept. 2007* 831-833
Ma, Z., *see* Yuan, H.-C., *EDL July 2007* 590-592
Macintyre, D., *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
Maclean, J. O., *see* Kuball, M., *EDL Feb. 2007* 86-89
Madan, A., *see* Ang, K.-W., *EDL June 2007* 509-512
Maes, H., *see* Shickova, A., *EDL March 2007* 242-244
Maes, H. E., *see* Martens, K., *EDL May 2007* 436-439
Maes, H., *see* Furnemont, A., *EDL April 2007* 276-278
Maes, H., *see* Aoulaliche, M., *EDL July 2007* 613-615
Maes, J. W., *see* Aoulaliche, M., *EDL July 2007* 613-615
Mahapatra, S., *see* Datta, A., *EDL May 2007* 446-448
Majhi, P., *see* Joshi, S., *EDL April 2007* 308-311
Majhi, P., *see* Oh, J., *EDL Nov. 2007* 1044-1046
Maji, D., Duttagupta, S. P., Rao, V. R., Yeo, C. C., and Cho, B.-J., Border-Trap Characterization in High- κ Strained-Si MOSFETs; *EDL Aug. 2007* 731-733
Makimoto, T., *see* Shiu, J.-Y., *EDL June 2007* 476-478
Mallinger, M., *see* Zhao, F., *EDL May 2007* 398-400
Manoj, C. R., and Rao, V. R., Impact of High- κ Gate Dielectrics on the Device and Circuit Performance of Nanoscale FinFETs; *EDL April 2007* 295-297
Mantegazza, D., Ielmini, D., Pirovano, A., and Lacaita, A. L., Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays; *EDL Oct. 2007* 865-867
Mantl, S., *see* Zhang, M., *EDL March 2007* 223-225
Mao, L., The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs; *EDL Feb. 2007* 161-163
Marathe, A., *see* Yu, C., *EDL Jan. 2007* 45-47
Marinoni, A., *see* Fantini, P., *EDL Dec. 2007* 1114-1116
Marmiroli, A., *see* Fantini, P., *EDL Dec. 2007* 1114-1116
Marshall, J. C., Herman, D. L., Vernier, P. T., DeVoe, D. L., and Gaitan, M., Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures; *EDL Nov. 2007* 960-963
Martens, K., Rosmeulen, M., Kaczer, B., Groeseneken, G., and Maes, H. E., Electrical Characterization of Leaky Charge-Trapping High- κ MOS Devices Using Pulsed $Q-V$; *EDL May 2007* 436-439
Martin, M. J., *see* Rengel, R., *EDL Feb. 2007* 171-173
Martin, T., *see* Kuball, M., *EDL Feb. 2007* 86-89
Masahara, M., *see* Endo, K., *EDL May 2007* 452-454
Masahara, M., *see* Liu, Y., *EDL June 2007* 517-519
Masahara, M., *see* Endo, K., *EDL Dec. 2007* 1123-1125
Masahara, M., Surdeanu, R., Witters, L., Doornbos, G., Nguyen, V. H., Van den bosch, G., Vrancken, C., Devriendt, K., Neuilly, F., Kunnen, E., Jurczak, M., and Biesemans, S., Demonstration of Asymmetric Gate-Oxide Thickness Four-Terminal FinFETs Having Flexible Threshold Voltage and Good Subthreshold Slope; *EDL March 2007* 217-219
Massengill, L. W., *see* Warren, K. M., *EDL Feb. 2007* 180-182
Massoud, Y., *see* Nieuwoudt, A., *EDL April 2007* 305-307
Mathews, K., *see* Zaman, R. J., *EDL Oct. 2007* 916-918
Matsukawa, T., *see* Endo, K., *EDL May 2007* 452-454
Matsukawa, T., *see* Liu, Y., *EDL June 2007* 517-519
Matsukawa, T., *see* Endo, K., *EDL Dec. 2007* 1123-1125
Matthews, K., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
Mayer, F., Le Royer, C., Le Carval, G., Clavelier, L., and Deleonibus, S., Experimental and TCAD Investigation of the Two Components of the Impact Ionization MOSFET (IMOS) Switching; *EDL July 2007* 619-621
McAlister, S. P., *see* Chiang, K. C., *EDL Aug. 2007* 694-696
McAlister, S. P., *see* Yang, H. J., *EDL Oct. 2007* 913-915
McAlister, S. P., *see* Cheng, C. H., *EDL Dec. 2007* 1095-1097
McAlister, S. P., *see* Cheng, C. F., *EDL Dec. 2007* 1092-1094
McAlister, S. P., *see* Lew, K. L., *EDL Dec. 2007* 1083-1085
McCarthy, L., *see* Lian, C., *EDL Jan. 2007* 8-10
McCarthy, L., *see* Chu, R., *EDL Sept. 2007* 781-783
McIntyre, P. C., *see* Wang, Z., *EDL Jan. 2007* 14-16
McVittie, J., *see* Wang, Z., *EDL Jan. 2007* 14-16
Mei, X. B., Yoshida, W., Deal, W. R., Liu, P. H., Lee, J., Uyeda, J., Dang, L., Wang, J., Liu, W., Li, D., Barsky, M., Kim, Y. M., Lange, M., Chin, T. P., Radisic, V., Gaier, T., Fung, A., Samoska, L., and Lai, R., 35-nm InP HEMT SMMIC Amplifier With 4.4-dB Gain at 308 GHz; *EDL June 2007* 470-472
Meindl, J. D., *see* Naeemi, A., *EDL Feb. 2007* 135-138
Meindl, J. D., *see* Naeemi, A., *EDL May 2007* 428-431
Meindl, J. D., *see* Sekar, D. C., *EDL Aug. 2007* 767-769
Mendenhall, M. H., *see* Warren, K. M., *EDL Feb. 2007* 180-182
Mercha, A., *see* Guo, W., *EDL April 2007* 288-291
Merlos, A., *see* Garcia-Canton, J., *EDL Jan. 2007* 27-29
Mertens, S., *see* Yu, H. Y., *EDL Feb. 2007* 154-156
Meunier-Beillard, P., *see* Choi, L. J., *EDL April 2007* 270-272
Meuris, M., *see* Nicholas, G., *EDL Sept. 2007* 825-827
Mhaisalkar, S. G., *see* Tiwari, S. P., *EDL Oct. 2007* 880-883
Mikhelashvili, V., and Eisenstein, G., High- κ $\text{Al}_2\text{O}_3-\text{HfTiO}$ Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness; *EDL Jan. 2007* 24-26
Mimura, A., *see* Sugawara, Y., *EDL May 2007* 395-397
Mishima, T., *see* Nomoto, K., *EDL Nov. 2007* 939-941
Mishra, U. K., *see* Chu, R., *EDL Sept. 2007* 781-783
Mishra, U. K., *see* Poblenz, C., *EDL Nov. 2007* 945-947
Misra, V., *see* Lee, B., *EDL July 2007* 555-557
Mitsuhashi, R., *see* Yu, H. Y., *EDL July 2007* 656-658
Miyamoto, Y., *see* Chang, C. Y., *EDL Oct. 2007* 856-858
Mizutani, M., *see* Kawahara, T., *EDL Oct. 2007* 868-870
Mizutani, T., Ito, M., Kishimoto, S., and Nakamura, F., AlGaN/GaN HEMTs With Thin InGaN Cap Layer for Normally Off Operation; *EDL July 2007* 549-551
Mo, Y. G., *see* Jeong, J. K., *EDL May 2007* 389-391
Moens, P., *see* Bakeroor, B., *EDL May 2007* 416-418
Mohajerzadeh, S., *see* Jamei, M., *EDL March 2007* 207-210
Mohamraj, S., *see* Singh, N., *EDL July 2007* 558-561
Moon, C.-R., Jung, J., Kwon, D.-W., Yoo, J., Lee, D.-H., and Kim, K., Application of Plasma-Doping (PLAD) Technique to Reduce Dark Current of CMOS Image Sensors; *EDL Feb. 2007* 114-116
Moran, D. A. J., *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
Mouthaan, K., *see* Sun, S., *EDL March 2007* 220-222
Muller, C. R., Worschach, L., Hopfner, P., Hofling, S., and Forchel, A., Monolithically Integrated Logic NOR Gate Based on GaAs/AlGaAs Three-Terminal Junctions; *EDL Oct. 2007* 859-861
Murata, N., *see* Kawahara, T., *EDL Oct. 2007* 868-870
Murthy, J. Y., *see* Pimparkar, N., *EDL Feb. 2007* 157-160

N

- Na, H. J.**, *see* Joshi, S., *EDL April 2007* 308-311
Na, K.-Y., and Kim, Y.-S., Novel Single Polysilicon EEPROM Cell With Dual Work Function Floating Gate; *EDL Feb. 2007* 151-153
Na, K.-Y., Kim, Y.-S., and Kim, Y.-S., A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor; *EDL Nov. 2007* 1047-1049
Nackaerts, A., *see* Kapila, G., *EDL March 2007* 232-234
Naeemi, A., and Meindl, J. D., Physical Modeling of Temperature Coefficient of Resistance for Single- and Multi-Wall Carbon Nanotube Interconnects; *EDL Feb. 2007* 135-138
Naeemi, A., and Meindl, J. D., Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects; *EDL May 2007* 428-431
Nahm, S., *see* Jeong, Y. H., *EDL Jan. 2007* 17-20
Nakajima, A., *see* Ohashi, T., *EDL July 2007* 562-564
Nakamura, F., *see* Mizutani, T., *EDL July 2007* 549-551
Nakamura, T., *see* Nomoto, K., *EDL Nov. 2007* 939-941
Namdas, E. B., *see* Tiwari, S. P., *EDL Oct. 2007* 880-883
Napoli, E., Duration of the High Breakdown Voltage Phase in Deep Depletion SOI LDMOS; *EDL Aug. 2007* 753-755
Nara, Y., *see* Umezawa, N., *EDL May 2007* 363-365
Nathan, A., *see* Chaji, G. R., *EDL Dec. 2007* 1108-1110
Nazarov, A., *see* Rudenko, T., *EDL Sept. 2007* 834-836
Neuilly, F., *see* Masahara, M., *EDL March 2007* 217-219
Ng, C., *see* Chaji, G. R., *EDL Dec. 2007* 1108-1110
Nguyen, B., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
Nguyen, H. S., *see* Fang, W. W., *EDL March 2007* 211-213
Nguyen, H. S., *see* Loh, W. Y., *EDL Nov. 2007* 984-986
Nguyen, V. H., *see* Masahara, M., *EDL March 2007* 217-219
Nicholas, G., *see* Guo, W., *EDL April 2007* 288-291
Nicholas, G., Grasby, T. J., Fulgomi, D. J. F., Beer, C. S., Parsons, J., Meuris, M., and Heyns, M. M., High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate; *EDL Sept. 2007* 825-827

- Nieuwoudt, A.**, and Massoud, Y., Performance Implications of Inductive Effects for Carbon-Nanotube Bundle Interconnect; *EDL April 2007* 305-307
- Niiyama, Y.**, *see* Kambayashi, H., *EDL Dec. 2007* 1077-1079
- Ning, J.**, *see* Li, R., *EDL May 2007* 360-362
- Nirschl, Th.**, Weis, M., Fulde, M., and Schmitt-Landsiedel, D., Correction to "Revision of Tunneling Field-Effect Transistor in Standard CMOS Technologies"; *EDL April 2007* 315-315
- Nishi, Y.**, *see* Wang, Z., *EDL Jan. 2007* 14-16
- Nishida, T.**, *see* Suthram, S., *EDL Jan. 2007* 58-61
- Nishida, Y.**, *see* Kawahara, T., *EDL Oct. 2007* 868-870
- Nishiguchi, K.**, Fujiwara, A., Ono, Y., Inokawa, H., and Takahashi, Y., Long Retention of Gain-Cell Dynamic Random Access Memory With Undoped Memory Node; *EDL Jan. 2007* 48-50
- Nishimura, K.**, *see* Shigekawa, N., *EDL Feb. 2007* 90-92
- Nitta, T.**, *see* Saito, W., *EDL Aug. 2007* 676-678
- Nomoto, K.**, Tajima, T., Mishima, T., Satoh, M., and Nakamura, T., Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current; *EDL Nov. 2007* 939-941
- Nomura, K.**, *see* Ofuji, M., *EDL April 2007* 273-275
- Nomura, T.**, *see* Kambayashi, H., *EDL Dec. 2007* 1077-1079
- Norris, C.**, *see* Kim, D., *EDL June 2007* 520-522
- Norris, C.**, *see* Kim, D., *EDL July 2007* 616-618
- Novak, S. R.**, *see* Lee, B., *EDL July 2007* 555-557

O

- O'Sullivan, B. J.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- Ouchi, S.**, *see* Endo, K., *EDL May 2007* 452-454
- Ouchi, S.-I.**, *see* Endo, K., *EDL Dec. 2007* 1123-1125
- Ouchi, S.**, *see* Liu, Y., *EDL June 2007* 517-519
- Ofuji, M.**, Abe, K., Shimizu, H., Kaji, N., Hayashi, R., Sano, M., Kumomi, H., Nomura, K., Kamiya, T., and Hosono, H., Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor; *EDL April 2007* 273-275
- Oh, J. W.**, *see* Joshi, S., *EDL April 2007* 308-311
- Oh, J.**, Majhi, P., Lee, H., Yoo, O., Banerjee, S., Kang, C. Y., Yang, J.-W., Harris, R., Tseng, H.-H., and Jammy, R., Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With ControlEDL Ge Epitaxial Layer Thickness on Si Substrates; *EDL Nov. 2007* 1044-1046
- Ohashi, T.**, Kubota, T., and Nakajima, A., Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge; *EDL July 2007* 562-564
- Ohno, T.**, *see* Umezawa, N., *EDL May 2007* 363-365
- Ohtou, T.**, Sugii, N., and Hiramoto, T., Impact of Parameter Variations and Random Dopant Fluctuations on Short-Channel Fully Depleted SOI MOS-FETs With Extremely Thin BOX; *EDL Aug. 2007* 740-742
- Ok, I. J.**, *see* Akbar, M. S., *EDL Feb. 2007* 132-134
- Ok, I. J.**, *see* Zhang, M. H., *EDL March 2007* 195-197
- Okoniewski, M.**, *see* Zine-El-Abidine, I., *EDL March 2007* 226-228
- Omampuliyur, S. R.**, *see* Rustagi, S. C., *EDL Nov. 2007* 1021-1024
- Omura, I.**, *see* Saito, W., *EDL Aug. 2007* 676-678
- Ono, Y.**, *see* Nishiguchi, K., *EDL Jan. 2007* 48-50
- Onsia, B.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- Onsia, B.**, *see* Yu, H. Y., *EDL Nov. 2007* 957-959
- Ootomo, S.**, *see* Kambayashi, H., *EDL Dec. 2007* 1077-1079
- Opsomer, K.**, *see* Yu, H. Y., *EDL Feb. 2007* 154-156
- Ostinelli, O.**, *see* Liu, H. G., *EDL Oct. 2007* 852-855
- Ostling, M.**, *see* Zhang, Z., *EDL July 2007* 565-568
- Ostling, M.**, *see* Lee, H.-S., *EDL Nov. 2007* 1007-1009
- Oudwan, M.**, *see* Hatzopoulos, A. T., *EDL Sept. 2007* 803-805
- Ouellet, L.**, *see* Brassard, D., *EDL April 2007* 261-263

P

- Padilla, A.**, Shin, K., King Liu, T.-J., Hyun, J. W., Yoo, I., and Park, Y., Dual-Bit Gate-Sidewall Storage FinFET NVM and New Method of Charge Detection; *EDL June 2007* 502-505
- Paek, K.-K.**, *see* Shin, K.-S., *EDL July 2007* 581-583
- Paillyoncy, G.**, *see* Kilchytska, V., *EDL May 2007* 419-421
- Palestri, P.**, *see* Zilli, M., *EDL Nov. 2007* 1036-1039
- Pan, H. C.**, *see* Chiang, K. C., *EDL March 2007* 235-237

- Pan, H. C.**, *see* Chiang, K. C., *EDL Aug. 2007* 694-696
- Pan, H. C.**, *see* Cheng, C. H., *EDL Dec. 2007* 1095-1097
- Pan, J.**, Topol, A., Shao, I., Sung, C.-Y., Iacoponi, J., and Lin, M.-R., Novel Approach to Reduce Source/Drain Series and Contact Resistance in High-Performance UTSOI CMOS Devices Using Selective Electrodeless CoWP or CoB Process; *EDL Aug. 2007* 691-693
- Pan, T.-M.**, Hsieh, C.-I., Huang, T.-Y., Yang, J.-R., and Kuo, P.-S., Good High-Temperature Stability of TiN/Al₂O₃/WN/TiN Capacitors; *EDL Nov. 2007* 954-956
- Pantelides, S. T.**, *see* Hadjisavvas, G., *EDL Nov. 2007* 1018-1020
- Park, B.-G.**, *see* Jung, K.-D., *EDL March 2007* 204-206
- Park, B.-G.**, *see* Choi, W. Y., *EDL Aug. 2007* 743-745
- Park, D.**, *see* Han, J.-W., *EDL July 2007* 625-627
- Park, D.-W.**, *see* Jung, K.-D., *EDL March 2007* 204-206
- Park, D.**, *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
- Park, D.**, Rhee, J., and Joo, Y., A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique; *EDL Oct. 2007* 890-892
- Park, H.**, *see* Chang, M., *EDL Jan. 2007* 21-23
- Park, J. S.**, *see* Kim, T. H., *EDL Oct. 2007* 874-876
- Park, J.-H.**, *see* Cho, W.-S., *EDL May 2007* 386-388
- Park, J.-H.**, *see* Shin, K.-S., *EDL July 2007* 581-583
- Park, K.-H.**, *see* Jung, H.-A.-R., *EDL Dec. 2007* 1126-1128
- Park, K.-H.**, and Lee, J.-H., Gate Workfunction Engineering in Bulk FinFETs for Sub-50-nm DRAM Cell Transistors; *EDL Feb. 2007* 148-150
- Park, M.**, Suh, K., Kim, K., Hur, S.-H., Kim, K., and Lee, W.-S., The Effect of Trapped Charge Distributions on Data Retention Characteristics of NAND Flash Memory Cells; *EDL Aug. 2007* 750-752
- Park, S. D.**, *see* Kim, T.-W., *EDL Dec. 2007* 1086-1088
- Park, S. K.**, Anthony, J. E., and Jackson, T. N., Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits; *EDL Oct. 2007* 877-879
- Park, Y.**, *see* Padilla, A., *EDL June 2007* 502-505
- Parsons, J.**, *see* Nicholas, G., *EDL Sept. 2007* 825-827
- Partlow, D. P.**, *see* Jessen, G. H., *EDL May 2007* 354-356
- Pas, M.**, *see* Lin, C.-T., *EDL Sept. 2007* 831-833
- Pascual, E.**, *see* Rengel, R., *EDL Feb. 2007* 171-173
- Passlack, M.**, *see* Rajagopalan, K., *EDL Feb. 2007* 100-102
- Passlack, M.**, *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
- Pawlak, B. J.**, *see* Severi, S., *EDL March 2007* 198-200
- Pei, Z.**, *see* Lin, H.-T., *EDL July 2007* 569-571
- Pei, Z.**, *see* Lin, H.-T., *EDL Nov. 2007* 951-953
- Pellish, J. A.**, *see* Warren, K. M., *EDL Feb. 2007* 180-182
- Pellizzer, F.**, *see* Ventrice, D., *EDL Nov. 2007* 973-975
- Penaud, J.**, *see* Cornu-Fruléux, F., *EDL June 2007* 523-526
- Peng, C.-Y.**, *see* Kuo, P.-S., *EDL July 2007* 596-598
- Peng, W.-C.**, *see* Wu, W.-C., *EDL March 2007* 214-216
- Peng, Y.-C.**, *see* Lu, T.-C., *EDL Oct. 2007* 884-886
- Pey, K. L.**, *see* Yu, H. P., *EDL Dec. 2007* 1098-1101
- Pham, V.**, *see* Yu, C., *EDL Jan. 2007* 45-47
- Pichon, L.**, Boukhenoufa, A., Cordier, C., and Cretu, B., Numerical Simulation of Low-Frequency Noise in Polysilicon Thin-Film Transistors; *EDL Aug. 2007* 716-718
- Pilgrim, N. J.**, *see* Khalid, A., *EDL Oct. 2007* 849-851
- Pimparkar, N.**, Cao, Q., Kumar, S., Murthy, J. Y., Rogers, J., and Alam, M. A., Current-Voltage Characteristics of Long-Channel Nanobundle Thin-Film Transistors: A "Bottom-Up" Perspective; *EDL Feb. 2007* 157-160
- Pimparkar, N.**, Kocabas, C., Kang, S. J., Rogers, J., and Alam, M. A., Limits of Performance Gain of Aligned CNT Over Randomized Network: Theoretical Predictions and Experimental Validation; *EDL July 2007* 593-595
- Pinto, A.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Piontek, A.**, *see* Choi, L. J., *EDL April 2007* 270-272
- Pirovano, A.**, *see* Mantegazza, D., *EDL Oct. 2007* 865-867
- Pirovano, A.**, *see* Ventrice, D., *EDL Nov. 2007* 973-975
- Plouchart, J.-O.**, *see* Kim, D., *EDL June 2007* 520-522
- Plouchart, J.-O.**, *see* Kim, D., *EDL July 2007* 616-618
- Plummer, J. D.**, *see* Feng, J., *EDL July 2007* 637-639
- Poblenz, C.**, Corrion, A. L., Recht, F., Suh, C. S., Chu, R., Shen, L., Speck, J. S., and Mishra, U. K., Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz; *EDL Nov. 2007* 945-947
- Pomeroy, J. W.**, *see* Kuball, M., *EDL Feb. 2007* 86-89
- Poortmans, J.**, *see* Carnel, L., *EDL Oct. 2007* 899-901
- Porter, M. E.**, *see* Warren, K. M., *EDL Feb. 2007* 180-182
- Pourtois, G.**, *see* Veloso, A., *EDL Nov. 2007* 980-983

Prost, W., *see* Do, Q.-T., *EDL Aug. 2007* 682-684

Q

Qiu, Z., *see* Zhang, Z., *EDL July 2007* 565-568

R

- Rachmady, W.**, *see* Datta, S., *EDL Aug. 2007* 685-687
Radisic, V., *see* Mei, X. B., *EDL June 2007* 470-472
Radosavljevic, M., *see* Datta, S., *EDL Aug. 2007* 685-687
Radosavljevic, M., *see* Chang, C. Y., *EDL Oct. 2007* 856-858
Rafhay, Q., *see* Duane, R., *EDL May 2007* 440-442
Ragnarsson, L.-A., *see* Yu, H. Y., *EDL July 2007* 656-658
Ragnarsson, L.-A., Chang, V. S., Yu, H. Y., Cho, H.-J., Conard, T., Yin, K. M., Delabie, A., Swerts, J., Schram, T., De Gendt, S., and Biesemans, S., Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates; *EDL June 2007* 486-488
Rajagopalan, K., *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
Rajagopalan, K., Droopad, R., Abrokwhah, J., Zurcher, P., Fejes, P., and Passlack, M., 1-μm Enhancement Mode GaAs N-Channel MOSFETs With Transconductance Exceeding 250 mS/mm; *EDL Feb. 2007* 100-102
Ramgopal Rao, V., *see* Tiwari, S. P., *EDL Oct. 2007* 880-883
Ramin, M., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
Ramin, M., *see* Lin, C.-T., *EDL Sept. 2007* 831-833
Rao, V. R., *see* Manoj, C. R., *EDL April 2007* 295-297
Rao, V. R., *see* Maji, D., *EDL Aug. 2007* 731-733
Raskin, J.-P., *see* Kilchytska, V., *EDL May 2007* 419-421
Raskin, J.-P., *see* Simoen, E., *EDL Oct. 2007* 919-921
Recht, F., *see* Poblenz, C., *EDL Nov. 2007* 945-947
Redaelli, A., *see* Ventrice, D., *EDL Nov. 2007* 973-975
Ree, M., *see* Kim, M., *EDL Nov. 2007* 967-969
Reed, R. A., *see* Warren, K. M., *EDL Feb. 2007* 180-182
Regolin, I., *see* Do, Q.-T., *EDL Aug. 2007* 682-684
Ren, C., *see* Jiang, Y., *EDL July 2007* 603-605
Ren, T.-L., *see* Yang, C., *EDL July 2007* 652-655
Rengel, R., Pascual, E., and Martin, M. J., Injected Current and Quantum Transmission Coefficient in Low Schottky Barriers: WKB and Airy Approaches; *EDL Feb. 2007* 171-173
Rhee, J., *see* Park, D., *EDL Oct. 2007* 890-892
Rhee, J.-K., *see* Lim, B. O., *EDL July 2007* 546-548
Rhee, J.-K., *see* Kim, T.-W., *EDL Dec. 2007* 1086-1088
Rhee, S. J., *see* Akbar, M. S., *EDL Feb. 2007* 132-134
Richard, O., *see* Yu, H. Y., *EDL Feb. 2007* 154-156
Riedel, G. J., *see* Kuball, M., *EDL Feb. 2007* 86-89
Rieh, J.-S., *see* Kim, D., *EDL June 2007* 520-522
Ries, M., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
Ristic, S., and Jaeger, N. A. F., Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators; *EDL Jan. 2007* 30-32
Ritenour, A., Hennessy, J., and Antoniadis, D. A., Investigation of Carrier Transport in Germanium MOSFETs With WN/Al₂O₃/AlN Gate Stacks; *EDL Aug. 2007* 746-749
Robertson, M. D., *see* Jamei, M., *EDL March 2007* 207-210
Rogers, J., *see* Pimparkar, N., *EDL Feb. 2007* 157-160
Rogers, J., *see* Pimparkar, N., *EDL July 2007* 593-595
Rooyackers, R., *see* Collaert, N., *EDL July 2007* 646-648
Rorsman, N., *see* Shiu, J.-Y., *EDL June 2007* 476-478
Rosmeulen, M., *see* Furnemont, A., *EDL April 2007* 276-278
Rosmeulen, M., *see* Martens, K., *EDL May 2007* 436-439
Rosseel, E., *see* Yu, H. Y., *EDL Feb. 2007* 154-156
Routoure, J.-M., *see* Guo, W., *EDL April 2007* 288-291
Rudenko, T., Kilchytska, V., Collaert, N., Jurczak, M., Nazarov, A., and Flandre, D., Substrate Bias Effect Linked to Parasitic Series Resistance in Multiple-Gate SOI MOSFETs; *EDL Sept. 2007* 834-836
Ruiz, N., *see* Sun, Y., *EDL June 2007* 473-475
Rustagi, S. C., *see* Fang, W. W., *EDL March 2007* 211-213
Rustagi, S. C., *see* Sun, S., *EDL March 2007* 220-222
Rustagi, S. C., *see* Singh, N., *EDL July 2007* 558-561
Rustagi, S. C., Singh, N., Fang, W. W., Buddharaju, K. D., Omampuliyur, S. R., Teo, S. H. G., Tung, C. H., Lo, G. Q., Balasubramanian, N., and Kwong, D. L., CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOS-FETs Fabricated Using Top-Down Approach; *EDL Nov. 2007* 1021-1024

+ Check author entry for coauthors

- Rustagi, S. C.**, Singh, N., Lim, Y. F., Zhang, G., Wang, S., Lo, G. Q., Balasubramanian, N., and Kwong, D.-L., Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET; *EDL Oct. 2007* 909-912
Ryu, S.-H., *see* Agarwal, A., *EDL July 2007* 587-589

S

- Sadana, D. K.**, *see* Sun, Y., *EDL June 2007* 473-475
Sadeghi, M., *see* Vukusic, J., *EDL May 2007* 340-342
Sadi, T., and Kelsall, R. W., Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs; *EDL Sept. 2007* 787-789
Saito, W., Nitta, T., Kakiuchi, Y., Saito, Y., Tsuda, K., Omura, I., and Yamaguchi, M., On-Resistance Modulation of High Voltage GaN HEMT on Sapphire Substrate Under High Applied Voltage; *EDL Aug. 2007* 676-678
Saito, Y., *see* Saito, W., *EDL Aug. 2007* 676-678
Saitou, K., *see* Chow, L. L. W., *EDL June 2007* 479-481
Sakashita, S., *see* Kawahara, T., *EDL Oct. 2007* 868-870
Samavedam, S. B., *see* Winstead, B., *EDL Aug. 2007* 719-721
Samoska, L., *see* Mei, X. B., *EDL June 2007* 470-472
Samudra, G., *see* Wong, H.-S., *EDL Aug. 2007* 703-705
Samudra, G. S., *see* Lee, R. T. P., *EDL Feb. 2007* 164-167
Samudra, G. S., *see* Ang, K.-W., *EDL April 2007* 301-304
Samudra, G. S., *see* Ang, K.-W., *EDL June 2007* 509-512
Samudra, G. S., *see* Lim, A. E.-J., *EDL June 2007* 482-485
Samudra, G. S., *see* Ang, K.-W., *EDL July 2007* 609-612
Samudra, G. S., *see* Tan, K.-M., *EDL Oct. 2007* 905-908
Samudra, G. S., *see* Ang, K.-W., *EDL Nov. 2007* 996-999
Samudra, G. S., *see* Liow, T.-Y., *EDL Nov. 2007* 1014-1017
Samudra, G., *see* Wong, H.-S., *EDL Dec. 2007* 1102-1104
San Andres, E., *see* Shickova, A., *EDL March 2007* 242-244
Sanaie, G., and Karim, K., On-Pixel Voltage-ControlEDL Oscillator in Amorphous-Silicon Technology for Digital Imaging Applications; *EDL Jan. 2007* 33-35
Sano, M., *see* Ofuji, M., *EDL April 2007* 273-275
Sarkar, J., Dey, S., Shahjerdi, D., and Banerjee, S. K., Vertical Flash Memory Cell With Nanocrystal Floating Gate for Ultradense Integration and Good Retention; *EDL May 2007* 449-451
Sarua, A., *see* Kuball, M., *EDL Feb. 2007* 86-89
Sasa, S., Hayafuji, T., Kawasaki, M., Koike, K., Yano, M., and Inoue, M., Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs; *EDL July 2007* 543-545
Satoh, M., *see* Nomoto, K., *EDL Nov. 2007* 939-941
Satoh, Y., *see* Kamabayashi, H., *EDL Dec. 2007* 1077-1079
Schindler, M., *see* Abelein, U., *EDL Jan. 2007* 65-67
Schlosser, M., *see* Abelein, U., *EDL Jan. 2007* 65-67
Schmitt-Landsiedel, D., *see* Nirschl, Th., *EDL April 2007* 315-315
Schmitz, J., *see* Hoang, T., *EDL May 2007* 383-385
Schmitz, J., *see* van der Steen, J.-L. P. J., *EDL Sept. 2007* 821-824
Schneider, O., *see* Chaji, G. R., *EDL Dec. 2007* 1108-1110
Schram, T., *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
Schram, T., *see* Yu, H. Y., *EDL July 2007* 656-658
Schrumpf, R. D., *see* Warren, K. M., *EDL Feb. 2007* 180-182
Schulman, J. N., *see* Su, N., *EDL May 2007* 336-339
Seacrist, M., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
Sekar, D. C., Dang, B., Davis, J. A., and Meindl, J. D., Electromigration Resistant Power Delivery Systems; *EDL Aug. 2007* 767-769
Sekigawa, T., *see* Endo, K., *EDL May 2007* 452-454
Selmi, L., *see* Zilli, M., *EDL Nov. 2007* 1036-1039
Severi, S., Pawlak, B. J., Duffy, R., Augendre, E., Henson, K., Lindsay, R., and De Meyer, K., Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors; *EDL March 2007* 198-200
Shahrjerdi, D., *see* Sarkar, J., *EDL May 2007* 449-451
Shahrjerdi, D., Garcia-Gutierrez, D. I., and Banerjee, S. K., Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach; *EDL Sept. 2007* 793-796
Shan, X., *see* Li, Y., *EDL July 2007* 622-624
Shao, I., *see* Pan, J., *EDL Aug. 2007* 691-693
Shapira, Y., *see* Stopel, A., *EDL May 2007* 357-359
Shei, S.-C., Sheu, J.-K., and Shen, C.-F., Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes; *EDL May 2007* 346-349

- Shen, C.**, *see* Chen, J., *EDL Oct. 2007* 862-864
- Shen, C.-F.**, *see* Shei, S.-C., *EDL May 2007* 346-349
- Shen, L.**, *see* Poblenz, C., *EDL Nov. 2007* 945-947
- Shen, T.**, *see* Xuan, Y., *EDL Nov. 2007* 935-938
- Shen, Z. J.**, *see* Fu, Y., *EDL Feb. 2007* 174-176
- Sheng, K.**, *see* Zhang, Y., *EDL May 2007* 404-407
- Sheu, J.-K.**, *see* Shei, S.-C., *EDL May 2007* 346-349
- Sheu, Y. M.**, *see* Cheng, C. Y., *EDL May 2007* 408-411
- Sheu, Y.-M.**, *see* Wang, J.-S., *EDL Nov. 2007* 1040-1043
- Shi, J.**, *see* Sun, S., *EDL March 2007* 220-222
- Shi, L.**, *see* Sun, W., *EDL July 2007* 631-633
- Shi, L.**, *see* Sun, W., *EDL Dec. 2007* 1135-1137
- Shi, T.**, *see* Zhao, F., *EDL May 2007* 398-400
- Shickova, A.**, *see* Simoen, E., *EDL Nov. 2007* 987-989
- Shickova, A.**, Kaczer, B., Verheyen, P., Eneman, G., San Andres, E., Jurczak, M., Absil, P., Maes, H., and Groeseneken, G., Negligible Effect of Process-Induced Strain on Intrinsic NBTI Behavior; *EDL March 2007* 242-244
- Shieh, J.-M.**, *see* Lin, Y.-T., *EDL Sept. 2007* 790-792
- Shigekawa, N.**, Nishimura, K., Suemitsu, T., Yokoyama, H., and Hohkawa, K., SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures; *EDL Feb. 2007* 90-92
- Shih, C.-H.**, *see* Wang, J.-S., *EDL Nov. 2007* 1040-1043
- Shimizu, H.**, *see* Ofuji, M., *EDL April 2007* 273-275
- Shin, H.**, *see* Jung, K.-D., *EDL March 2007* 204-206
- Shin, H. S.**, *see* Jeong, J. K., *EDL May 2007* 389-391
- Shin, H.**, *see* Kang, I. M., *EDL May 2007* 425-427
- Shin, K.**, *see* Padilla, A., *EDL June 2007* 502-505
- Shin, K.-S.**, Paek, K.-K., Park, J.-H., Kim, T.-S., Ju, B.-K., and Kang, J. Y., Parasitic Bipolar Junction Transistors in a Floating-Gate MOSFET for Fluorescence Detection; *EDL July 2007* 581-583
- Shin, M. W.**, *see* Kim, L., *EDL July 2007* 578-580
- Shiraishi, K.**, *see* Umezawa, N., *EDL May 2007* 363-365
- Shiu, J.-Y.**, Huang, J.-C., Desmaris, V., Chang, C.-T., Lu, C.-Y., Kumakura, K., Makimoto, T., Zirath, H., Rorsman, N., and Chang, E. Y., Oxygen Ion Implantation Isolation Planar Process for AlGaN/GaN HEMTs; *EDL June 2007* 476-478
- Shiu, K. T.**, *see* Sun, Y., *EDL June 2007* 473-475
- Shur, M. S.**, *see* Koudymov, A., *EDL May 2007* 332-335
- Shy, J.-H.**, *see* Chen, S.-C., *EDL Sept. 2007* 809-811
- Sibaja-Hernandez, A.**, *see* Choi, L. J., *EDL April 2007* 270-272
- Sierawski, B. D.**, *see* Warren, K. M., *EDL Feb. 2007* 180-182
- Silva, S. R. P.**, *see* Guo, X., *EDL Aug. 2007* 710-712
- Silva, S. R. P.**, *see* Guo, X., *EDL Oct. 2007* 887-889
- Simin, G.**, *see* Koudymov, A., *EDL Jan. 2007* 5-7
- Simin, G.**, *see* Adivarahan, V., *EDL March 2007* 192-194
- Simin, G.**, *see* Koudymov, A., *EDL May 2007* 332-335
- Simin, G.**, *see* Tipirneni, N., *EDL Sept. 2007* 784-786
- Simin, G.**, and Yang, Z.-J., RF-Enhanced Contacts to Wide-Bandgap Devices; *EDL Jan. 2007* 2-4
- Simoen, E.**, *see* Guo, W., *EDL April 2007* 288-291
- Simoen, E.**, Claeys, C., Chung, T. M., Flandre, D., and Raskin, J.-P., On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs; *EDL Oct. 2007* 919-921
- Simoen, E.**, Verheyen, P., Shickova, A., Loo, R., and Claeys, C., On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate; *EDL Nov. 2007* 987-989
- Singanamalla, R.**, *see* Yu, H. Y., *EDL Feb. 2007* 154-156
- Singanamalla, R.**, *see* Yu, H. Y., *EDL July 2007* 656-658
- Singanamalla, R.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- Singanamalla, R.**, Yu, H. Y., Van Daele, B., Kubicek, S., and De Meyer, K., Effective Work-Function Modulation by Aluminum-Ion Implantation for Metal-Gate Technology (Poly-Si/TiN/SiO₂); *EDL Dec. 2007* 1089-1091
- Singh, N.**, *see* Fang, W. W., *EDL March 2007* 211-213
- Singh, N.**, *see* Rustagi, S. C., *EDL Oct. 2007* 909-912
- Singh, N.**, *see* Rustagi, S. C., *EDL Nov. 2007* 1021-1024
- Singh, N.**, Fang, W. W., Rustagi, S. C., Budharaju, K. D., Teo, S. H. G., Mohanraj, S., Lo, G. Q., Balasubramanian, N., and Kwong, D.-L., Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures; *EDL July 2007* 558-561
- Sivoththaman, S.**, *see* Farrokh-Baroughi, M., *EDL July 2007* 575-577
- Skotnicki, T.**, *see* Cornu-Frûleux, F., *EDL June 2007* 523-526
- Smit, G. D. J.**, *see* van der Steen, J.-L. P. J., *EDL Sept. 2007* 821-824
- Solodky, S.**, *see* Stopel, A., *EDL May 2007* 357-359
- Song, C. K.**, *see* Kim, T. H., *EDL Oct. 2007* 874-876
- Song, D.**, Liu, J., Cheng, Z., Tang, W. C. W., Lau, K. M., and Chen, K. J., Normally Off AlGaN/GaN Low-Density Drain HEMT (LDD-HEMT) With Enhanced Breakdown Voltage and Reduced Current Collapse; *EDL March 2007* 189-191
- Song, G.**, Ali, M. Y., and Tao, M., A High Schottky-Barrier of 1.1 eV Between Al and S-Passivated p-Type Si(100) Surface; *EDL Jan. 2007* 71-73
- Song, J. F.**, *see* Loh, W. Y., *EDL Nov. 2007* 984-986
- Song, J.-I.**, *see* Kim, T.-W., *EDL Dec. 2007* 1086-1088
- Song, Y.**, Ling, Q. D., Lim, S. L., Teo, E. Y. H., Tan, Y. P., Li, L., Kang, E. T., Chan, D. S. H., and Zhu, C., Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material; *EDL Feb. 2007* 107-110
- Sousa, M.**, *see* Sun, Y., *EDL June 2007* 473-475
- Speck, J. S.**, *see* Chu, R., *EDL Sept. 2007* 781-783
- Speck, J. S.**, *see* Poblenz, C., *EDL Nov. 2007* 945-947
- Spinelli, A. S.**, *see* Compagnoni, C. M., *EDL July 2007* 628-630
- Srinidhi, E. R.**, Jarndal, A., and Kompa, G., A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis; *EDL May 2007* 343-345
- Stager, C.**, *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Stake, J.**, *see* Vukusic, J., *EDL May 2007* 340-342
- Stanley, C. R.**, *see* Khalid, A., *EDL Oct. 2007* 849-851
- Stopel, A.**, Khramtsov, A., Solodky, S., Fainbrun, A., and Shapira, Y., Direct Monitoring of RF Overstress in High-Power Transistors and Amplifiers; *EDL May 2007* 357-359
- Sturm, J. C.**, *see* Kattamis, A. Z., *EDL July 2007* 606-608
- Sturm, J. C.**, *see* Cherenack, K. H., *EDL Nov. 2007* 1004-1006
- Su, K.-H.**, Hsu, W.-C., Lee, C.-S., Wu, T.-Y., Wu, Y.-H., Chang, L., Hsiao, R.-S., Chen, J.-F., and Chi, T.-W., A Novel Dilute Antimony Channel In_{0.2}Ga_{0.8}AsSb/GaAs HEMT; *EDL Feb. 2007* 96-99
- Su, M.**, *see* Zhang, Y., *EDL May 2007* 404-407
- Su, N. C.**, *see* Cheng, C. F., *EDL Dec. 2007* 1092-1094
- Su, N.**, Zhang, Z., Schulman, J. N., and Fay, P., Temperature Dependence of High Frequency and Noise Performance of Sb-Heterostructure Millimeter-Wave Detectors; *EDL May 2007* 336-339
- Su, P.**, *see* Wang, J.-S., *EDL Nov. 2007* 1040-1043
- Su, P.**, and Kuo, J. J.-Y., On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs; *EDL July 2007* 649-651
- Suemitsu, T.**, *see* Shigekawa, N., *EDL Feb. 2007* 90-92
- Suemitsu, T.**, Yokoyama, H., Sugiyama, H., and Tokumitsu, M., Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier; *EDL Aug. 2007* 669-671
- Sugawara, Y.**, Uraoka, Y., Yano, H., Hatayama, T., Fuyuki, T., and Mimura, A., Crystallization of Double-Layered Silicon Thin Films by Solid Green Laser Annealing for High-Performance Thin-Film Transistors; *EDL May 2007* 395-397
- Sugii, N.**, *see* Ohtou, T., *EDL Aug. 2007* 740-742
- Sugiyama, H.**, *see* Suemitsu, T., *EDL Aug. 2007* 669-671
- Suh, C. S.**, *see* Chu, R., *EDL Sept. 2007* 781-783
- Suh, C. S.**, *see* Poblenz, C., *EDL Nov. 2007* 945-947
- Suh, K.**, *see* Park, M., *EDL Aug. 2007* 750-752
- Suh, M. C.**, *see* Kim, T. H., *EDL Oct. 2007* 874-876
- Sui, Y.**, Wang, X., and Cooper, J. A., High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC; *EDL Aug. 2007* 728-730
- Suk, S. D.**, *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
- Sulima, T.**, *see* Abelein, U., *EDL Jan. 2007* 65-67
- Sun, H. F.**, Alt, A. R., and Bolognesi, C. R., Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect; *EDL May 2007* 350-353
- Sun, H.-J.**, *see* Jeong, Y. H., *EDL Jan. 2007* 17-20
- Sun, M.**, and Zhang, Y. P., 100-GHz Quasi-Yagi Antenna in Silicon Technology; *EDL May 2007* 455-457
- Sun, S.**, Shi, J., Zhu, L., Rustagi, S. C., and Mouthaan, K., Millimeter-Wave Bandpass Filters by Standard 0.18- μ m CMOS Technology; *EDL March 2007* 220-222
- Sun, W.**, Wu, H., Shi, L., Yi, Y., and Li, H., On-Resistance Degradations for Different Stress Conditions in High-Voltage pEDLMOS Transistor With Thick Gate Oxide; *EDL July 2007* 631-633
- Sun, W.**, Yi, Y., Li, H., and Shi, L., A Novel Latch-Up Protection for Bulk-Silicon Scan Driver ICs of Shadow-Mask Plasma-Display Panel; *EDL Dec. 2007* 1135-1137
- Sun, Y.**, *see* Felbinger, J. G., *EDL Nov. 2007* 948-950
- Sun, Y. Y.**, *see* Wang, X. P., *EDL April 2007* 258-260
- Sun, Y.**, Kiewra, E. W., Koester, S. J., Ruiz, N., Callegari, A., Fogel, K. E., Sadana, D. K., Pompeyrine, J., Webb, D. J., Locquet, J.-P., Sousa, M., Germann, R., Shiu, K. T., and Forrest, S. R., Enhancement-Mode Buried-

- Channel In_{0.7}Ga_{0.3}As/In_{0.52}Al_{0.48}As MOSFETs With High- κ Gate Dielectrics; *EDL June 2007* 473-475
- Sundaram, K. B.**, *see* Vijayakumar, A., *EDL Aug. 2007* 713-715
- Sung, C.-Y.**, *see* Pan, J., *EDL Aug. 2007* 691-693
- Surdeanu, R.**, *see* Masahara, M., *EDL March 2007* 217-219
- Suthram, S.**, Ziegert, J. C., Nishida, T., and Thompson, S. E., Piezoresistance Coefficients of (100) Silicon nMOSFETs Measured at Low and High (~ 1.5 GPa) Channel Stress; *EDL Jan. 2007* 58-61
- Suzuki, E.**, *see* Endo, K., *EDL May 2007* 452-454
- Suzuki, E.**, *see* Liu, Y., *EDL June 2007* 517-519
- Suzuki, E.**, *see* Endo, K., *EDL Dec. 2007* 1123-1125
- Sveinbjornsson, E. O.**, *see* Lee, H.-S., *EDL Nov. 2007* 1007-1009
- Swerts, J.**, *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
- Sze, S. M.**, *see* Chen, S.-C., *EDL Sept. 2007* 809-811
- T**
- Tajima, T.**, *see* Nomoto, K., *EDL Nov. 2007* 939-941
- Takahashi, Y.**, *see* Nishiguchi, K., *EDL Jan. 2007* 48-50
- Tan, K.-M.**, *see* Lee, R. T. P., *EDL Feb. 2007* 164-167
- Tan, K.-M.**, *see* Liow, T.-Y., *EDL Nov. 2007* 1014-1017
- Tan, K.-M.**, Liow, T.-Y., Lee, R. T. P., Hoe, K. M., Tung, C.-H., Balasubramanian, N., Samudra, G. S., and Yeo, Y.-C., Strained p-Channel FinFETs With Extended Π -Shaped Silicon-Germanium Source and Drain Stressors; *EDL Oct. 2007* 905-908
- Tan, Y. P.**, *see* Song, Y., *EDL Feb. 2007* 107-110
- Tang, C. W.**, *see* Cai, Y., *EDL May 2007* 328-331
- Tang, C. W.**, *see* Zhou, W., *EDL July 2007* 539-542
- Tang, W. C. W.**, *see* Song, D., *EDL March 2007* 189-191
- Tang, X.**, *see* Luo, X., *EDL May 2007* 422-424
- Tao, H. J.**, *see* Yen, F. Y., *EDL March 2007* 201-203
- Tao, H. J.**, *see* Wu, C. H., *EDL April 2007* 292-294
- Tao, K.**, *see* Li, R., *EDL May 2007* 360-362
- Tao, M.**, *see* Song, G., *EDL Jan. 2007* 71-73
- Tao, N. G.**, *see* Zhou, W., *EDL July 2007* 539-542
- Tassis, D. H.**, *see* Hatzopoulos, A. T., *EDL Sept. 2007* 803-805
- Taur, Y.**, Changes to the Editorial Board; *EDL Feb. 2007* 81-81
- Taur, Y.**, Changes to the Editorial Board; *EDL April 2007* 257-257
- Taur, Y.**, Changes in the Editorial Board; *EDL May 2007* 327-327
- Taur, Y.**, Kudos to Our Reviewers; *EDL Dec. 2007* 1061-1061
- Taylor, W. J.**, *see* Winstead, B., *EDL Aug. 2007* 719-721
- Tedde, S.**, Zaus, E. S., Furst, J., Henseler, D., and Lugli, P., Active Pixel Concept Combined With Organic Photodiode for Imaging Devices; *EDL Oct. 2007* 893-895
- Tegude, F. J.**, *see* Do, Q.-T., *EDL Aug. 2007* 682-684
- Tekleab, D.**, *see* Winstead, B., *EDL Aug. 2007* 719-721
- Templier, F.**, *see* Hatzopoulos, A. T., *EDL Sept. 2007* 803-805
- Teo, E. Y. H.**, *see* Song, Y., *EDL Feb. 2007* 107-110
- Teo, S. H. G.**, *see* Singh, N., *EDL July 2007* 558-561
- Teo, S. H. G.**, *see* Rustagi, S. C., *EDL Nov. 2007* 1021-1024
- Thayne, I. G.**, *see* Khalid, A., *EDL Oct. 2007* 849-851
- Thayne, I. G.**, *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
- Thompson, S. E.**, *see* Suthram, S., *EDL Jan. 2007* 58-61
- Thoms, S.**, *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
- Thomson, D. B.**, *see* Jessen, G. H., *EDL May 2007* 354-356
- Tipirneni, N.**, Adivarahan, V., Simin, G., and Khan, A., Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications; *EDL Sept. 2007* 784-786
- Tittonen, I.**, *see* Koskenvuo, M., *EDL Nov. 2007* 970-972
- Tiwari, S.**, *see* Kim, S., *EDL Aug. 2007* 706-709
- Tiwari, S.**, *see* Lin, H., *EDL May 2007* 412-415
- Tiwari, S. P.**, Namdas, E. B., Ramgopal Rao, V., Fichou, D., and Mhaisalkar, S. G., Solution-Processed n-Type Organic Field-Effect Transistors With High ON / OFF Current Ratios Based on Fullerene Derivatives; *EDL Oct. 2007* 880-883
- Tiwari, S.**, *see* Lin, H., *EDL June 2007* 506-508
- Todi, R. M.**, *see* Guo, W., *EDL April 2007* 288-291
- Todi, R. M.**, *see* Vijayakumar, A., *EDL Aug. 2007* 713-715
- Tokumitsu, M.**, *see* Suemitsu, T., *EDL Aug. 2007* 669-671
- Topol, A.**, *see* Pan, J., *EDL Aug. 2007* 691-693
- Torii, K.**, *see* Umezawa, N., *EDL May 2007* 363-365
- Torvik, K.**, *see* Zhao, F., *EDL May 2007* 398-400
- Trivedi, V. P.**, *see* Fossum, J. G., *EDL June 2007* 513-516
- T**
- Trojman, L.**, *see* Aoulaiche, M., *EDL July 2007* 613-615
- Trzcinski, R.**, *see* Kim, D., *EDL June 2007* 520-522
- Trzcinski, R.**, *see* Kim, D., *EDL July 2007* 616-618
- Tsai, C.-C.**, Chen, H.-H., Chen, B.-T., and Cheng, H.-C., High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization; *EDL July 2007* 599-602
- Tsai, C.-C.**, Wei, K.-F., Lee, Y.-J., Chen, H.-H., Wang, J.-L., Lee, I.-C., and Cheng, H.-C., High-Performance Short-Channel Double-Gate Low-Temperature Polysilicon Thin-Film Transistors Using Excimer Laser Crystallization; *EDL Nov. 2007* 1010-1013
- Tsai, C.-L.**, *see* Lee, F.-M., *EDL Feb. 2007* 120-122
- Tsai, C.-T.**, Liu, P.-T., Chang, T.-C., Wang, C.-W., Yang, P.-Y., and Yeh, F.-S., Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids; *EDL July 2007* 584-586
- Tsai, M.-J.**, *see* Chao, D.-S., *EDL Oct. 2007* 871-873
- Tsai, P.-H.**, *see* Lu, C.-Y., *EDL May 2007* 432-435
- Tsai, T.-T.**, *see* Lin, C.-L., *EDL June 2007* 489-491
- Tseng, B.-H.**, *see* Chen, S.-C., *EDL Sept. 2007* 809-811
- Tseng, C.-W.**, *see* Hsu, H.-M., *EDL Nov. 2007* 1029-1032
- Tseng, H.-H.**, *see* Joshi, S., *EDL April 2007* 308-311
- Tseng, H.-H.**, *see* Oh, J., *EDL Nov. 2007* 1044-1046
- Tseng, T.-Y.**, *see* Lin, C.-Y., *EDL May 2007* 366-368
- Tsetsaris, L.**, *see* Hadjisavvas, G., *EDL Nov. 2007* 1018-1020
- Tsuda, K.**, *see* Saito, W., *EDL Aug. 2007* 676-678
- Tsukada, J.**, *see* Endo, K., *EDL May 2007* 452-454
- Tsukada, J.**, *see* Liu, Y., *EDL June 2007* 517-519
- Tsukada, J.**, *see* Endo, K., *EDL Dec. 2007* 1123-1125
- Tung, C. H.**, *see* Lim, A. E.-J., *EDL June 2007* 482-485
- Tung, C. H.**, *see* Rustagi, S. C., *EDL Nov. 2007* 1021-1024
- Tung, C.-H.**, *see* Ang, K.-W., *EDL April 2007* 301-304
- Tung, C.-H.**, *see* Ang, K.-W., *EDL June 2007* 509-512
- Tung, C.-H.**, *see* Ang, K.-W., *EDL July 2007* 609-612
- Tung, C.-H.**, *see* Tan, K.-M., *EDL Oct. 2007* 905-908
- Tung, C.-H.**, *see* Liow, T.-Y., *EDL Nov. 2007* 1014-1017
- U**
- Umezawa, N.**, Shiraishi, K., Torii, K., Boero, M., Chikyow, T., Watanabe, H., Yamabe, K., Ohno, T., Yamada, K., and Nara, Y., Role of Nitrogen Atoms in Reduction of Electron Charge Traps in Hf-Based High- κ Dielectrics; *EDL May 2007* 363-365
- Uraoka, Y.**, *see* Sugawara, Y., *EDL May 2007* 395-397
- Uren, M. J.**, *see* Kuball, M., *EDL Feb. 2007* 86-89
- Uyeda, J.**, *see* Mei, X. B., *EDL June 2007* 470-472
- V**
- Van Daele, B.**, *see* Singanamalla, R., *EDL Dec. 2007* 1089-1091
- Van Delden, J. S.**, *see* Lin, H., *EDL June 2007* 506-508
- Van Duuren, M.**, *see* Duane, R., *EDL May 2007* 440-442
- Van Elshocht, S.**, *see* Yu, H. Y., *EDL July 2007* 656-658
- Van Elshocht, S.**, *see* Veloso, A., *EDL Nov. 2007* 980-983
- Van Gestel, D.**, *see* Carnel, L., *EDL Oct. 2007* 899-901
- Van Houdt, J.**, *see* Furnemont, A., *EDL April 2007* 276-278
- Van Huylebroeck, S.**, *see* Choi, L. J., *EDL April 2007* 270-272
- Van den bosch, G.**, *see* Masahara, M., *EDL March 2007* 217-219
- Van der Zanden, K.**, *see* Furnemont, A., *EDL April 2007* 276-278
- Vanfleteren, J.**, *see* Brosteaux, D., *EDL July 2007* 552-554
- Vanhaeften, D.**, *see* Carnel, L., *EDL Oct. 2007* 899-901
- Vanmeerbeek, P.**, *see* Bakeroott, B., *EDL May 2007* 416-418
- Van Noort, W. D.**, *see* Choi, L. J., *EDL April 2007* 270-272
- Van der Steen, J.-L. P. J.**, Huetting, R. J. E., Smit, G. D. J., Hoang, T., Hollerman, J., and Schmitz, J., Valence Band Offset Measurements on Thin Silicon-on-Insulator MOSFETs; *EDL Sept. 2007* 821-824
- Van der Toorn, R.**, Threshold Current for the Onset of Kirk Effect in Bipolar Transistors With a Fully Depleted Nonuniformly Doped Collector; *EDL Jan. 2007* 54-57
- Varadan, V. K.**, *see* Ji, T., *EDL Dec. 2007* 1105-1107
- Veloso, A.**, *see* Chang, S. Z., *EDL July 2007* 634-636
- Veloso, A.**, *see* Yu, H. Y., *EDL Nov. 2007* 957-959
- Veloso, A.**, Yu, H. Y., Chang, S. Z., Adelmann, C., Onsia, B., Brus, S., Demand, M., Lauwers, A., O'Sullivan, B. J., Singanamalla, R., Pourtois, G., Lehnen, P., Van Elshocht, S., De Meyer, K., Jurczak, M., Absil, P. P., and

- Biesemans, S., Achieving Low- V_T Ni-FUSI CMOS by Ultra-Thin Dy₂O₃ Capping of Hafnium Silicate Dielectrics; *EDL Nov. 2007* 980-983
- Ventrice, D., Fantini, P., Redaelli, A., Pirovano, A., Benvenuti, A., and Pelizzetti, F., A Phase Change Memory Compact Model for Multilevel Applications; *EDL Nov. 2007* 973-975
- Verheyen, P., *see* Shickova, A., *EDL March 2007* 242-244
- Verheyen, P., *see* Simoen, E., *EDL Nov. 2007* 987-989
- Vernier, P. T., *see* Marshall, J. C., *EDL Nov. 2007* 960-963
- Verret, E., *see* Winstead, B., *EDL Aug. 2007* 719-721
- Via, G. D., *see* Jessen, G. H., *EDL May 2007* 354-356
- Vijayakumar, A., Todi, R. M., and Sundaram, K. B., Amorphous-SiCBN-Based Metal-Semiconductor-Metal Photodetector for High-Temperature Applications; *EDL Aug. 2007* 713-715
- Visconti, A., *see* Fantini, P., *EDL Dec. 2007* 1114-1116
- Volakis, J. L., *see* Chow, L. L. W., *EDL June 2007* 479-481
- Vrancken, C., *see* Masahara, M., *EDL March 2007* 217-219
- Vukusic, J., Bryllert, T., Arezoo Emadi, T., Sadeghi, M., and Stake, J., A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz; *EDL May 2007* 340-342
- W**
- Wagner, S., *see* Kattamis, A. Z., *EDL July 2007* 606-608
- Wagner, S., *see* Cherenack, K. H., *EDL Nov. 2007* 1004-1006
- Wallis, D. J., *see* Kuball, M., *EDL Feb. 2007* 86-89
- Wan, C., *see* Ang, K.-W., *EDL Nov. 2007* 996-999
- Wang, A., *see* Yang, C., *EDL July 2007* 652-655
- Wang, C., *see* Li, C., *EDL Aug. 2007* 763-766
- Wang, C. K., *see* Chiou, Y. Z., *EDL April 2007* 264-266
- Wang, C. S., *see* Lian, C., *EDL Jan. 2007* 8-10
- Wang, C. X., *see* Koudymov, A., *EDL Jan. 2007* 5-7
- Wang, C.-D., *see* Li, R., *EDL May 2007* 360-362
- Wang, C.-W., *see* Tsai, C.-T., *EDL July 2007* 584-586
- Wang, H., *see* Lew, K. L., *EDL Dec. 2007* 1083-1085
- Wang, J., *see* Mei, X. B., *EDL June 2007* 470-472
- Wang, J.-C., *see* Wu, W.-C., *EDL March 2007* 214-216
- Wang, J.-L., *see* Tsai, C.-C., *EDL Nov. 2007* 1010-1013
- Wang, J.-S., Chen, W. P.-N., Shih, C.-H., Lien, C., Su, P., Sheu, Y.-M., Chao, D. Y.-S., and Goto, K.-I., Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs; *EDL Nov. 2007* 1040-1043
- Wang, J., *see* Loh, W. Y., *EDL Nov. 2007* 984-986
- Wang, J., *see* Xu, C., *EDL Nov. 2007* 942-944
- Wang, S., *see* Rustagi, S. C., *EDL Oct. 2007* 909-912
- Wang, S. J., *see* Wu, C. H., *EDL April 2007* 292-294
- Wang, S. J., *see* Cheng, C. F., *EDL Dec. 2007* 1092-1094
- Wang, S.-C., *see* Lu, T.-C., *EDL Oct. 2007* 884-886
- Wang, S.-D., *see* Chen, C.-Y., *EDL May 2007* 392-394
- Wang, S.-J., *see* Ma, M.-W., *EDL March 2007* 238-241
- Wang, S.-W., *see* Lin, D.-W., *EDL Dec. 2007* 1132-1134
- Wang, S.-Y., *see* Chen, S.-H., *EDL Aug. 2007* 679-681
- Wang, T., *see* Liao, Y.-Y., *EDL Sept. 2007* 828-830
- Wang, T.-K., *see* Lu, C.-Y., *EDL May 2007* 432-435
- Wang, W., *see* Haruehanroengra, S., *EDL Aug. 2007* 756-759
- Wang, X., *see* Sui, Y., *EDL Aug. 2007* 728-730
- Wang, X. P., *see* Wu, C. H., *EDL April 2007* 292-294
- Wang, X. P., *see* Lim, A. E.-J., *EDL June 2007* 482-485
- Wang, X. P., *see* Chen, J., *EDL Oct. 2007* 862-864
- Wang, X. P., Yu, H. Y., Li, M.-F., Zhu, C. X., Biesemans, S., Chin, A., Sun, Y. Y., Feng, Y. P., Lim, A., Yeo, Y.-C., Loh, W. Y., Lo, G. Q., and Kwong, D.-L., Wide V_{fb} and V_{th} Tunability for Metal-Gated MOS Devices With HfLaO Gate Dielectrics; *EDL April 2007* 258-260
- Wang, X., *see* Huang, F., *EDL Nov. 2007* 1025-1028
- Wang, Y., *see* Li, Y., *EDL July 2007* 622-624
- Wang, Y. P., Wu, S. L., and Chang, S. J., Low-Frequency Noise Characteristics in Strained-Si nMOSFETs; *EDL Jan. 2007* 36-38
- Wang, Y., Cheung, K. P., Choi, R., Brown, G. A., and Lee, B.-H., Time-Domain-Reflectometry for Capacitance-Voltage Measurement With Very High Leakage Current; *EDL Jan. 2007* 51-53
- Wang, Y., Cheung, K. P., Choi, R., Brown, G. A., and Lee, B.-H., Error and Correction in Capacitance-Voltage Measurement Due to the Presence of Source and Drain; *EDL July 2007* 640-642
- Wang, Y., Cheung, K. P., Choi, R., Brown, G. A., and Lee, B.-H., Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry; *EDL April 2007* 279-281
- Wang, Y., *see* Li, C., *EDL Aug. 2007* 763-766
- Wang, Z., Griffin, P. B., McVittie, J., Wong, S., McIntyre, P. C., and Nishi, Y., Resistive Switching Mechanism in Zn_xCd_{1-x}S Nonvolatile Memory Devices; *EDL Jan. 2007* 14-16
- Ward, C. S., *see* Jessen, G. H., *EDL May 2007* 354-356
- Warren, K. M., Sierawski, B. D., Weller, R. A., Reed, R. A., Mendenhall, M. H., Pellish, J. A., Schrimpf, R. D., Massengill, L. W., Porter, M. E., and Wilkinson, J. D., Predicting Thermal Neutron-Induced Soft Errors in Static Memories Using TCAD and Physics-Based Monte Carlo Simulation Tools; *EDL Feb. 2007* 180-182
- Wasserbauer, J., *see* Felbinger, J. G., *EDL Nov. 2007* 948-950
- Watanabe, H., *see* Umezawa, N., *EDL May 2007* 363-365
- Webb, D. J., *see* Sun, Y., *EDL June 2007* 473-475
- Weerakoon, P., *see* Culurciello, E., *EDL Feb. 2007* 117-119
- Wei, C. S., *see* Chen, Y. H., *EDL Dec. 2007* 1111-1113
- Wei, K.-F., *see* Tsai, C.-C., *EDL Nov. 2007* 1010-1013
- Wei, L., Zhang, X., Lou, C., and Zhu, Z., An Improved Planar Triode With ZnO Nanopin Field Emitters; *EDL Aug. 2007* 688-690
- Weis, M., *see* Nirschl, Th., *EDL April 2007* 315-315
- Weller, R. A., *see* Warren, K. M., *EDL Feb. 2007* 180-182
- Wen, C. P., *see* Xu, C., *EDL Nov. 2007* 942-944
- Werner, A., *see* Chaji, G. R., *EDL Dec. 2007* 1108-1110
- Wicaksono, S., *see* Lew, K. L., *EDL Dec. 2007* 1083-1085
- Wilkinson, J. D., *see* Warren, K. M., *EDL Feb. 2007* 180-182
- Wilks, B., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Winstead, B., Taylor, W. J., Verret, E., Loiko, K., Tekleab, D., Capasso, C., Foisy, M., and Samavedam, S. B., SiGe-Channel Confinement Effects for Short-Channel PFETs With Nonbandedge Gate Workfunctions; *EDL Aug. 2007* 719-721
- Wise, R., *see* Huang, Y.-T., *EDL Sept. 2007* 815-817
- Wise, R., *see* Lin, C.-T., *EDL Sept. 2007* 831-833
- Witters, L., *see* Masahara, M., *EDL March 2007* 217-219
- Wong, H.-S., Chan, L., Samudra, G., and Yeo, Y.-C., Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation; *EDL Aug. 2007* 703-705
- Wong, H.-S., Chan, L., Samudra, G., and Yeo, Y.-C., Effective Schottky Barrier Height Reduction Using Sulfur or Selenium at the NiSi/n-Si (100) Interface for Low Resistance Contacts; *EDL Dec. 2007* 1102-1104
- Wong, H.-S.P., *see* Kim, S., *EDL Aug. 2007* 697-699
- Wong, L.-Y., *see* Ang, K.-W., *EDL June 2007* 509-512
- Wong, M., *see* Zhang, D., *EDL Feb. 2007* 126-128
- Wong, M. H., *see* Chu, R., *EDL Sept. 2007* 781-783
- Wong, S., *see* Wang, Z., *EDL Jan. 2007* 14-16
- Woo, R., *see* Feng, J., *EDL July 2007* 637-639
- Worschelch, L., *see* Muller, C. R., *EDL Oct. 2007* 859-861
- Wu, C., *see* Lai, S., *EDL July 2007* 643-645
- Wu, C. H., *see* Cheng, C. F., *EDL Dec. 2007* 1092-1094
- Wu, C. H., Hung, B. F., Chin, A., Wang, S. J., Wang, X. P., Li, M.-F., Zhu, C., Yen, F. Y., Hou, Y. T., Jin, Y., Tao, H. J., Chen, S. C., and Liang, M. S., High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate; *EDL April 2007* 292-294
- Wu, C. K., *see* Chen, Y. H., *EDL Dec. 2007* 1111-1113
- Wu, C.-C., *see* Lin, D.-W., *EDL Dec. 2007* 1132-1134
- Wu, C.-H., *see* Ma, M.-W., *EDL March 2007* 238-241
- Wu, C.-Y., *see* Lin, C.-Y., *EDL May 2007* 366-368
- Wu, C.-Y., *see* Lin, C.-Y., *EDL May 2007* 366-368
- Wu, F., *see* Chu, R., *EDL Sept. 2007* 781-783
- Wu, H., *see* Sun, W., *EDL July 2007* 631-633
- Wu, H.-H., *see* Liu, P.-T., *EDL Aug. 2007* 722-724
- Wu, K.-M., *see* Chen, J. F., *EDL Nov. 2007* 1033-1035
- Wu, M.-C., *see* Lee, F.-M., *EDL Feb. 2007* 120-122
- Wu, M.-C., Huang, Y.-H., and Ho, C.-L., High-Speed InGaP/GaAs p-i-n Photodiodes With Wide Spectral Range; *EDL Sept. 2007* 797-799
- Wu, S. L., *see* Wang, Y. P., *EDL Jan. 2007* 36-38
- Wu, T., *see* Lai, S., *EDL July 2007* 643-645
- Wu, T.-Y., *see* Su, K.-H., *EDL Feb. 2007* 96-99
- Wu, W.-C., *see* Ma, M.-W., *EDL March 2007* 238-241
- Wu, W.-C., Chao, T.-S., Peng, W.-C., Yang, W.-L., Wang, J.-C., Chen, J.-H., Lai, C.-S., Yang, T.-Y., Lee, C.-H., Hsieh, T.-M., and Liou, J. C., Highly Reliable Multilevel and 2-bit/cell Operation of Wrapped Select Gate (WSG) SONOS Memory; *EDL March 2007* 214-216

- Wu, Y. C. S.**, *see* Chang, C.-P., *EDL Nov. 2007* 990-992
Wu, Y. C. S., *see* Hu, C.-M., *EDL Nov. 2007* 1000-1003
Wu, Y. H., *see* Chu, L. H., *EDL Feb. 2007* 82-85
Wu, Y. Q., *see* Xuan, Y., *EDL Nov. 2007* 935-938
Wu, Y.-C., *see* Chen, S.-C., *EDL Sept. 2007* 809-811
Wu, Y.-H., *see* Su, K.-H., *EDL Feb. 2007* 96-99

X

- Xia, T.**, *see* Erturk, M., *EDL Sept. 2007* 812-814
Xie, R., *and* Zhu, C., Effects of Sulfur Passivation on Germanium MOS Capacitors With HfON Gate Dielectric; *EDL Nov. 2007* 976-979
Xing, H., *see* Lian, C., *EDL Jan. 2007* 8-10
Xiong, W., *see* Zaman, R. J., *EDL Oct. 2007* 916-918
Xiong, Y. Z., *see* Jiang, Y., *EDL July 2007* 603-605
Xiong, Y. Z., *see* Loh, W. Y., *EDL Nov. 2007* 984-986
Xu, C., Wang, J., Chen, H., Xu, F., Dong, Z., Hao, Y., and Wen, C. P., The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure; *EDL Nov. 2007* 942-944
Xu, F., *see* Xu, C., *EDL Nov. 2007* 942-944
Xu, W., *see* Guo, P., *EDL July 2007* 572-574
Xuan, Y., Wu, Y. Q., Lin, H. C., Shen, T., and Ye, P. D., Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric; *EDL Nov. 2007* 935-938
Xue, L., *see* Kim, S., *EDL Aug. 2007* 706-709

Y

- Yamabe, K.**, *see* Umezawa, N., *EDL May 2007* 363-365
Yamada, K., *see* Umezawa, N., *EDL May 2007* 363-365
Yamaguchi, M., *see* Saito, W., *EDL Aug. 2007* 676-678
Yamanari, S., *see* Kawahara, T., *EDL Oct. 2007* 868-870
Yamauchi, H., *see* Endo, K., *EDL May 2007* 452-454
Yamauchi, H., *see* Liu, Y., *EDL June 2007* 517-519
Yamauchi, H., *see* Endo, K., *EDL Dec. 2007* 1123-1125
Yan, S.-G., *see* Chen, M.-J., *EDL Feb. 2007* 177-179
Yang, C., Liu, F., Ren, T.-L., Liu, L.-T., Chen, G., Guan, X.-K., Wang, A., and Feng, H.-G., Ferrite-Integrated On-Chip Inductors for RF ICs; *EDL July 2007* 652-655
Yang, F.-L., *see* Lin, C.-Y., *EDL May 2007* 366-368
Yang, G. L., *see* Chang, K. M., *EDL Sept. 2007* 806-808
Yang, H. J., *see* Cheng, C. H., *EDL Dec. 2007* 1095-1097
Yang, H. J., Chin, A., Chen, W. J., Cheng, C. F., Huang, W. L., Hsieh, I. J., and McAlister, S. P., A Program-Erasable High- κ Hf_{0.3}N_{0.2}O_{0.5} MIS Capacitor With Good Retention; *EDL Oct. 2007* 913-915
Yang, J., *see* Koudymov, A., *EDL Jan. 2007* 5-7
Yang, J.-R., *see* Pan, T.-M., *EDL Nov. 2007* 954-956
Yang, J.-W., *see* Oh, J., *EDL Nov. 2007* 1044-1046
Yang, J., *see* Adivarahan, V., *EDL March 2007* 192-194
Yang, K., *see* Lee, S., *EDL June 2007* 492-494
Yang, M., *see* Lai, S., *EDL July 2007* 643-645
Yang, M.-J., Chien, C.-H., Lu, Y.-H., Luo, G.-L., Chiu, S.-C., Lou, C.-C., and Huang, T.-Y., High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric; *EDL Oct. 2007* 902-904
Yang, P.-Y., *see* Tsai, C.-T., *EDL July 2007* 584-586
Yang, R., *see* Loh, W. Y., *EDL Nov. 2007* 984-986
Yang, T.-Y., *see* Ma, M.-W., *EDL March 2007* 238-241
Yang, T.-Y., *see* Wu, W.-C., *EDL March 2007* 214-216
Yang, W.-L., *see* Wu, W.-C., *EDL March 2007* 214-216
Yang, Z., *see* Cai, Y., *EDL May 2007* 328-331
Yang, Z.-J., *see* Simin, G., *EDL Jan. 2007* 2-4
Yano, H., *see* Sugawara, Y., *EDL May 2007* 395-397
Yano, M., *see* Sasa, S., *EDL July 2007* 543-545
Yao, L. G., *see* Yen, F. Y., *EDL March 2007* 201-203
Ye, J. D., *see* Loh, W. Y., *EDL Nov. 2007* 984-986
Ye, J. D., *see* Zang, H., *EDL Dec. 2007* 1117-1119
Ye, P. D., *see* Xuan, Y., *EDL Nov. 2007* 935-938
Yeh, F.-S., *see* Tsai, C.-T., *EDL July 2007* 584-586
Yeh, K.-F., *see* Lu, T.-C., *EDL Oct. 2007* 884-886
Yeh, K.-L., *see* Chen, C.-Y., *EDL May 2007* 392-394
Yeh, L., *see* Liaw, C.-W., *EDL Aug. 2007* 737-739

- Yeh, W.-K.**, *see* Lai, C.-M., *EDL Feb. 2007* 142-144
Yeh, W.-K., *see* Lin, C.-T., *EDL Feb. 2007* 111-113
Yeh, W.-K., *see* Lin, C.-T., *EDL May 2007* 376-378
Yen, F. Y., *see* Wu, C. H., *EDL April 2007* 292-294
Yen, F. Y., Hung, C. L., Hou, Y. T., Hsu, P. F., Chang, V. S., Lim, P. S., Yao, L. G., Jiang, J. C., Lin, H. J., Chen, C. C., Jin, Y., Jang, S. M., Tao, H. J., Chen, S. C., and Liang, M. S., Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics; *EDL March 2007* 201-203
Yen, P. H., *see* Chao, D.-S., *EDL Oct. 2007* 871-873
Yeo, C. C., *see* Maji, D., *EDL Aug. 2007* 731-733
Yeo, K. H., *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
Yeo, Y.-C., *see* Lee, R. T. P., *EDL Feb. 2007* 164-167
Yeo, Y.-C., *see* Wang, X. P., *EDL April 2007* 258-260
Yeo, Y.-C., *see* Ang, K.-W., *EDL April 2007* 301-304
Yeo, Y.-C., *see* Ang, K.-W., *EDL June 2007* 509-512
Yeo, Y.-C., *see* Lim, A. E.-J., *EDL June 2007* 482-485
Yeo, Y.-C., *see* Ang, K.-W., *EDL July 2007* 609-612
Yeo, Y.-C., *see* Wong, H.-S., *EDL Aug. 2007* 703-705
Yeo, Y.-C., *see* Chen, J., *EDL Oct. 2007* 862-864
Yeo, Y.-C., *see* Tan, K.-M., *EDL Oct. 2007* 905-908
Yeo, Y.-C., *see* Ang, K.-W., *EDL Nov. 2007* 996-999
Yeo, Y.-C., *see* Liow, T.-Y., *EDL Nov. 2007* 1014-1017
Yeo, Y.-C., *see* Wong, H.-S., *EDL Dec. 2007* 1102-1104
Yeh, Y. Y., *see* Cho, K. H., *EDL Dec. 2007* 1129-1131
Yeom, G. Y., *see* Kim, T.-W., *EDL Dec. 2007* 1086-1088
Yi, Y., *see* Sun, W., *EDL July 2007* 631-633
Yi, Y., *see* Sun, W., *EDL Dec. 2007* 1135-1137
Yin, J., *see* Li, C., *EDL Aug. 2007* 763-766
Yin, K. M., *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
Yin, K. M., *see* Yu, H. Y., *EDL July 2007* 656-658
Yin, K. M., *see* Yu, H. Y., *EDL Nov. 2007* 957-959
Yokoyama, H., *see* Shigekawa, N., *EDL Feb. 2007* 90-92
Yokoyama, H., *see* Suematsu, T., *EDL Aug. 2007* 669-671
Yoneda, M., *see* Kawahara, T., *EDL Oct. 2007* 868-870
Yoo, I., *see* Padilla, A., *EDL June 2007* 502-505
Yoo, J., *see* Moon, C.-R., *EDL Feb. 2007* 114-116
Yoo, O., *see* Oh, J., *EDL Nov. 2007* 1044-1046
Yoon, S. F., *see* Lew, K. L., *EDL Dec. 2007* 1083-1085
Yoon, Y.-S., *see* Lee, J.-W., *EDL May 2007* 379-382
Yoshida, S., *see* Kambayashi, H., *EDL Dec. 2007* 1077-1079
Yoshida, W., *see* Mei, X. B., *EDL June 2007* 470-472
Yoshimura, H., *see* Kawahara, T., *EDL Oct. 2007* 868-870
Young, C. D., *see* Heh, D., *EDL Aug. 2007* 734-736
Yu, C., Zhang, J., Yuan, J. S., Duan, F., Jayanaranan, S. K., Marathe, A., Cooper, S., Pham, V., and Goo, J.-S., Evaluation of RF Capacitance Extraction for Ultrathin Ultraleaky SOI MOS Devices; *EDL Jan. 2007* 45-47
Yu, H. P., Pey, K. L., Choi, W. K., Dawood, M. K., Chew, H. G., Antoniadis, D. A., Fitzgerald, E. A., and Chi, D. Z., The Effect of an Yttrium Interlayer on a Ni Germanided Metal Gate Workfunction in SiO₂/HfO₂; *EDL Dec. 2007* 1098-1101
Yu, H. Y., *see* Lousberg, G. P., *EDL Feb. 2007* 123-125
Yu, H. Y., Chang, S. Z., Veloso, A., Lauwers, A., Adelmann, C., Onsia, B., Lehnen, P., Kauerauf, T., Brus, S., Yin, K. M., Absil, P., and Biesemans, S., Demonstration of Low V_t Ni-FUSIN-n-MOSFETs With SiON Dielectrics by Using a Dy₂O₃ Cap Layer; *EDL Nov. 2007* 957-959
Yu, H. Y., *see* Wang, X. P., *EDL April 2007* 258-260
Yu, H. Y., *see* Ragnarsson, L.-A., *EDL June 2007* 486-488
Yu, H. Y., *see* Chang, S. Z., *EDL July 2007* 634-636
Yu, H. Y., *see* Veloso, A., *EDL Nov. 2007* 980-983
Yu, H. Y., *see* Singanamalla, R., *EDL Dec. 2007* 1089-1091
Yu, H. Y., Lauwers, A., Demeurisse, C., Richard, O., Mertens, S., Opsomer, K., Singanamalla, R., Rosseel, E., Absil, P., and Biesemans, S., Electrical Properties of nMOSFETs Using the NiSi:Yb FUSIN Electrode; *EDL Feb. 2007* 154-156
Yu, H. Y., Singanamalla, R., Ragnarsson, L.-A., Chang, V. S., Cho, H.-J., Mitsuhashi, R., Adelmann, C., Van Elshocht, S., Lehnen, P., Chang, S. Z., Yin, K. M., Schram, T., Kubicek, S., De Gendt, S., Absil, P., De Meyer, K., and Biesemans, S., Demonstration of Metal-Gated Low V_t n-MOSFETs Using a Poly-Si/TaN/Dy₂O₃/SiON Gate Stack With a ScaEDL EOT Value; *EDL July 2007* 656-658
Yu, L.-J., *see* Li, R., *EDL May 2007* 360-362
Yu, M., *see* Yu, X., *EDL May 2007* 373-375
Yu, M. B., *see* Chen, J., *EDL Oct. 2007* 862-864
Yu, M. B., *see* Loh, W. Y., *EDL Nov. 2007* 984-986

- Yu, X.**, Huang, J., Yu, M., and Zhu, C., Effect of Gate Dopant Diffusion on Leakage Current in n⁺Poly-Si/HfO₂ and Examination of Leakage Paths by Conducting Atomic Force Microscopy; *EDL May 2007* 373-375
- Yuan, H.-C.**, Celler, G. K., and Ma, Z., Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate; *EDL July 2007* 590-592
- Yuan, J. S.**, *see* Yu, C., *EDL Jan. 2007* 45-47
- Yugami, J.**, *see* Kawahara, T., *EDL Oct. 2007* 868-870
- Yuill, S.**, *see* Jamei, M., *EDL March 2007* 207-210

Z

- Zaman, R. J.**, Mathews, K., Xiong, W., and Banerjee, S. K., Trigate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach; *EDL Oct. 2007* 916-918
- Zang, H.**, Loh, W. Y., Ye, J. D., Lo, G. Q., and Cho, B. J., Tensile-Strained Germanium CMOS Integration on Silicon; *EDL Dec. 2007* 1117-1119
- Zaus, E. S.**, *see* Tedde, S., *EDL Oct. 2007* 893-895
- Zeghbrouck, B. V.**, *see* Zhao, F., *EDL May 2007* 398-400
- Zeng, Y.**, *see* Zhou, W., *EDL July 2007* 539-542
- Zeng, Y. P.**, *see* Liu, H. G., *EDL Oct. 2007* 852-855
- Zetterling, C.-M.**, *see* Lee, H.-S., *EDL Nov. 2007* 1007-1009
- Zhang, B.**, *see* Luo, X., *EDL May 2007* 422-424
- Zhang, D.**, and Wong, M., Passivation Effects of Aluminum on Polycrystalline Silicon Thin-Film Transistor With Metal-Replaced Junctions; *EDL Feb. 2007* 126-128
- Zhang, G.**, *see* Rustagi, S. C., *EDL Oct. 2007* 909-912
- Zhang, J.**, *see* Yu, C., *EDL Jan. 2007* 45-47
- Zhang, J. F.**, Chang, M. H., and Groeseneken, G., Effects of Measurement Temperature on NBTI; *EDL April 2007* 298-300
- Zhang, M. H.**, *see* Akbar, M. S., *EDL Feb. 2007* 132-134
- Zhang, M. H.**, Zhu, F., Kim, H. S., Ok, I. J., and Lee, J. C., Fluorine Passivation in Gate Stacks of Poly-Si/TaN/HfO₂ (and HfSiON/HfO₂)/Si Through Gate Ion Implantation; *EDL March 2007* 195-197
- Zhang, M.**, Knoch, J., Appenzeller, J., and Mantl, S., Improved Carrier Injection in Ultrathin-Body SOI Schottky-Barrier MOSFETs; *EDL March 2007* 223-225
- Zhang, S.-L.**, *see* Zhang, Z., *EDL July 2007* 565-568
- Zhang, X.**, *see* Li, Y., *EDL July 2007* 622-624
- Zhang, X.**, *see* Wei, L., *EDL Aug. 2007* 688-690
- Zhang, Y. P.**, *see* Sun, M., *EDL May 2007* 455-457
- Zhang, Y.**, Sheng, K., Su, M., Zhao, J. H., Alexandrov, P., and Fursin, L., 1000-V 9.1-mΩ · cm² Normally Off 4H-SiC Lateral RESURF JFET for Power Integrated Circuit Applications; *EDL May 2007* 404-407
- Zhang, Z.**, *see* Su, N., *EDL May 2007* 336-339
- Zhang, Z.**, Qiu, Z., Liu, R., Ostling, M., and Zhang, S.-L., Schottky-Barrier Height Tuning by Means of Ion Implantation Into Preformed Silicide Films Followed by Drive-In Anneal; *EDL July 2007* 565-568
- Zhao, F.**, Zeghbrouck, B. V., Torvik, K., Shi, T., and Mallinger, M., Demonstration of Long-Pulse Power Amplification at 1 GHz Using 4H-SiC RF BJTs on a Conductive Substrate; *EDL May 2007* 398-400
- Zhao, J. H.**, *see* Zhang, Y., *EDL May 2007* 404-407
- Zhong, H.**, *see* Zhu, H., *EDL Feb. 2007* 168-170
- Zhou, F.**, *see* Li, Y., *EDL July 2007* 622-624
- Zhou, H.**, *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082
- Zhou, W.**, Tang, C. W., Zhu, J., Lau, K. M., Zeng, Y., Liu, H. G., Tao, N. G., and Bolognesi, C. R., Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD; *EDL July 2007* 539-542
- Zhu, C.**, *see* Song, Y., *EDL Feb. 2007* 107-110
- Zhu, C. X.**, *see* Wang, X. P., *EDL April 2007* 258-260
- Zhu, C.**, *see* Wu, C. H., *EDL April 2007* 292-294
- Zhu, C.**, *see* Yu, X., *EDL May 2007* 373-375
- Zhu, C.**, *see* Xie, R., *EDL Nov. 2007* 976-979
- Zhu, F.**, *see* Akbar, M. S., *EDL Feb. 2007* 132-134
- Zhu, F.**, *see* Zhang, M. H., *EDL March 2007* 195-197
- Zhu, H.**, Zhong, H., Kawamura, T., Liang, Q., Leobandung, E., and Huang, S.-F., On the Control of Short-Channel Effect for MOSFETs With Reverse Halo Implantation; *EDL Feb. 2007* 168-170
- Zhu, J.**, *see* Zhou, W., *EDL July 2007* 539-542
- Zhu, L.**, *see* Sun, S., *EDL March 2007* 220-222
- Zhu, Y.**, *see* Huang, F., *EDL Nov. 2007* 1025-1028
- Zhu, Z.**, *see* Wei, L., *EDL Aug. 2007* 688-690
- Ziegert, J. C.**, *see* Suthram, S., *EDL Jan. 2007* 58-61

+ Check author entry for coauthors

- Zilli, M.**, Esseni, D., Palestri, P., and Selmi, L., On the Apparent Mobility in Nanometric n-MOSFETs; *EDL Nov. 2007* 1036-1039
- Zine-El-Abidine, I.**, and Okoniewski, M., CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q-Factors; *EDL March 2007* 226-228
- Zirath, H.**, *see* Shiu, J.-Y., *EDL June 2007* 476-478
- Zurcher, P.**, *see* Rajagopalan, K., *EDL Feb. 2007* 100-102
- Zurcher, P.**, *see* Hill, R. J. W., *EDL Dec. 2007* 1080-1082

SUBJECT INDEX**1/f****1/f noise**

- Gate Voltage Dependence of MOSFET 1/f Noise Statistics. *Erturk, M.*, +, *EDL Sept. 2007* 812-814
- Low-Frequency Noise Characteristics in Strained-Si nMOSFETs. *Wang, Y. P.*, +, *EDL Jan. 2007* 36-38
- Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W.*, +, *EDL April 2007* 288-291

A**AC-DC power converters**

- Pinch-Off Voltage-Adjustable High-Voltage Junction Field-Effect Transistor. *Liau, C.-W.*, +, *EDL Aug. 2007* 737-739

Ab initio calculations

- Role of Nitrogen Atoms in Reduction of Electron Charge Traps in Hf-Based High-κ Dielectrics. *Umezawa, N.*, +, *EDL May 2007* 363-365

Algorithm design and analysis

- Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance. *Hsu, H.-M.*, +, *EDL Nov. 2007* 1029-1032

Alumina

- High-κ Al₂O₃-HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikheleshvili, V.*, +, *EDL Jan. 2007* 24-26

- Study of the Erase Mechanism of MANOS (Metal/Al₂O₃/SiN/SiO₂/Si) Device. *Lai, S.*, +, *EDL July 2007* 643-645

Aluminum

- Passivation Effects of Aluminum on Polycrystalline Silicon Thin-Film Transistor With Metal-Replaced Junctions. *Zhang, D.*, +, *EDL Feb. 2007* 126-128

Aluminum compounds

- Power Stability of AlGaN/GaN HFETs at 20 W/mm in the Pinched-Off Operation Mode. *Koudymov, A.*, +, *EDL Jan. 2007* 5-7

- A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J.*, +, *EDL May 2007* 340-342

- AlGaN Photodetectors Prepared on Si Substrates. *Chiou, Y. Z.*, +, *EDL April 2007* 264-266

- AlGaN/GaN HEMTs With Thin InGaN Cap Layer for Normally Off Operation. *Mizutani, T.*, +, *EDL July 2007* 549-551

- Compact Model of Current Collapse in Heterostructure Field-Effect Transistors. *Koudymov, A.*, +, *EDL May 2007* 332-335

- DC Characteristics of AlGaAs/GaAs/GaN HBTs Formed by Direct Wafer Fusion. *Lian, C.*, +, *EDL Jan. 2007* 8-10

- Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H.*, +, *EDL Feb. 2007* 82-85

- Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier. *Suemitsu, T.*, +, *EDL Aug. 2007* 669-671

- High-Temperature Operation of AlGaN/GaN HEMTs Direct-CoupEDL FET Logic (DCFL) Integrated Circuits. *Cai, Y.*, +, *EDL May 2007* 328-331

- Normally Off AlGaN/GaN Low-Density Drain HEMT (LDD-HEMT) With Enhanced Breakdown Voltage and Reduced Current Collapse. *Song, D.*, +, *EDL March 2007* 189-191

- RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H.*, +, *EDL May 2007* 354-356

- Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S.*, +, *EDL Jan. 2007* 30-32

- SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures. *Shigekawa, N.*, +, *EDL Feb. 2007* 90-92

- Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET. *Adivarahan, V.*, +, *EDL March 2007* 192-194

- Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007 784-786*
- Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*
- Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*
- Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*
- Aluminum**
- Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films. *Kim, M., +, EDL Nov. 2007 967-969*
- Aluminum gallium nitride**
- Comparison of GaN HEMTs on Diamond and SiC Substrates. *Felbinger, J. G., +, EDL Nov. 2007 948-950*
- Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz. *Poblenz, C., +, EDL Nov. 2007 945-947*
- Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current. *Nomoto, K., +, EDL Nov. 2007 939-941*
- The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure. *Xu, C., +, EDL Nov. 2007 942-944*
- Ammonia**
- Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*
- Amorphous semiconductors**
- The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*
- Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor. *Ojiji, M., +, EDL April 2007 273-275*
- Limits of Performance Gain of Aligned CNT Over Randomized Network: Theoretical Predictions and Experimental Validation. *Pimparkar, N., +, EDL July 2007 593-595*
- Analytical models**
- Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP. *Kim, J.-S., +, EDL Oct. 2007 896-898*
- Annealing**
- Effect of F₂ Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric. *Chang, M., +, EDL Jan. 2007 21-23*
- A Novel Approach in Separating the Roles of Electrons and Holes in Causing Degradation in Hf-Based MOSFET Devices by Using Stress-Anneal Technique. *Akbar, M. S., +, EDL Feb. 2007 132-134*
- Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*
- Effect of Gate Sinking on the Device Performance of the InGaP/AlGAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*
- Effects of Sulfur Passivation on Germanium MOS Capacitors With HfO₂ Gate Dielectric. *Xie, R., +, EDL Nov. 2007 976-979*
- Good High-Temperature Stability of TiN/Al₂O₃/WN/TiN Capacitors. *Pan, T.-M., +, EDL Nov. 2007 954-956*
- High- κ Al₂O₃-HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikheleshvili, V., +, EDL Jan. 2007 24-26*
- Metal-Oxide-High- κ Dielectric-Oxide-Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications. *Hsu, H., +, EDL Nov. 2007 964-966*
- NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. *Chen, J., +, EDL Oct. 2007 862-864*
- Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*
- Schottky-Barrier Height Tuning by Means of Ion Implantation Into Preformed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*
- The Investigation of Post-Annealing-Induced Defects Behavior on 90-nm In Halo nMOSFETs With Low-Frequency Noise and Charge-Pumping Measuring. *Lai, C.-M., +, EDL Feb. 2007 142-144*
- The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*
- Threshold Voltage Shift Due to Mechanical Stress-Enhanced Plasma Process-Induced Damage in 0.13- μ m pMOSFET. *Li, R., +, EDL May 2007 360-362*

Trigate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach. *Zaman, R. J., +, EDL Oct. 2007 916-918*

Anodes

An Improved Planar Triode With ZnO Nanopin Field Emitters. *Wei, L., +, EDL Aug. 2007 688-690*

Antenna radiation patterns

100-GHz Quasi-Yagi Antenna in Silicon Technology. *Sun, M., +, EDL May 2007 455-457*

Antimony

Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. *Wong, H.-S., +, EDL Aug. 2007 703-705*

Antimony compounds

Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier. *Suemitsu, T., +, EDL Aug. 2007 669-671*

Antireflection coatings

High-Speed InGaP/GaAs p-i-n Photodiodes With Wide Spectral Range. *Wu, M.-C., +, EDL Sept. 2007 797-799*

Argon

Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*

Arsenic

Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors. *Severi, S., +, EDL March 2007 198-200*

Arsenic compounds

Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier. *Suemitsu, T., +, EDL Aug. 2007 669-671*

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Preformed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*

Atomic force microscopy

Performance Improvement of Organic Thin-Film Transistors by Electrode/Pentacene Interface Treatment Using a Hydrogen Plasma. *Lee, J.-W., +, EDL May 2007 379-382*

Effect of Gate Dopant Diffusion on Leakage Current in n⁺ Poly-Si/HfO₂ and Examination of Leakage Paths by Conducting Atomic Force Microscopy. *Yu, X., +, EDL May 2007 373-375*

Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

Atomic layer deposition

Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*

Effect of a Two-Step Recess Process Using Atomic Layer Etching on the Performance of In_{0.52}Al_{0.48}As/In_{0.53}Ga_{0.47}As p-HEMTs. *Kim, T.-W., +, EDL Dec. 2007 1086-1088*

Effective Work-Function Modulation by Aluminum-Ion Implantation for Metal-Gate Technology (Poly-Si/TiN/SiO₂). *Singanamalla, R., +, EDL Dec. 2007 1089-1091*

Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*

The Application of an Ultrathin ALD HfSiON Cap Layer on SiON Dielectrics for Ni-FUSI CMOS Technology Targeting at Low-Power Applications. *Chang, S. Z., +, EDL July 2007 634-636*

Avalanche breakdown

Experimental and TCAD Investigation of the Two Components of the Impact Ionization MOSFET (IMOS) Switching. *Mayer, F., +, EDL July 2007 619-621*

OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors. *Chen, J. F., +, EDL Nov. 2007 1033-1035*

B

Ball grid arrays

Lifetime Extension of RF MEMS Direct Contact Switches in Hot Switching Operations by Ball Grid Array Dimple Design. *Chow, L. L. W., +, EDL June 2007 479-481*

Ballistic transport

The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs. *Mao, L., EDL Feb. 2007 161-163*

Band-pass filters

Millimeter-Wave Bandpass Filters by Standard 0.18- μ m CMOS Technology. *Sun, S., +, EDL March 2007 220-222*

Barium compounds

High-Performance Metal–Insulator–Metal Capacitors Using Amorphous BaSm₂Ti₄O₁₂ Thin Film. *Jeong, Y. H., +, EDL Jan. 2007 17-20*

BiCMOS integrated circuits

High-Responsivity Photodetector in Standard SiGe BiCMOS Technology. *Lai, K.-S., +, EDL Sept. 2007 800-802*

Biomedical electronics

Design and Fabrication of Elastic Interconnections for Stretchable Electronic Circuits. *Brosteaux, D., +, EDL July 2007 552-554*

Bipolar transistors

Threshold Current for the Onset of Kirk Effect in Bipolar Transistors With a Fully Depleted Nonuniformly Doped Collector. *van der Toorn, R., EDL Jan. 2007 54-57*

High-Gain Low Turn-On Voltage AlGaAs/GaAsNSb/GaAs Heterojunction Bipolar Transistors Grown by Molecular Beam Epitaxy. *Lew, K. L., +, EDL Dec. 2007 1083-1085*

Parasitic Bipolar Junction Transistors in a Floating-Gate MOSFET for Fluorescence Detection. *Shin, K.-S., +, EDL July 2007 581-583*

Bismuth compounds

Ferrite-Integrated On-Chip Inductors for RF ICs. *Yang, C., +, EDL July 2007 652-655*

Boron

Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors. *Severi, S., +, EDL March 2007 198-200*

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Preformed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*

The Effect of Trapped Charge Distributions on Data Retention Characteristics of NAND Flash Memory Cells. *Park, M., +, EDL Aug. 2007 750-752*

Breakdown voltage

1200-V 5.2-mΩ · cm² 4H-SiC BJTs With a High Common-Emitter Current Gain. *Lee, H.-S., +, EDL Nov. 2007 1007-1009*

Buffer layers

Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget. *Loh, W. Y., +, EDL Nov. 2007 984-986*

Ultrahigh-Speed 0.5 V Supply Voltage In_{0.7}Ga_{0.3}As Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*

Buried layers

Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*

A Novel 700-V SOI LDMOS With Double-Sided Trench. *Luo, X., +, EDL May 2007 422-424*

Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007 590-592*

C**CMOS analogue integrated circuits**

Novel Approach to Reduce Source/Drain Series and Contact Resistance in High-Performance UTSOI CMOS Devices Using Selective Electrodeless CoWP or CoB Process. *Pan, J., +, EDL Aug. 2007 691-693*

CMOS image sensors

Application of Plasma-Doping (PLAD) Technique to Reduce Dark Current of CMOS Image Sensors. *Moon, C.-R., +, EDL Feb. 2007 114-116*

A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique. *Park, D., +, EDL Oct. 2007 890-892*

Sub-1-V Supply Self-Adaptive CMOS Image Sensor Cell With 86-dB Dynamic Range. *Lee, S., +, EDL June 2007 492-494*

CMOS integrated circuits

Bond Pad Design With Low Capacitance in CMOS Technology for RF Applications. *Hsiao, Y.-W., +, EDL Jan. 2007 68-70*

100-GHz Quasi-Yagi Antenna in Silicon Technology. *Sun, M., +, EDL May 2007 455-457*

A 20-V CMOS-Based Monolithic Bidirectional Power Switch. *Fu, Y., +, EDL Feb. 2007 174-176*

A Dynamical Power-Management Demonstration Using Four-Terminal Separated-Gate FinFETs. *Endo, K., +, EDL May 2007 452-454*

A New Lateral-IGBT Structure With a Wider Safe Operating Area. *Bakeroot, B., +, EDL May 2007 416-418*

A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007 111-113*

A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique. *Park, D., +, EDL Oct. 2007 890-892*

Achieving Low-V_T Ni-FUSI CMOS by Ultra-Thin Dy₂O₃ Capping of Hafnium Silicate Dielectrics. *Veloso, A., +, EDL Nov. 2007 980-983*

CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007 831-833*

CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOSFETs Fabricated Using Top-Down Approach. *Rustagi, S. C., +, EDL Nov. 2007 1021-1024*

CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q-Factors. *Zine-El-Abidine, I., +, EDL March 2007 226-228*

Correction to “Revision of Tunneling Field-Effect Transistor in Standard CMOS Technologies”. *Nirschl, Th., +, EDL April 2007 315-315*

Frequency Variation of the Small-Signal Output Conductance of Decamanometer MOSFETs Due to Substrate Crosstalk. *Kilchytska, V., +, EDL May 2007 419-421*

High-Q Integrated Inductor Using Post-CMOS Selectively Grown Porous Silicon (SGPS) Technique for RFIC Applications. *Li, C., +, EDL Aug. 2007 763-766*

Investigation and Localization of the SiGe Source/Drain (S/D) Strain-Induced Defects in PMOSFET With 45-nm CMOS Technology. *Cheng, C. Y., +, EDL May 2007 408-411*

Millimeter-Wave Bandpass Filters by Standard 0.18-μm CMOS Technology. *Sun, S., +, EDL March 2007 220-222*

Parasitic Bipolar Junction Transistors in a Floating-Gate MOSFET for Fluorescence Detection. *Shin, K.-S., +, EDL July 2007 581-583*

Predicting Thermal Neutron-Induced Soft Errors in Static Memories Using TCAD and Physics-Based Monte Carlo Simulation Tools. *Warren, K. M., +, EDL Feb. 2007 180-182*

SiGe-Channel Confinement Effects for Short-Channel PFETs With Non-bandedge Gate Workfunctions. *Winstead, B., +, EDL Aug. 2007 719-721*

Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. *Wong, H.-S., +, EDL Aug. 2007 703-705*

Symmetric Vertical Parallel Plate Capacitors for On-Chip RF Circuits in 65-nm SOI Technology. *Kim, D., +, EDL July 2007 616-618*

Tensile-Strained Germanium CMOS Integration on Silicon. *Zang, H., +, EDL Dec. 2007 1117-1119*

The Application of an Ultrathin ALD HfSiON Cap Layer on SiON Dielectrics for Ni-FUSI CMOS Technology Targeting at Low-Power Applications. *Chang, S. Z., +, EDL July 2007 634-636*

Three-Dimensional Photodetectors in 3-D Silicon-On-Insulator Technology. *Culurciello, E., +, EDL Feb. 2007 117-119*

Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. *Fang, W. W., +, EDL March 2007 211-213*

Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures. *Marshall, J. C., +, EDL Nov. 2007 960-963*

CMOS logic circuits

A 0.26-μm² U-Shaped Nitride-Based Programming Cell on Pure 90-nm CMOS Technology. *Lai, H.-C., +, EDL Sept. 2007 837-839*

CMOS memory circuits

A Novel Dual-Polarity Nonvolatile Memory. *Lin, H., +, EDL May 2007 412-415*

A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application. *Li, Y., +, EDL July 2007 622-624*

CVD coatings

Vertical Flash Memory Cell With Nanocrystal Floating Gate for Ultradense Integration and Good Retention. *Sarkar, J., +, EDL May 2007 449-451*

Cadmium alloys

Resistive Switching Mechanism in Zn_xCd_{1-x}S Nonvolatile Memory Devices. *Wang, Z., +, EDL Jan. 2007 14-16*

Cameras

Direct Monitoring of RF Overstress in High-Power Transistors and Amplifiers. *Stopel, A., +, EDL May 2007 357-359*

Capacitance

A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007 312-314*

Capacitance measurement

A High Schottky-Barrier of 1.1 eV Between Al and S-Passivated p-Type Si(100) Surface. *Song, G., +, EDL Jan. 2007 71-73*

Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry. *Wang, Y., +, EDL April 2007 279-281*

- Electrical Characterization of Leaky Charge-Trapping High- κ MOS Devices Using Pulsed $Q-V$. Martens, K., +, EDL May 2007 436-439**
- Evaluation of RF Capacitance Extraction for Ultrathin Ultraleaky SOI MOS Devices. Yu, C., +, EDL Jan. 2007 45-47**
- Time-Domain-Reflectometry for Capacitance–Voltage Measurement With Very High Leakage Current. Wang, Y., +, EDL Jan. 2007 51-53**
- A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry. Guo, X., +, EDL Oct. 2007 887-889**
- Active Pixel Concept Combined With Organic Photodiode for Imaging Devices. Tedde, S., +, EDL Oct. 2007 893-895**
- Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With ControlEDL Ge Epitaxial Layer Thickness on Si Substrates. Oh, J., +, EDL Nov. 2007 1044-1046**
- Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs. Wang, J.-S., +, EDL Nov. 2007 1040-1043**
- Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices. Guo, P., +, EDL July 2007 572-574**
- Capacitors**
- High-Temperature Leakage Improvement in Metal–Insulator–Metal Capacitors by Work–Function Tuning. Chiang, K. C., +, EDL March 2007 235-237
- A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor. Na, K.-Y., +, EDL Nov. 2007 1047-1049
- A Program-Erasable High- κ Hf_{0.3}N_{0.2}O_{0.5} MIS Capacitor With Good Retention. Yang, H. J., +, EDL Oct. 2007 913-915
- Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry. Wang, Y., +, EDL April 2007 279-281
- Good High-Temperature Stability of TiN/Al₂O₃/WN/TiN Capacitors. Pan, T.-M., +, EDL Nov. 2007 954-956
- Metal–Oxide–High- κ Dielectric–Oxide–Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications. Hsu, H., +, EDL Nov. 2007 964-966
- Room-Temperature Deposited Titanium Silicate Thin Films for MIM Capacitor Applications. Brassard, D., +, EDL April 2007 261-263
- Symmetric Vertical Parallel Plate Capacitors for On-Chip RF Circuits in 65-nm SOI Technology. Kim, D., +, EDL July 2007 616-618
- Use of a High-Work-Function Ni Electrode to Improve the Stress Reliability of Analog SrTiO₃ Metal–Insulator–Metal Capacitors. Chiang, K. C., +, EDL Aug. 2007 694-696
- Carbon**
- Fermi-Level Pinning in Nanocrystal Memories. Hou, T.-H., +, EDL Feb. 2007 103-106
- Carbon nanotubes**
- Physical Modeling of Temperature Coefficient of Resistance for Single- and Multi-Wall Carbon Nanotube Interconnects. Naeemi, A., +, EDL Feb. 2007 135-138
- An Efficient Macromodeling Approach for Simulating Carbon-Nanotube Field-Emission Triode Devices in Display Applications. Guo, X., +, EDL Aug. 2007 710-712
- Analyzing Conductance of Mixed Carbon-Nanotube Bundles for Interconnect Applications. Haruehanroengra, S., +, EDL Aug. 2007 756-759
- Carbon Nanotube-Based Triode Field Emission Lamps Using Metal Meshes With Spacers. Cho, W.-S., +, EDL May 2007 386-388
- Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. Naeemi, A., +, EDL May 2007 428-431
- Limits of Performance Gain of Aligned CNT Over Randomized Network: Theoretical Predictions and Experimental Validation. Pimparkar, N., +, EDL July 2007 593-595
- Performance Implications of Inductive Effects for Carbon-Nanotube Bundle Interconnect. Nieuwoudt, A., +, EDL April 2007 305-307
- Simulation of Graphene Nanoribbon Field-Effect Transistors. Fiori, G., +, EDL Aug. 2007 760-762
- A Graphene Field-Effect Device. Lemme, M. C., +, EDL April 2007 282-284
- Carrier density**
- Detection of Border Trap Density and Energy Distribution Along the Gate Dielectric Bulk of High- κ Gated MOS Devices. Lu, C.-Y., +, EDL May 2007 432-435
- Carrier mobility**
- A Graphene Field-Effect Device. Lemme, M. C., +, EDL April 2007 282-284
- Impacts of Notched-Gate Structure on Contact Etch Stop Layer (CESL) Stressed 90-nm nMOSFET. Lin, C.-T., +, EDL May 2007 376-378
- Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTL. Aoulaiche, M., +, EDL July 2007 613-615
- Stress Hybridization for Multigate Devices Fabricated on Supercritical Strained-SOI (SC-SSOI). Collaert, N., +, EDL July 2007 646-648**
- Cathodes**
- Carbon Nanotube-Based Triode Field Emission Lamps Using Metal Meshes With Spacers. Cho, W.-S., +, EDL May 2007 386-388
- An Improved Planar Triode With ZnO Nanopin Field Emitters. Wei, L., +, EDL Aug. 2007 688-690
- Cathodoluminescence**
- The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. Jamei, M., +, EDL March 2007 207-210
- Cavity resonators**
- GaN-Based High- Q Vertical-Cavity Light-Emitting Diodes. Lu, T.-C., +, EDL Oct. 2007 884-886
- Channel separation**
- n⁺/p⁺ Gate Bulk FinFETs With Locally Separated Channel Structure for Sub-50-nm DRAM Cell Transistors. Jung, H.-A.-R., +, EDL Dec. 2007 1126-1128
- Charge carrier processes**
- A Program-Erasable High- κ Hf_{0.3}N_{0.2}O_{0.5} MIS Capacitor With Good Retention. Yang, H. J., +, EDL Oct. 2007 913-915
- Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films. Kim, M., +, EDL Nov. 2007 967-969
- Charge injection**
- New Operating Mode Based on Electron/Hole Profile Matching in Nitride-Based Nonvolatile Memories. Furnemont, A., +, EDL April 2007 276-278
- Charge pumps**
- OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors. Chen, J. F., +, EDL Nov. 2007 1033-1035
- Chemical sensors**
- High-Quality Factor Electrolyte Insulator Silicon Capacitor for Wireless Chemical Sensing. Garcia-Canton, J., +, EDL Jan. 2007 27-29
- Chirality**
- Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. Naeemi, A., +, EDL May 2007 428-431
- Simulation of Graphene Nanoribbon Field-Effect Transistors. Fiori, G., +, EDL Aug. 2007 760-762
- Circuit CAD**
- Predicting Thermal Neutron-Induced Soft Errors in Static Memories Using TCAD and Physics-Based Monte Carlo Simulation Tools. Warren, K. M., +, EDL Feb. 2007 180-182
- Circuit bistability**
- Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material. Song, Y., +, EDL Feb. 2007 107-110
- Circuit feedback**
- A Novel LTPS-TFT Pixel Circuit Compensating for TFT Threshold-Voltage Shift and OEDL Degradation for AMOEDL. Lin, C.-L., +, EDL Feb. 2007 129-131
- Cobalt compounds**
- Ferrite-Integrated On-Chip Inductors for RF ICs. Yang, C., +, EDL July 2007 652-655
- Coils**
- Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance. Hsu, H.-M., +, EDL Nov. 2007 1029-1032
- Colour displays**
- Flexible Full-Color AMOEDL on Ultrathin Metal Foil. Jeong, J. K., +, EDL May 2007 389-391
- Condensation**
- Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. Fang, W. W., +, EDL March 2007 211-213
- Conduction bands**
- Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. Ragnarsson, L.-A., +, EDL June 2007 486-488
- Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier. Suemitsu, T., +, EDL Aug. 2007 669-671
- Contact resistance**
- Novel Approach to Reduce Source/Drain Series and Contact Resistance in High-Performance UTSOI CMOS Devices Using Selective Electroless CoWP or CoB Process. Pan, J., +, EDL Aug. 2007 691-693
- Effective Schottky Barrier Height Reduction Using Sulfur or Selenium at the NiSi/n-Si (100) Interface for Low Resistance Contacts. Wong, H.-S., +, EDL Dec. 2007 1102-1104
- Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. Wong, H.-S., +, EDL Aug. 2007 703-705

Controllability

A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels. *Chang, C.-W., +, EDL Nov. 2007 993-995*

Converters

A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique. *Park, D., +, EDL Oct. 2007 890-892*

Copper

CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q -Factors. *Zine-El-Abidine, I., +, EDL March 2007 226-228*

Crosstalk

Frequency Variation of the Small-Signal Output Conductance of Decanometer MOSFETs Due to Substrate Crosstalk. *Kilchytska, V., +, EDL May 2007 419-421*

Crystallisation

Degradation of Laser-Crystallized Laterally Grown Poly-Si TFT under Dynamic Stress. *Liu, P.-T., +, EDL May 2007 401-403*

Crystallization of Double-Layered Silicon Thin Films by Solid Green Laser Annealing for High-Performance Thin-Film Transistors. *Sugawara, Y., +, EDL May 2007 395-397*

Crystallization

High-Performance Short-Channel Double-Gate Low-Temperature Polysilicon Thin-Film Transistors Using Excimer Laser Crystallization. *Tsai, C.-C., +, EDL Nov. 2007 1010-1013*

A Phase Change Memory Compact Model for Multilevel Applications. *Ventrice, D., +, EDL Nov. 2007 973-975*

Current density

High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC. *Sui, Y., +, EDL Aug. 2007 728-730*

Current measurement

Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications. *Chang, C. Y., +, EDL Oct. 2007 856-858*
1200-V 5.2-m Ω · cm 2 4H-SiC BJTs With a High Common-Emitter Current Gain. *Lee, H.-S., +, EDL Nov. 2007 1007-1009*

A Planar Gunn Diode Operating Above 100 GHz. *Khalid, A., +, EDL Oct. 2007 849-851*

Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric. *Xuan, Y., +, EDL Nov. 2007 935-938*

D**DC-AC power converters**

Pinch-Off Voltage-Adjustable High-Voltage Junction Field-Effect Transistor. *Liaw, C.-W., +, EDL Aug. 2007 737-739*

DRAM chips

Long Retention of Gain-Cell Dynamic Random Access Memory With Undoped Memory Node. *Nishiguchi, K., +, EDL Jan. 2007 48-50*

Gate Workfunction Engineering in Bulk FinFETs for Sub-50-nm DRAM Cell Transistors. *Park, K.-H., +, EDL Feb. 2007 148-150*

New Insights on "Capacitorless" Floating-Body DRAM Cells. *Fossum, J. G., +, EDL June 2007 513-516*

Dangling bonds

Impact of Channel Dangling Bonds on Reliability Characteristics of Flash Memory on Poly-Si Thin Films. *Lin, Y.-H., +, EDL April 2007 267-269*

Data mining

On the Apparent Mobility in Nanometric n-MOSFETs. *Zilli, M., +, EDL Nov. 2007 1036-1039*

Degradation

A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device. *Lin, H.-T., +, EDL Nov. 2007 951-953*

OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors. *Chen, J. F., +, EDL Nov. 2007 1033-1035*

Delays

Performance Implications of Inductive Effects for Carbon-Nanotube Bundle Interconnect. *Nieuwoudt, A., +, EDL April 2007 305-307*

Density measurement

Direct Measurement of Top and Sidewall Interface Trap Density in SOI FinFETs. *Kapila, G., +, EDL March 2007 232-234*

Dielectric hysteresis

Border-Trap Characterization in High- κ Strained-Si MOSFETs. *Maji, D., +, EDL Aug. 2007 731-733*

Dielectric materials

Electrical Characterization of ZrO₂/Si Interface Properties in MOSFETs With ZrO₂ Gate Dielectrics. *Liu, C.-H., +, EDL Jan. 2007 62-64*

Charge Trapping and TDDDB Characteristics of Ultrathin MOCVD HfO₂ Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

Fermi-Level Pinning in Nanocrystal Memories. *Hou, T.-H., +, EDL Feb. 2007 103-106*

High Transconductance MISFET With a Single InAs Nanowire Channel. *Do, Q.-T., +, EDL Aug. 2007 682-684*

Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007 288-291*

Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures. *Singh, N., +, EDL July 2007 558-561*

Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007 590-592*

Role of Nitrogen Atoms in Reduction of Electron Charge Traps in Hf-Based High- κ Dielectrics. *Umezawa, N., +, EDL May 2007 363-365*

Dielectric measurements

Demonstration of Metal-Gated Low V_t n-MOSFETs Using a Poly-Si/TaN/Dy₂O₃/SiON Gate Stack With a ScaEDL EOT Value. *Yu, H. Y., +, EDL July 2007 656-658*

Dielectric properties

High-Performance Metal-Insulator-Metal Capacitors Using Amorphous BaSm₂Ti₄O₁₂ Thin Film. *Jeong, Y. H., +, EDL Jan. 2007 17-20*

Dielectric thin films

High- κ Al₂O₃-HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikhelashvili, V., +, EDL Jan. 2007 24-26*

Yttrium- and Terbium-Based Interlayer on SiO₂ and HfO₂ Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. *Lim, A. E.-J., +, EDL June 2007 482-485*

Dielectrics

Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability. *Kattamis, A. Z., +, EDL July 2007 606-608*

A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor. *Na, K.-Y., +, EDL Nov. 2007 1047-1049*

A Program-Erasable High- κ Hf_{0.3}N_{0.2}O_{0.5} MIS Capacitor With Good Retention. *Yang, H. J., +, EDL Oct. 2007 913-915*

Achieving Low- V_T Ni-FUSI CMOS by Ultra-Thin Dy₂O₃ Capping of Hafnium Silicate Dielectrics. *Veloso, A., +, EDL Nov. 2007 980-983*

Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric. *Kim, T. H., +, EDL Oct. 2007 874-876*

Demonstration of Low V_t Ni-FUSI N-MOSFETs With SiON Dielectrics by Using a Dy₂O₃ Cap Layer. *Yu, H. Y., +, EDL Nov. 2007 957-959*

Demonstration of Metal-Gated Low V_t n-MOSFETs Using a Poly-Si/TaN/Dy₂O₃/SiON Gate Stack With a ScaEDL EOT Value. *Yu, H. Y., +, EDL July 2007 656-658*

Effects of Sulfur Passivation on Germanium MOS Capacitors With HfON Gate Dielectric. *Xie, R., +, EDL Nov. 2007 976-979*

Good High-Temperature Stability of TiN/Al₂O₃/WN/TiN Capacitors. *Pan, T.-M., +, EDL Nov. 2007 954-956*

High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric. *Yang, M.-J., +, EDL Oct. 2007 902-904*

Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs. *Sasa, S., +, EDL July 2007 543-545*

Investigation of Carrier Transport in Germanium MOSFETs With WN/Al₂O₃/AlN Gate Stacks. *Ritenour, A., +, EDL Aug. 2007 746-749*

NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. *Chen, J., +, EDL Oct. 2007 862-864*

Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric. *Xuan, Y., +, EDL Nov. 2007 935-938*

Digital storage

Fermi-Level Pinning in Nanocrystal Memories. *Hou, T.-H., +, EDL Feb. 2007 103-106*

Display devices

Flexible Full-Color AMOEDL on Ultrathin Metal Foil. *Jeong, J. K., +, EDL May 2007 389-391*

Displays

Electrical Compensation of OEDL Luminance Degradation. *Chaji, G. R., +, EDL Dec. 2007 1108-1110*

Distributed Bragg reflectors

GaN-Based High-*Q* Vertical-Cavity Light-Emitting Diodes. *Lu, T.-C., +, EDL Oct. 2007 884-886*

Doping

Experimental Evaluation of Effects of Channel Doping on Characteristics of FinFETs. *Endo, K., +, EDL Dec. 2007 1123-1125*

Doping profiles

Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate. *Liu, J., +, EDL Jan. 2007 11-13*

Double heterojunction bipolar transistors

High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz. *Liu, H. G., +, EDL Oct. 2007 852-855*

Driver circuits

Flexible Full-Color AMOEDL on Ultrathin Metal Foil. *Jeong, J. K., +, EDL May 2007 389-391*

Dynamic range

A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique. *Park, D., +, EDL Oct. 2007 890-892*

E**EPROM**

Novel Single Polysilicon EEPROM Cell With Dual Work Function Floating Gate. *Na, K.-Y., +, EDL Feb. 2007 151-153*

A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor. *Na, K.-Y., +, EDL Nov. 2007 1047-1049*

Effective mass

A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007 312-314*

Electric admittance

Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007 428-431*

Electric admittance measurement

Admittance Measurements on OFET Channel and Its Modeling With $R-C$ Network. *Jung, K.-D., +, EDL March 2007 204-206*

Analyzing Conductance of Mixed Carbon-Nanotube Bundles for Interconnect Applications. *Haruehanroengra, S., +, EDL Aug. 2007 756-759*

Electric breakdown

A Novel Approach in Separating the Roles of Electrons and Holes in Causing Degradation in Hf-Based MOSFET Devices by Using Stress-Anneal Technique. *Akbar, M. S., +, EDL Feb. 2007 132-134*

A Novel 700-V SOI LDMOS With Double-Sided Trench. *Luo, X., +, EDL May 2007 422-424*

Duration of the High Breakdown Voltage Phase in Deep Depletion SOI LDMOS. *Napoli, E., EDL Aug. 2007 753-755*

High Transconductance MISFET With a Single InAs Nanowire Channel. *Do, Q.-T., +, EDL Aug. 2007 682-684*

Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*

Electric current

Valence Band Offset Measurements on Thin Silicon-on-Insulator MOS-FETs. *van der Steen, J.-L. P. J., +, EDL Sept. 2007 821-824*

Electric current measurement

Measurement of Channel Stress Using Gate Direct Tunneling Current in Uniaxially Stressed nMOSFETs. *Hsieh, C.-Y., +, EDL Sept. 2007 818-820*

Electric field effects

Impact of High- κ Offset Spacer in 65-nm Node SOI Devices. *Ma, M.-W., +, EDL March 2007 238-241*

Electric fields

Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET. *Han, J.-W., +, EDL July 2007 625-627*

OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors. *Chen, J. F., +, EDL Nov. 2007 1033-1035*

Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films. *Kim, M., +, EDL Nov. 2007 967-969*

The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure. *Xu, C., +, EDL Nov. 2007 942-944*

Electric resistance

Physical Modeling of Temperature Coefficient of Resistance for Single- and Multi-Wall Carbon Nanotube Interconnects. *Naeemi, A., +, EDL Feb. 2007 135-138*

Electric resistance measurement

Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry. *Wang, Y., +, EDL April 2007 279-281*

Extraction of π -Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. *Kang, I. M., +, EDL May 2007 425-427*

On-Resistance Degradations for Different Stress Conditions in High-Voltage pEDLMOS Transistor With Thick Gate Oxide. *Sun, W., +, EDL July 2007 631-633*

Electrical conductivity

Physical Modeling of Temperature Coefficient of Resistance for Single- and Multi-Wall Carbon Nanotube Interconnects. *Naeemi, A., +, EDL Feb. 2007 135-138*

Analyzing Conductance of Mixed Carbon-Nanotube Bundles for Interconnect Applications. *Haruehanroengra, S., +, EDL Aug. 2007 756-759*

Electrical resistance measurement

Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET. *Han, J.-W., +, EDL July 2007 625-627*

Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays. *Mantegazza, D., +, EDL Oct. 2007 865-867*

Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance. *Hsu, H.-M., +, EDL Nov. 2007 1029-1032*

Electrical resistivity

Resistive Switching Mechanism in $Zn_xCd_{1-x}S$ Nonvolatile Memory Devices. *Wang, Z., +, EDL Jan. 2007 14-16*

Electrodes

Electrical Properties of nMOSFETs Using the NiSi:Yb FUSI Electrode. *Yu, H. Y., +, EDL Feb. 2007 154-156*

Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films. *Kim, M., +, EDL Nov. 2007 967-969*

Demonstration of Low V_t Ni-FUSI N-MOSFETs With SiON Dielectrics by Using a Dy_2O_3 Cap Layer. *Yu, H. Y., +, EDL Nov. 2007 957-959*

Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP. *Kim, J.-S., +, EDL Oct. 2007 896-898*

Effect of Top Electrode Material on Resistive Switching Properties of ZrO_2 Film Memory Devices. *Lin, C.-Y., +, EDL May 2007 366-368*

Good High-Temperature Stability of TiN/ Al_2O_3 /WN/TiN Capacitors. *Pan, T.-M., +, EDL Nov. 2007 954-956*

Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. *Koskenvuori, M., +, EDL Nov. 2007 970-972*

Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices. *Guo, P., +, EDL July 2007 572-574*

SiGe-Channel Confinement Effects for Short-Channel PFETs With Non-bandedge Gate Workfunctions. *Winstead, B., +, EDL Aug. 2007 719-721*

Solution-Processed n-Type Organic Field-Effect Transistors With High ON/OFF Current Ratios Based on Fullerene Derivatives. *Tiwari, S. P., +, EDL Oct. 2007 880-883*

Use of a High-Work-Function Ni Electrode to Improve the Stress Reliability of Analog SrTiO₃ Metal-Insulator-Metal Capacitors. *Chiang, K. C., +, EDL Aug. 2007 694-696*

Electrolytic capacitors

High-Quality Factor Electrolyte Insulator Silicon Capacitor for Wireless Chemical Sensing. *Garcia-Canton, J., +, EDL Jan. 2007 27-29*

Electromagnetic wave refraction

Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S., +, EDL Jan. 2007 30-32*

Electromigration

Electromigration Resistant Power Delivery Systems. *Sekar, D. C., +, EDL Aug. 2007 767-769*

Electron backscattering

Temperature-Oriented Experiment and Simulation as Corroborating Evidence of MOSFET Backscattering Theory. *Chen, M.-J., +, EDL Feb. 2007 177-179*

Electron beam deposition

High- κ $Al_2O_3-HfTiO$ Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikheleshvili, V., +, EDL Jan. 2007 24-26*

Electron collisions

Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007 428-431*

Electron devices

Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation. *Chang, C.-P., +, EDL Nov. 2007 990-992*

Electron impact ionisation

Improved Reliability by Reduction of Hot-Electron Damage in the Vertical Impact-Ionization MOSFET (I-MOS). *Abelein, U., +, EDL Jan. 2007 65-67*

Electron mobility

The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs. *Mao, L., EDL Feb. 2007 161-163*

Achieving Conduction Band-Edge Effective Work Functions by La_2O_3 Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*

Effect of a Two-Step Recess Process Using Atomic Layer Etching on the Performance of $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ p-HEMTs. *Kim, T.-W., +, EDL Dec. 2007 1086-1088*

Electron Transport in Strained-Silicon Directly on Insulator Ultrathin-Body n-MOSFETs With Body Thickness Ranging From 2 to 25 nm. *Gomez, L., +, EDL April 2007 285-287*

Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. *Ang, K.-W., +, EDL April 2007 301-304*

HfLaON n-MOSFETs Using a Low Work Function HfSi_x Gate. *Cheng, C. F., +, EDL Dec. 2007 1092-1094*

Investigation of Carrier Transport in Germanium MOSFETs With $\text{WN}/\text{Al}_2\text{O}_3/\text{AlN}$ Gate Stacks. *Ritenour, A., +, EDL Aug. 2007 746-749*

Passivation Effects of Aluminum on Polycrystalline Silicon Thin-Film Transistor With Metal-Replaced Junctions. *Zhang, D., +, EDL Feb. 2007 126-128*

Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. *Ang, K.-W., +, EDL July 2007 609-612*

The Origin of Electron Mobility Enhancement in Strained MOSFETs. *Hadjisavvas, G., +, EDL Nov. 2007 1018-1020*

Electron transport theory

A Novel Dilute Antimony Channel $\text{In}_{0.2}\text{Ga}_{0.8}\text{AsSb}/\text{GaAs}$ HEMT. *Su, K.-H., +, EDL Feb. 2007 96-99*

Electron traps

Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO_2 Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

On-Resistance Degradations for Different Stress Conditions in High-Voltage pEDLMOS Transistor With Thick Gate Oxide. *Sun, W., +, EDL July 2007 631-633*

Profiling of Nitride-Trap-Energy Distribution in SONOS Flash Memory by Using a Variable-Amplitude Low-Frequency Charge-Pumping Technique. *Liao, Y.-Y., +, EDL Sept. 2007 828-830*

Role of Nitrogen Atoms in Reduction of Electron Charge Traps in Hf-Based High- κ Dielectrics. *Umezawa, N., +, EDL May 2007 363-365*

Electroplating

CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q-Factors. *Zine-El-Abidine, I., +, EDL March 2007 226-228*

Electrostatic discharge

Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes. *Shei, S.-C., +, EDL May 2007 346-349*

An Unassisted, Low Trigger-, and High Holding-Voltage SCR (uSCR) for On-Chip ESD-Protection Applications. *Lou, L., +, EDL Dec. 2007 1120-1122*

Electrostatics

Substrate Bias Effect Linked to Parasitic Series Resistance in Multiple-Gate SOI MOSFETs. *Rudenko, T., +, EDL Sept. 2007 834-836*

Elemental semiconductors

A High Schottky-Barrier of 1.1 eV Between Al and S-Passivated p-Type Si(100) Surface. *Song, G., +, EDL Jan. 2007 71-73*

A Novel Nanowire Channel Poly-Si TFT Functioning as Transistor and Non-volatile SONOS Memory. *Chen, S.-C., +, EDL Sept. 2007 809-811*

A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007 312-314*

Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO_2 Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

Defect Passivation by Selenium-Ion Implantation for Poly-Si Thin Film Transistors. *Lai, J., +, EDL Aug. 2007 725-727*

High-Temperature Leakage Improvement in Metal-Insulator-Metal Capacitors by Work-Function Tuning. *Chiang, K. C., +, EDL March 2007 235-237*

Low-Temperature Polymer-Based Three-Dimensional Silicon Integration.

Kim, S., +, EDL Aug. 2007 706-709

Negligible Effect of Process-Induced Strain on Intrinsic NBTI Behavior.

Shickova, A., +, EDL March 2007 242-244

Numerical Simulation of Low-Frequency Noise in Polysilicon Thin-Film Transistors. *Pichon, L., +, EDL Aug. 2007 716-718*

Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures. *Singh, N., +, EDL July 2007 558-561*

Piezoresistance Coefficients of (100) Silicon nMOSFETs Measured at Low and High (~ 1.5 GPa) Channel Stress. *Suthram, S., +, EDL Jan. 2007 58-61*

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*

Transport Mechanism of SiGe Dot MOS Tunneling Diodes. *Kuo, P.-S., +, EDL July 2007 596-598*

Ultrahigh-Speed 0.5 V Supply Voltage $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*

Embedded systems

Embedded TFT NAND-Type Nonvolatile Memory in Panel. *Chen, H.-T., +, EDL June 2007 499-501*

Encapsulation

Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007 784-786*

Epitaxial growth

A Novel Silicon Photovoltaic Cell Using a Low-Temperature Quasi-Epitaxial Silicon Emitter. *Farrok-Baroughi, M., +, EDL July 2007 575-577*

On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate. *Simoen, E., +, EDL Nov. 2007 987-989*

Epitaxial layers

Monolithically Integrated Logic NOR Gate Based on GaAs/AlGAs Three-Terminal Junctions. *Muller, C. R., +, EDL Oct. 2007 859-861*

Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With Control-EDL Ge Epitaxial Layer Thickness on Si Substrates. *Oh, J., +, EDL Nov. 2007 1044-1046*

Equations

Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP. *Kim, J.-S., +, EDL Oct. 2007 896-898*

Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET. *Rustagi, S. C., +, EDL Oct. 2007 909-912*

Equivalent circuits

Physical Modeling of Temperature Coefficient of Resistance for Single- and Multi-Wall Carbon Nanotube Interconnects. *Naeemi, A., +, EDL Feb. 2007 135-138*

Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors. *Huang, F., +, EDL Nov. 2007 1025-1028*

Performance Implications of Inductive Effects for Carbon-Nanotube Bundle Interconnect. *Nieuwoudt, A., +, EDL April 2007 305-307*

Error correction

Error and Correction in Capacitance–Voltage Measurement Due to the Presence of Source and Drain. *Wang, Y., +, EDL July 2007 640-642*

Etching

Fabrication of 0.15- μm Γ -Shaped Gate $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.6}\text{Ga}_{0.4}\text{As}$ Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007 93-95*

AlGaN/GaN HEMTs With Thin InGaN Cap Layer for Normally Off Operation. *Mizutani, T., +, EDL July 2007 549-551*

Demonstration of Asymmetric Gate-Oxide Thickness Four-Terminal FinFETs Having Flexible Threshold Voltage and Good Subthreshold Slope. *Masahara, M., +, EDL March 2007 217-219*

Impact of CF_4 Plasma Treatment on GaN. *Chu, R., +, EDL Sept. 2007 781-783*

Excimer lasers

High-Performance Polycrystalline-Silicon TFT by Heat-Retaining Enhanced Lateral Crystallization. *Liu, P.-T., +, EDL Aug. 2007 722-724*

Extrapolation

Experimental Study of Data Retention in Nitride Memories by Temperature and Field Acceleration. *Compagnoni, C. M., +, EDL July 2007 628-630*

F**FETs**

- Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs. *Sasa, S., +, EDL July 2007 543-545*
 Trigate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach. *Zaman, R. J., +, EDL Oct. 2007 916-918*

Fabrication

- High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization. *Tsai, C.-C., +, EDL July 2007 599-602*

Feedback

- Electrical Compensation of OEDL Luminance Degradation. *Chaji, G. R., +, EDL Dec. 2007 1108-1110*

Fermi level

- Fermi-Level Pinning in Nanocrystal Memories. *Hou, T.-H., +, EDL Feb. 2007 103-106*
 Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007 428-431*

Fermi resonance

- Effective Work-Function Modulation by Aluminum-Ion Implantation for Metal-Gate Technology (Poly-Si/TiN/SiO₂). *Singanamalla, R., +, EDL Dec. 2007 1089-1091*

Ferroelectric storage

- Resistive Switching Mechanism in Zn_xCd_{1-x}S Nonvolatile Memory Devices. *Wang, Z., +, EDL Jan. 2007 14-16*

Field effect transistors

- Admittance Measurements on OFET Channel and Its Modeling With *R-C* Network. *Jung, K.-D., +, EDL March 2007 204-206*
 High-Temperature Operation of AlGaN/GaN HEMTs Direct-Coupled FET Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007 328-331*
 Impact of CF₄ Plasma Treatment on GaN. *Chu, R., +, EDL Sept. 2007 781-783*
 SiGe-Channel Confinement Effects for Short-Channel PFETs With Non-bandedge Gate Workfunctions. *Winstead, B., +, EDL Aug. 2007 719-721*
 Simulation of Graphene Nanoribbon Field-Effect Transistors. *Fiori, G., +, EDL Aug. 2007 760-762*
 Tunneling Field-Effect Transistors (TFETs) With Subthreshold Swing (SS) Less Than 60 mV/dec. *Choi, W. Y., +, EDL Aug. 2007 743-745*

Field emission

- Carbon Nanotube-Based Triode Field Emission Lamps Using Metal Meshes With Spacers. *Cho, W.-S., +, EDL May 2007 386-388*

Field emission displays

- An Efficient Macromodeling Approach for Simulating Carbon-Nanotube Field-Emission Triode Devices in Display Applications. *Guo, X., +, EDL Aug. 2007 710-712*
 An Improved Planar Triode With ZnO Nanopin Field Emitters. *Wei, L., +, EDL Aug. 2007 688-690*

Films

- Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices. *Guo, P., +, EDL July 2007 572-574*
 Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films. *Kim, M., +, EDL Nov. 2007 967-969*
 Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure. *Chao, D.-S., +, EDL Oct. 2007 871-873*
 Good High-Temperature Stability of TiN/Al₂O₃/WN/TiN Capacitors. *Pan, T.-M., +, EDL Nov. 2007 954-956*
 High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric. *Yang, M.-J., +, EDL Oct. 2007 902-904*
 Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget. *Loh, W. Y., +, EDL Nov. 2007 984-986*
 Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation. *Chang, C.-P., +, EDL Nov. 2007 990-992*
 Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate. *Hu, C.-M., +, EDL Nov. 2007 1000-1003*
 Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids. *Tsai, C.-T., +, EDL July 2007 584-586*
 Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks. *Kawahara, T., +, EDL Oct. 2007 868-870*

FinFETs

- Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET. *Han, J.-W., +, EDL July 2007 625-627*
 N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. *Liow, T.-Y., +, EDL Nov. 2007 1014-1017*
 Strained p-Channel FinFETs With Extended Π -Shaped Silicon-Germanium Source and Drain Stressors. *Tan, K.-M., +, EDL Oct. 2007 905-908*

Flash memories

- Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material. *Song, Y., +, EDL Feb. 2007 107-110*
 A High-Performance Body-Tied FinFET Bandgap Engineered SONOS (BE-SONOS) for NAND-Type Flash Memory. *Hsu, T.-H., +, EDL May 2007 443-445*
 A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application. *Li, Y., +, EDL July 2007 622-624*
 Dual-Bit/Cell SONOS Flash EEPROMs: Impact of Channel Engineering on Programming Speed and Bit Coupling Effect. *Datta, A., +, EDL May 2007 446-448*
 Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007 793-796*
 Impact of Channel Dangling Bonds on Reliability Characteristics of Flash Memory on Poly-Si Thin Films. *Lin, Y.-H., +, EDL April 2007 267-269*
 Profiling of Nitride-Trap-Energy Distribution in SONOS Flash Memory by Using a Variable-Amplitude Low-Frequency Charge-Pumping Technique. *Liao, Y.-Y., +, EDL Sept. 2007 828-830*
 The Effect of Trapped Charge Distributions on Data Retention Characteristics of NAND Flash Memory Cells. *Park, M., +, EDL Aug. 2007 750-752*
 Thickness Scaling and Reliability Comparison for the Inter-Poly High-κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*
 Giant Random Telegraph Signals in Nanoscale Floating-Gate Devices. *Fantini, P., +, EDL Dec. 2007 1114-1116*
 Vertical Flash Memory Cell With Nanocrystal Floating Gate for Ultradense Integration and Good Retention. *Sarkar, J., +, EDL May 2007 449-451*

Flexible electronics

- Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007 590-592*

Flicker noise

- Flicker Noise and Its Degradation Characteristics Under Electrical Stress in MOSFETs With Thin Strained-Si/SiGe Dual-Quantum Well. *Jiang, Y., +, EDL July 2007 603-605*

Flip-chip devices

- Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes. *Shei, S.-C., +, EDL May 2007 346-349*
 A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J., +, EDL May 2007 340-342*
 Electromigration Resistant Power Delivery Systems. *Sekar, D. C., +, EDL Aug. 2007 767-769*

Fluids

- Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids. *Tsai, C.-T., +, EDL July 2007 584-586*

Fluorescence

- Parasitic Bipolar Junction Transistors in a Floating-Gate MOSFET for Fluorescence Detection. *Shin, K.-S., +, EDL July 2007 581-583*

Fluorine

- Effect of F₂ Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric. *Chang, M., +, EDL Jan. 2007 21-23*
 Fluorine Passivation in Gate Stacks of Poly-Si/TaN/HfO₂ (and HfSiON/HfO₂)/Si Through Gate Ion Implantation. *Zhang, M. H., +, EDL March 2007 195-197*

Flux pinning

- Effective Work-Function Modulation by Aluminum-Ion Implantation for Metal-Gate Technology (Poly-Si/TiN/SiO₂). *Singanamalla, R., +, EDL Dec. 2007 1089-1091*

Frequency measurement

- Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures. *Marshall, J. C., +, EDL Nov. 2007 960-963*

Frequency multipliers

- A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J., +, EDL May 2007 340-342*

G

Gadolinium

Characteristics of Ni/Gd FUSI for NMOS Gate Electrode Applications. *Lee, B., +, EDL July 2007 555-557*

Gadolinium compounds

Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes. *Shei, S.-C., +, EDL May 2007 346-349*

A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis. *Srinidhi, E. R., +, EDL May 2007 343-345*

Gain

50-nm T-Gate InAlAs/InGaAs Metamorphic HEMTs With Low Noise and High f_T Characteristics. *Lim, B. O., +, EDL July 2007 546-548*

1200-V 5.2-m Ω · cm 2 4H-SiC BJTs With a High Common-Emitter Current Gain. *Lee, H.-S., +, EDL Nov. 2007 1007-1009*

35-nm Zigzag T-Gate In_{0.52}Al_{0.48}As/In_{0.53}Ga_{0.47}As Metamorphic GaAs HEMTs With an Ultrahigh f_{max} of 520 GHz. *Lee, K.-S., +, EDL Aug. 2007 672-675*

Active Pixel Concept Combined With Organic Photodiode for Imaging Devices. *Tedde, S., +, EDL Oct. 2007 893-895*

CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOSFETs Fabricated Using Top-Down Approach. *Rustagi, S. C., +, EDL Nov. 2007 1021-1024*

High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz. *Liu, H. G., +, EDL Oct. 2007 852-855*

High-Gain Low Turn-On Voltage AlGaN/GaAsNSb/GaAs Heterojunction Bipolar Transistors Grown by Molecular Beam Epitaxy. *Lew, K. L., +, EDL Dec. 2007 1083-1085*

Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. *Koskenvuo, M., +, EDL Nov. 2007 970-972*

Monolithically Integrated Logic NOR Gate Based on GaAs/AlGaN Three-Terminal Junctions. *Muller, C. R., +, EDL Oct. 2007 859-861*

Gallium

CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007 831-833*

Gallium arsenide

DC Characteristics of AlGaN/GaAs/GaN HEMTs Formed by Direct Wafer Fusion. *Lian, C., +, EDL Jan. 2007 8-10*

35-nm Zigzag T-Gate In_{0.52}Al_{0.48}As/In_{0.53}Ga_{0.47}As Metamorphic GaAs HEMTs With an Ultrahigh f_{max} of 520 GHz. *Lee, K.-S., +, EDL Aug. 2007 672-675*

InGaAsSb/InP Double Heterojunction Bipolar Transistors Grown by Solid-Source Molecular Beam Epitaxy. *Chen, S.-H., +, EDL Aug. 2007 679-681*

A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J., +, EDL May 2007 340-342*

A Planar Gunn Diode Operating Above 100 GHz. *Khalid, A., +, EDL Oct. 2007 849-851*

High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz. *Liu, H. G., +, EDL Oct. 2007 852-855*

High-Speed InGaP/GaAs p-i-n Photodiodes With Wide Spectral Range. *Wu, M.-C., +, EDL Sept. 2007 797-799*

Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs. *Sadi, T., +, EDL Sept. 2007 787-789*

Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

Monolithically Integrated Logic NOR Gate Based on GaAs/AlGaN Three-Terminal Junctions. *Muller, C. R., +, EDL Oct. 2007 859-861*

Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S., +, EDL Jan. 2007 30-32*

Ultrahigh-Speed 0.5 V Supply Voltage In_{0.7}Ga_{0.3}As Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*

Gallium compounds

Power Stability of AlGaN/GaAs HFETs at 20 W/mm in the Pinched-Off Operation Mode. *Koudymov, A., +, EDL Jan. 2007 5-7*

1- μ m Enhancement Mode GaAs N-Channel MOSFETs With Transconductance Exceeding 250 mS/mm. *Rajagopalan, K., +, EDL Feb. 2007 100-102*

1.3- μ m GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planarized and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007 120-122*

A Novel Dilute Antimony Channel In_{0.2}Ga_{0.8}AsSb/GaAs HEMT. *Su, K.-H., +, EDL Feb. 2007 96-99*

AlGaN/GaN HEMTs With Thin InGaN Cap Layer for Normally Off Operation. *Mizutani, T., +, EDL July 2007 549-551*

Compact Model of Current Collapse in Heterostructure Field-Effect Transistors. *Koudymov, A., +, EDL May 2007 332-335*

DC Characteristics of AlGaN/GaAs/GaN HBTs Formed by Direct Wafer Fusion. *Lian, C., +, EDL Jan. 2007 8-10*

Effect of Gate Sinking on the Device Performance of the InGaP/AlGAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*

Enhancement-Mode GaAs MOSFETs With an In_{0.3}Ga_{0.7}As Channel, a Mobility of Over 5000 cm 2 /V · s, and Transconductance of Over 475 μ S/ μ m. *Hill, R. J. W., +, EDL Dec. 2007 1080-1082*

Fabrication of 0.15- μ m Γ -Shaped Gate In_{0.52}Al_{0.48}As/In_{0.6}Ga_{0.4}As Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007 93-95*

High-Gain Low Turn-On Voltage AlGaN/GaAsNSb/GaAs Heterojunction Bipolar Transistors Grown by Molecular Beam Epitaxy. *Lew, K. L., +, EDL Dec. 2007 1083-1085*

High-Speed InGaP/GaAs p-i-n Photodiodes With Wide Spectral Range. *Wu, M.-C., +, EDL Sept. 2007 797-799*

High-Temperature Operation of AlGaN/GaN HEMTs Direct-Coupled EDL FET Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007 328-331*

Impact of CF₄ Plasma Treatment on GaN. *Chu, R., +, EDL Sept. 2007 781-783*

Normally Off AlGaN/GaN Low-Density Drain HEMT (LDD-HEMT) With Enhanced Breakdown Voltage and Reduced Current Collapse. *Song, D., +, EDL March 2007 189-191*

ON-Resistance Modulation of High Voltage GaN HEMT on Sapphire Substrate Under High Applied Voltage. *Saito, W., +, EDL Aug. 2007 676-678*

RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*

SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures. *Shigekawa, N., +, EDL Feb. 2007 90-92*

Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET. *Adivarahan, V., +, EDL March 2007 192-194*

Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007 784-786*

Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*

Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*

Gallium nitride

GaN-Based High-Q Vertical-Cavity Light-Emitting Diodes. *Lu, T.-C., +, EDL Oct. 2007 884-886*

Comparison of GaN HEMTs on Diamond and SiC Substrates. *Felbinger, J. G., +, EDL Nov. 2007 948-950*

Normally Off n-Channel GaN MOSFETs on Si Substrates Using an SAG Technique and Ion Implantation. *Kambayashi, H., +, EDL Dec. 2007 1077-1079*

Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz. *Poblenz, C., +, EDL Nov. 2007 945-947*

Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current. *Nomoto, K., +, EDL Nov. 2007 939-941*

The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure. *Xu, C., +, EDL Nov. 2007 942-944*

Gate leakage

Demonstration of Metal-Gated Low V_t n-MOSFETs Using a Poly-Si/TaN/Dy₂O₃/SiON Gate Stack With a ScaEDL EOT Value. *Yu, H. Y., +, EDL July 2007 656-658*

High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric. *Yang, M.-J., +, EDL Oct. 2007 902-904*

Ge-Si alloys

Low-Frequency Noise Characteristics in Strained-Si nMOSFETs. *Wang, Y. P., +, EDL Jan. 2007 36-38*

High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007 825-827*

High-Responsivity Photodetector in Standard SiGe BiCMOS Technology. *Lai, K.-S., +, EDL Sept. 2007 800-802*

Investigation and Localization of the SiGe Source/Drain (S/D) Strain-Induced Defects in PMOSFET With 45-nm CMOS Technology. *Cheng, C. Y., +, EDL May 2007 408-411*

- Negligible Effect of Process-Induced Strain on Intrinsic NBTI Behavior. *Shickova, A., +, EDL March 2007 242-244*
- On the Use of a SiGe Spike in the Emitter to Improve the $f_T \times V_{CEO}$ Product of High-Speed SiGe HBTs. *Choi, L. J., +, EDL April 2007 270-272*
- SiGe-Channel Confinement Effects for Short-Channel PFETs With Non-bandedge Gate Workfunctions. *Winstead, B., +, EDL Aug. 2007 719-721*
- Transport Mechanism of SiGe Dot MOS Tunneling Diodes. *Kuo, P.-S., +, EDL July 2007 596-598*
- Vertical Flash Memory Cell With Nanocrystal Floating Gate for Ultradense Integration and Good Retention. *Sarkar, J., +, EDL May 2007 449-451*
- Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. *Fang, W. W., +, EDL March 2007 211-213*
- Germanium**
- Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. *Fang, W. W., +, EDL March 2007 211-213*
- Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO_2 Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*
- Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007 308-311*
- Investigation of Carrier Transport in Germanium MOSFETs With $\text{WN}/\text{Al}_2\text{O}_3/\text{AlN}$ Gate Stacks. *Ritenour, A., +, EDL Aug. 2007 746-749*
- Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With $\text{TiN}/\text{Ta}/\text{HfO}_2$ Gate Stack. *Guo, W., +, EDL April 2007 288-291*
- P-Channel Germanium FinFET Based on Rapid Melt Growth. *Feng, J., +, EDL July 2007 637-639*
- Gettering**
- Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate. *Hu, C.-M., +, EDL Nov. 2007 1000-1003*
- Glass**
- HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007 42-44*
- Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic. *Cherenack, K. H., +, EDL Nov. 2007 1004-1006*
- Gold**
- Fermi-Level Pinning in Nanocrystal Memories. *Hou, T.-H., +, EDL Feb. 2007 103-106*
- Gold alloys**
- Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*
- Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material. *Song, Y., +, EDL Feb. 2007 107-110*
- Grain boundaries**
- Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells. *Carnel, L., +, EDL Oct. 2007 899-901*
- A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels. *Chang, C.-W., +, EDL Nov. 2007 993-995*
- Green's function methods**
- Simulation of Graphene Nanoribbon Field-Effect Transistors. *Fiori, G., +, EDL Aug. 2007 760-762*
- H**
- HEMT integrated circuits**
- Effect of a Two-Step Recess Process Using Atomic Layer Etching on the Performance of $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ p-HEMTs. *Kim, T.-W., +, EDL Dec. 2007 1086-1088*
- High-Temperature Operation of AlGaN/GaN HEMTs Direct-CoupEDL FET Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007 328-331*
- HEMTs**
- 50-nm T-Gate InAlAs/InGaAs Metamorphic HEMTs With Low Noise and High f_T Characteristics. *Lim, B. O., +, EDL July 2007 546-548*
- 35-nm Zigzag T-Gate $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ Metamorphic GaAs HEMTs With an Ultrahigh f_{max} of 520 GHz. *Lee, K.-S., +, EDL Aug. 2007 672-675*
- Comparison of GaN HEMTs on Diamond and SiC Substrates. *Felbinger, J. G., +, EDL Nov. 2007 948-950*
- Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications. *Chang, C. Y., +, EDL Oct. 2007 856-858*
- Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz. *Poblenz, C., +, EDL Nov. 2007 945-947*
- Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current. *Nomoto, K., +, EDL Nov. 2007 939-941*
- The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure. *Xu, C., +, EDL Nov. 2007 942-944*
- Hafnium compounds**
- Effect of F_2 Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric. *Chang, M., +, EDL Jan. 2007 21-23*
- A Novel Approach in Separating the Roles of Electrons and Holes in Causing Degradation in Hf-Based MOSFET Devices by Using Stress-Anneal Technique. *Akbar, M. S., +, EDL Feb. 2007 132-134*
- Achieving Conduction Band-Edge Effective Work Functions by La_2O_3 Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*
- Border-Trap Characterization in High- κ Strained-Si MOSFETs. *Maji, D., +, EDL Aug. 2007 731-733*
- Characteristics of Ni/Gd FUSI for NMOS Gate Electrode Applications. *Lee, B., +, EDL July 2007 555-557*
- Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO_2 Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*
- Demonstration of Asymmetric Gate-Oxide Thickness Four-Terminal FinFETs Having Flexible Threshold Voltage and Good Subthreshold Slope. *Masahara, M., +, EDL March 2007 217-219*
- Detection of Border Trap Density and Energy Distribution Along the Gate Dielectric Bulk of High- κ Gated MOS Devices. *Lu, C.-Y., +, EDL May 2007 432-435*
- Effect of Gate Dopant Diffusion on Leakage Current in n^+ Poly-Si/ HfO_2 and Examination of Leakage Paths by Conducting Atomic Force Microscopy. *Yu, X., +, EDL May 2007 373-375*
- Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics. *Yen, F. Y., +, EDL March 2007 201-203*
- Electrical Properties of nMOSFETs Using the NiSi:Yb FUSI Electrode. *Yu, H. Y., +, EDL Feb. 2007 154-156*
- Fluorine Passivation in Gate Stacks of Poly-Si/TaN/ HfO_2 (and $\text{HfSiON}/\text{HfO}_2$)/Si Through Gate Ion Implantation. *Zhang, M. H., +, EDL March 2007 195-197*
- High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007 825-827*
- High- κ $\text{Al}_2\text{O}_3-\text{HfTiO}$ Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikhelashvili, V., +, EDL Jan. 2007 24-26*
- High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir_3Si Gate. *Wu, C. H., +, EDL April 2007 292-294*
- Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007 308-311*
- Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With $\text{TiN}/\text{Ta}/\text{HfO}_2$ Gate Stack. *Guo, W., +, EDL April 2007 288-291*
- NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. *Chen, J., +, EDL Oct. 2007 862-864*
- Nitrogen Incorporation in $\text{HfSiO}(\text{N})/\text{TaN}$ Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*
- Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures. *Singh, N., +, EDL July 2007 558-561*
- Role of Nitrogen Atoms in Reduction of Electron Charge Traps in Hf-Based High- κ Dielectrics. *Umezawa, N., +, EDL May 2007 363-365*
- The Application of an Ultrathin ALD HfSiON Cap Layer on SiON Dielectrics for Ni-FUSI CMOS Technology Targeting at Low-Power Applications. *Chang, S. Z., +, EDL July 2007 634-636*
- Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*
- Yttrium- and Terbium-Based Interlayer on SiO_2 and HfO_2 Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. *Lim, A. E.-J., +, EDL June 2007 482-485*
- Harmonic analysis**
- A Planar Gunn Diode Operating Above 100 GHz. *Khalid, A., +, EDL Oct. 2007 849-851*
- Heat treatment**
- Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007 793-796*

Heating

Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure. *Chao, D.-S., +, EDL Oct. 2007 871-873*

Heterojunction bipolar transistors

DC Characteristics of AlGAs/GaAs/GaN HBTs Formed by Direct Wafer Fusion. *Lian, C., +, EDL Jan. 2007 8-10*

InGaAsSb/InP Double Heterojunction Bipolar Transistors Grown by Solid-Source Molecular Beam Epitaxy. *Chen, S.-H., +, EDL Aug. 2007 679-681*

High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz. *Liu, H. G., +, EDL Oct. 2007 852-855*

Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

On the Use of a SiGe Spike in the Emitter to Improve the $f_T \times V_{CEO}$ Product of High-Speed SiGe HBTs. *Choi, L. J., +, EDL April 2007 270-272*

Heterojunctions

Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells. *Carnel, L., +, EDL Oct. 2007 899-901*

High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz. *Liu, H. G., +, EDL Oct. 2007 852-855*

High electron mobility transistors

RF-Enhanced Contacts to Wide-Bandgap Devices. *Simin, G., +, EDL Jan. 2007 2-4*

A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis. *Srinidhi, E. R., +, EDL May 2007 343-345*

A Novel Dilute Antimony Channel $\text{In}_{0.2}\text{Ga}_{0.8}\text{AsSb}/\text{GaAs}$ HEMT. *Su, K.-H., +, EDL Feb. 2007 96-99*

AlGaN/GaN HEMTs With Thin InGaN Cap Layer for Normally Off Operation. *Mizutani, T., +, EDL July 2007 549-551*

Compact Model of Current Collapse in Heterostructure Field-Effect Transistors. *Koudymov, A., +, EDL May 2007 332-335*

Effect of Gate Sinking on the Device Performance of the InGaP/AlGAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*

Effect of a Two-Step Recess Process Using Atomic Layer Etching on the Performance of $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ p-HEMTs. *Kim, T.-W., +, EDL Dec. 2007 1086-1088*

Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier. *Suemitsu, T., +, EDL Aug. 2007 669-671*

Fabrication of 0.15- μm T-Shaped Gate $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.6}\text{Ga}_{0.4}\text{As}$ Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007 93-95*

Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs. *Sadi, T., +, EDL Sept. 2007 787-789*

Normally Off AlGaN/GaN Low-Density Drain HEMT (LD-HEMT) With Enhanced Breakdown Voltage and Reduced Current Collapse. *Song, D., +, EDL March 2007 189-191*

RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*

SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures. *Shigekawa, N., +, EDL Feb. 2007 90-92*

Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET. *Adivarahan, V., +, EDL March 2007 192-194*

Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*

Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*

Ultrahigh-Speed 0.5 V Supply Voltage $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*

High-k dielectric thin films

Effect of F_2 Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric. *Chang, M., +, EDL Jan. 2007 21-23*

Border-Trap Characterization in High- κ Strained-Si MOSFETs. *Maji, D., +, EDL Aug. 2007 731-733*

Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO_2 Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

Detection of Border Trap Density and Energy Distribution Along the Gate Dielectric Bulk of High- κ Gated MOS Devices. *Lu, C.-Y., +, EDL May 2007 432-435*

Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics. *Yen, F. Y., +, EDL March 2007 201-203*

Electrical Characterization of ZrO_2/Si Interface Properties in MOSFETs With ZrO_2 Gate Dielectrics. *Liu, C.-H., +, EDL Jan. 2007 62-64*

Electrical Characterization of Leaky Charge-Trapping High- κ MOS Devices Using Pulsed $Q-V$. *Martens, K., +, EDL May 2007 436-439*

Extraction of the Threshold-Voltage Shift by the Single-Pulse Technique. *Heh, D., +, EDL Aug. 2007 734-736*

High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007 825-827*

High- κ $\text{Al}_2\text{O}_3-\text{HfTiO}$ Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikheleshvili, V., +, EDL Jan. 2007 24-26*

Impact of High- κ Gate Dielectrics on the Device and Circuit Performance of Nanoscale FinFETs. *Manoj, C. R., +, EDL April 2007 295-297*

Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007 308-311*

The Application of an Ultrathin ALD HfSiON Cap Layer on SiON Dielectrics for Ni-FUSI CMOS Technology Targeting at Low-Power Applications. *Chang, S. Z., +, EDL July 2007 634-636*

Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*

Wide V_{fl} and V_{th} Tunability for Metal-Gated MOS Devices With HfLaO Gate Dielectrics. *Wang, X. P., +, EDL April 2007 258-260*

High-speed integrated circuits

A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application. *Li, Y., +, EDL July 2007 622-624*

High-temperature electronics

Amorphous-SiCBN-Based Metal–Semiconductor–Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007 713-715*

High-temperature techniques

Improved High-Temperature Leakage in High-Density MIM Capacitors by Using a TiLaO Dielectric and an Ir Electrode. *Cheng, C. H., +, EDL Dec. 2007 1095-1097*

Hole mobility

High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir_3Si Gate. *Wu, C. H., +, EDL April 2007 292-294*

Enhanced Hole Mobility and Reliability of Planar Epi-Like Silicon Transistors Using Backside Green Laser Activation. *Lin, Y.-T., +, EDL Sept. 2007 790-792*

High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007 825-827*

Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007 308-311*

P-Channel Germanium FinFET Based on Rapid Melt Growth. *Feng, J., +, EDL July 2007 637-639*

Hole traps

Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO_2 Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

Hot carrier effects

On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs. *Su, P., +, EDL July 2007 649-651*

Hot carriers

Improved Reliability by Reduction of Hot-Electron Damage in the Vertical Impact-Ionization MOSFET (I-MOS). *Abelein, U., +, EDL Jan. 2007 65-67*
A Novel Dual-Polarity Nonvolatile Memory. *Lin, H., +, EDL May 2007 412-415*

Hot-Carrier Effects in Strained n-Channel Transistor With Silicon–Carbon ($\text{Si}_{1-y}\text{C}_y$) Source/Drain Stressors and Its Orientation Dependence. *Ang, K.-W., +, EDL Nov. 2007 996-999*

New Operating Mode Based on Electron/Hole Profile Matching in Nitride-Based Nonvolatile Memories. *Furnemont, A., +, EDL April 2007 276-278*

Novel Single Polysilicon EEPROM Cell With Dual Work Function Floating Gate. *Na, K.-Y., +, EDL Feb. 2007 151-153*

On-Resistance Degradations for Different Stress Conditions in High-Voltage pEDLMOS Transistor With Thick Gate Oxide. *Sun, W., +, EDL July 2007 631-633*

Hot electron transistors

On-Resistance Degradations for Different Stress Conditions in High-Voltage pEDLMOS Transistor With Thick Gate Oxide. *Sun, W., +, EDL July 2007 631-633*

Hydrogen

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*

Tribate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach. *Zaman, R. J., +, EDL Oct. 2007 916-918*

Hydrogenation

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*

Hysteresis

Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs. *Sasa, S., +, EDL July 2007 543-545*

I**IEEE**

2007 Golden List of Reviewers. , *EDL Dec. 2007 1062-1075*

II-VI semiconductors

HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007 42-44*

III-V semiconductors

Power Stability of AlGaN/GaN HFETs at 20 W/mm in the Pinched-Off Operation Mode. *Koudymov, A., +, EDL Jan. 2007 5-7*

1- μ m Enhancement Mode GaAs N-Channel MOSFETs With Transconductance Exceeding 250 mS/mm. *Rajagopalan, K., +, EDL Feb. 2007 100-102*

1.3- μ m GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planned and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007 120-122*

InGaAsSb/InP Double Heterojunction Bipolar Transistors Grown by Solid-Source Molecular Beam Epitaxy. *Chen, S.-H., +, EDL Aug. 2007 679-681*

A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J., +, EDL May 2007 340-342*

A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis. *Srinidhi, E. R., +, EDL May 2007 343-345*

A Novel Dilute Antimony Channel In_{0.2}Ga_{0.8}AsSb/GaAs HEMT. *Su, K.-H., +, EDL Feb. 2007 96-99*

AlGaN Photodetectors Prepared on Si Substrates. *Chiou, Y. Z., +, EDL April 2007 264-266*

AlGaN/GaN HEMTs With Thin InGaN Cap Layer for Normally Off Operation. *Mizutani, T., +, EDL July 2007 549-551*

Compact Model of Current Collapse in Heterostructure Field-Effect Transistors. *Koudymov, A., +, EDL May 2007 332-335*

DC Characteristics of AlGaAs/GaAs/GaN HBTs Formed by Direct Wafer Fusion. *Lian, C., +, EDL Jan. 2007 8-10*

Fabrication of 0.15- μ m Γ -Shaped Gate In_{0.52}Al_{0.48}As/In_{0.6}Ga_{0.4}As Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007 93-95*

High-Speed InGaP/GaAs p-i-n Photodiodes With Wide Spectral Range. *Wu, M.-C., +, EDL Sept. 2007 797-799*

High-Temperature Operation of AlGaN/GaN HEMTs Direct-CoupEDL FET Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007 328-331*

Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs. *Sadi, T., +, EDL Sept. 2007 787-789*

Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes. *Shei, S.-C., +, EDL May 2007 346-349*

Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

Normally Off AlGaN/GaN Low-Density Drain HEMT (LDD-HEMT) With Enhanced Breakdown Voltage and Reduced Current Collapse. *Song, D., +, EDL March 2007 189-191*

On-Resistance Modulation of High Voltage GAN HEMT on Sapphire Substrate Under High Applied Voltage. *Saito, W., +, EDL Aug. 2007 676-678*

RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*

Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S., +, EDL Jan. 2007 30-32*

Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET. *Adivarahan, V., +, EDL March 2007 192-194*

Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007 784-786*

Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*

Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*

Ultrahigh-Speed 0.5 V Supply Voltage In_{0.7}Ga_{0.3}As Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*

Image sensors

A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique. *Park, D., +, EDL Oct. 2007 890-892*

Immune system

Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET. *Han, J.-W., +, EDL July 2007 625-627*

Impact ionisation

Improved Reliability by Reduction of Hot-Electron Damage in the Vertical Impact-Ionization MOSFET (I-MOS). *Abelein, U., +, EDL Jan. 2007 65-67*

Experimental and TCAD Investigation of the Two Components of the Impact Ionization MOSFET (IMOS) Switching. *Mayer, F., +, EDL July 2007 619-621*

Impact ionization

Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET. *Han, J.-W., +, EDL July 2007 625-627*

Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon (Si_{1-y}C_y) Source/Drain Stressors and Its Orientation Dependence. *Ang, K.-W., +, EDL Nov. 2007 996-999*

Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications. *Chang, C. Y., +, EDL Oct. 2007 856-858*

On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs. *Su, P., +, EDL July 2007 649-651*

Impurity distribution

Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate. *Liu, J., +, EDL Jan. 2007 11-13*

Indium

The Investigation of Post-Annealing-Induced Defects Behavior on 90-nm In Halo nMOSFETs With Low-Frequency Noise and Charge-Pumping Measuring. *Lai, C.-M., +, EDL Feb. 2007 142-144*

Indium compounds

Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S., +, EDL Jan. 2007 30-32*

1.3- μ m GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planned and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007 120-122*

InGaAsSb/InP Double Heterojunction Bipolar Transistors Grown by Solid-

Source Molecular Beam Epitaxy. *Chen, S.-H., +, EDL Aug. 2007 679-681*

A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J., +, EDL May 2007 340-342*

A Novel Dilute Antimony Channel In_{0.2}Ga_{0.8}AsSb/GaAs HEMT. *Su, K.-H., +, EDL Feb. 2007 96-99*

Effect of Gate Sinking on the Device Performance of the InGaP/AlGaN/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*

Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier. *Suemitsu, T., +, EDL Aug. 2007 669-671*

Fabrication of 0.15- μ m Γ -Shaped Gate In_{0.52}Al_{0.48}As/In_{0.6}Ga_{0.4}As Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007 93-95*

Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor. *Ojiji, M., +, EDL April 2007 273-275*

High Transconductance MISFET With a Single InAs Nanowire Channel. *Do, Q.-T., +, EDL Aug. 2007 682-684*

High-Speed InGaP/GaAs p-i-n Photodiodes With Wide Spectral Range. *Wu, M.-C., +, EDL Sept. 2007 797-799*

Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007 590-592*

RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*

Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET. *Adivarahan, V., +, EDL March 2007 192-194*

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*

Ultrahigh-Speed 0.5 V Supply Voltage $In_{0.7}Ga_{0.3}As$ Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007* 685-687

Indium gallium arsenide

Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications. *Chang, C. Y., +, EDL Oct. 2007* 856-858

Indium phosphide

Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications. *Chang, C. Y., +, EDL Oct. 2007* 856-858
High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz. *Liu, H. G., +, EDL Oct. 2007* 852-855

Indium tin oxide

Ga-Based High-Q Vertical-Cavity Light-Emitting Diodes. *Lu, T.-C., +, EDL Oct. 2007* 884-886

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007* 565-568

Inductance

Performance Implications of Inductive Effects for Carbon-Nanotube Bundle Interconnect. *Nieuwoudt, A., +, EDL April 2007* 305-307

Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors. *Huang, F., +, EDL Nov. 2007* 1025-1028

Inductors

Bond Pad Design With Low Capacitance in CMOS Technology for RF Applications. *Hsiao, Y.-W., +, EDL Jan. 2007* 68-70

CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q-Factors. *Zine-El-Abidine, I., +, EDL March 2007* 226-228

Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance. *Hsu, H.-M., +, EDL Nov. 2007* 1029-1032

Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors. *Huang, F., +, EDL Nov. 2007* 1025-1028

High-Q Integrated Inductor Using Post-CMOS Selectively Grown Porous Silicon (SGPS) Technique for RFIC Applications. *Li, C., +, EDL Aug. 2007* 763-766

Infrared imaging

Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007* 86-89

Infrared sources

Strong Efficiency Improvement of SOI-EDLs Through Carrier Confinement. *Hoang, T., +, EDL May 2007* 383-385

Inorganic polymers

Numerical Simulation of Low-Frequency Noise in Polysilicon Thin-Film Transistors. *Pichon, L., +, EDL Aug. 2007* 716-718

Insulated gate bipolar transistors

A New Lateral-IGBT Structure With a Wider Safe Operating Area. *Bakeroot, B., +, EDL May 2007* 416-418

High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC. *Sui, Y., +, EDL Aug. 2007* 728-730

Integrated circuit design

Source/Drain Extension Region Engineering in FinFETs for Low-Voltage Analog Applications. *Kranti, A., +, EDL Feb. 2007* 139-141

Ferrite-Integrated On-Chip Inductors for RFICs. *Yang, C., +, EDL July 2007* 652-655

Integrated circuit interconnections

Physical Modeling of Temperature Coefficient of Resistance for Single- and Multi-Wall Carbon Nanotube Interconnects. *Naeemi, A., +, EDL Feb. 2007* 135-138

Analyzing Conductance of Mixed Carbon-Nanotube Bundles for Interconnect Applications. *Haruehanroengra, S., +, EDL Aug. 2007* 756-759

Design and Fabrication of Elastic Interconnections for Stretchable Electronic Circuits. *Brostiaux, D., +, EDL July 2007* 552-554

Electromigration Resistant Power Delivery Systems. *Sekar, D. C., +, EDL Aug. 2007* 767-769

Performance Implications of Inductive Effects for Carbon-Nanotube Bundle Interconnect. *Nieuwoudt, A., +, EDL April 2007* 305-307

Integrated circuit manufacture

A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application. *Li, Y., +, EDL July 2007* 622-624

Integrated circuit measurement

Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry. *Wang, Y., +, EDL April 2007* 279-281

Integrated circuit modeling

A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry. *Guo, X., +, EDL Oct. 2007* 887-889

A Phase Change Memory Compact Model for Multilevel Applications. *Ventrice, D., +, EDL Nov. 2007* 973-975

Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP. *Kim, J.-S., +, EDL Oct. 2007* 896-898

Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors. *Huang, F., +, EDL Nov. 2007* 1025-1028

Integrated circuit modelling

New Insights on "Capacitorless" Floating-Body DRAM Cells. *Fossum, J. G., +, EDL June 2007* 513-516

Integrated circuit reliability

A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application. *Li, Y., +, EDL July 2007* 622-624

Integrated circuits

Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures. *Marshall, J. C., +, EDL Nov. 2007* 960-963

Integrated memory circuits

Embedded TFT NAND-Type Nonvolatile Memory in Panel. *Chen, H.-T., +, EDL June 2007* 499-501

A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application. *Li, Y., +, EDL July 2007* 622-624

Integrated optoelectronics

High-Responsivity Photodetector in Standard SiGe BiCMOS Technology. *Lai, K.-S., +, EDL Sept. 2007* 800-802

Interconnections

Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007* 428-431

Interdigital transducers

SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures. *Shigekawa, N., +, EDL Feb. 2007* 90-92

Interface states

Electrical Characterization of ZrO_2/Si Interface Properties in MOSFETs With ZrO_2 Gate Dielectrics. *Liu, C.-H., +, EDL Jan. 2007* 62-64

Border-Trap Characterization in High- κ Strained-Si MOSFETs. *Maji, D., +, EDL Aug. 2007* 731-733

Detection of Border Trap Density and Energy Distribution Along the Gate Dielectric Bulk of High- κ Gated MOS Devices. *Lu, C.-Y., +, EDL May 2007* 432-435

Direct Measurement of Top and Sidewall Interface Trap Density in SOI FinFETs. *Kapila, G., +, EDL March 2007* 232-234

Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate. *Liu, J., +, EDL Jan. 2007* 11-13

Investigation of Carrier Transport in Germanium MOSFETs With $WN/Al_2O_3/AlN$ Gate Stacks. *Ritenour, A., +, EDL Aug. 2007* 746-749

Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007* 288-291

Inverters

CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOSFETs Fabricated Using Top-Down Approach. *Rustagi, S. C., +, EDL Nov. 2007* 1021-1024

Invertors

High-Temperature Operation of AlGaN/GaN HEMTs Direct-Coupled Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007* 328-331

A Dynamical Power-Management Demonstration Using Four-Terminal Separated-Gate FinFETs. *Endo, K., +, EDL May 2007* 452-454

Ion implantation

On the Control of Short-Channel Effect for MOSFETs With Reverse Halo Implantation. *Zhu, H., +, EDL Feb. 2007* 168-170

CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007* 831-833

Defect Passivation by Selenium-Ion Implantation for Poly-Si Thin Film Transistors. *Lai, J., +, EDL Aug. 2007* 725-727

Dual-Bit/Cell SONOS Flash EEPROMs: Impact of Channel Engineering on Programming Speed and Bit Coupling Effect. *Datta, A., +, EDL May 2007* 446-448

Fluorine Passivation in Gate Stacks of Poly-Si/TaN/HfO₂ (and HfSiON/HfO₂)/Si Through Gate Ion Implantation. *Zhang, M. H., +, EDL March 2007* 195-197

High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate. *Wu, C. H., +, EDL April 2007* 292-294

Impacts of Notched-Gate Structure on Contact Etch Stop Layer (CESL) Stressed 90-nm nMOSFET. *Lin, C.-T., +, EDL May 2007 376-378*
 Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks. *Kawahara, T., +, EDL Oct. 2007 868-870*

Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current. *Nomoto, K., +, EDL Nov. 2007 939-941*

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*

Iridium compounds

High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate. *Wu, C. H., +, EDL April 2007 292-294*

Iron

A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels. *Chang, C.-W., +, EDL Nov. 2007 993-995*

Isolation technology

Application of Plasma-Doping (PLAD) Technique to Reduce Dark Current of CMOS Image Sensors. *Moon, C.-R., +, EDL Feb. 2007 114-116*

A New Lateral-IGBT Structure With a Wider Safe Operating Area. *Bakeroot, B., +, EDL May 2007 416-418*

Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*

The Effect of Trapped Charge Distributions on Data Retention Characteristics of NAND Flash Memory Cells. *Park, M., +, EDL Aug. 2007 750-752*

J

Junction gate field effect transistors

1000-V 9.1-mΩ · cm² Normally Off 4H-SiC Lateral RESURF JFET for Power Integrated Circuit Applications. *Zhang, Y., +, EDL May 2007 404-407*

Pinch-Off Voltage-Adjustable High-Voltage Junction Field-Effect Transistor. *Liaw, C.-W., +, EDL Aug. 2007 737-739*

Junctions

Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells. *Carnel, L., +, EDL Oct. 2007 899-901*

1200-V 5.2-mΩ · cm² 4H-SiC BJTs With a High Common-Emitter Current Gain. *Lee, H.-S., +, EDL Nov. 2007 1007-1009*

Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With ControlEDL Ge Epitaxial Layer Thickness on Si Substrates. *Oh, J., +, EDL Nov. 2007 1044-1046*

Monolithically Integrated Logic NOR Gate Based on GaAs/AlGaAs Three-Terminal Junctions. *Muller, C. R., +, EDL Oct. 2007 859-861*

L

EDL displays

Flexible Full-Color AMOEDL on Ultrathin Metal Foil. *Jeong, J. K., +, EDL May 2007 389-391*

Laminates

High-κ Al₂O₃-HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikhelashvili, V., +, EDL Jan. 2007 24-26*

Lanthanum compounds

High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate. *Wu, C. H., +, EDL April 2007 292-294*

Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*

Laser beam annealing

Crystallization of Double-Layered Silicon Thin Films by Solid Green Laser Annealing for High-Performance Thin-Film Transistors. *Sugawara, Y., +, EDL May 2007 395-397*

Laser materials processing

Enhanced Hole Mobility and Reliability of Panel Epi-Like Silicon Transistors Using Backside Green Laser Activation. *Lin, Y.-T., +, EDL Sept. 2007 790-792*

Lasers

High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization. *Tsai, C.-C., +, EDL July 2007 599-602*

High-Performance Short-Channel Double-Gate Low-Temperature Poly-Silicon Thin-Film Transistors Using Excimer Laser Crystallization. *Tsai, C.-C., +, EDL Nov. 2007 1010-1013*

Layout

Active Pixel Concept Combined With Organic Photodiode for Imaging Devices. *Tedde, S., +, EDL Oct. 2007 893-895*

Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance. *Hsu, H.-M., +, EDL Nov. 2007 1029-1032*

Leakage current

A New Degradation Mechanism in High-Voltage SiC Power MOSFETs. *Agarwal, A., +, EDL July 2007 587-589*

High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric. *Yang, M.-J., +, EDL Oct. 2007 902-904*

Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate. *Hu, C.-M., +, EDL Nov. 2007 1000-1003*

Metal-Oxide-High-κ Dielectric–Oxide–Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications. *Hsu, H., +, EDL Nov. 2007 964-966*

NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. *Chen, J., +, EDL Oct. 2007 862-864*

The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure. *Xu, C., +, EDL Nov. 2007 942-944*

Leakage currents

Long Retention of Gain-Cell Dynamic Random Access Memory With Undoped Memory Node. *Nishiguchi, K., +, EDL Jan. 2007 48-50*

Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry. *Wang, Y., +, EDL April 2007 279-281*

Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO₂ Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

Effect of Gate Dopant Diffusion on Leakage Current in n⁺ Poly-Si/HfO₂ and Examination of Leakage Paths by Conducting Atomic Force Microscopy. *Yu, X., +, EDL May 2007 373-375*

Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*

Experimental Study of Data Retention in Nitride Memories by Temperature and Field Acceleration. *Compagnoni, C. M., +, EDL July 2007 628-630*

High Mobility Strained Ge pMOSFETs With High-κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007 825-827*

High-Temperature Leakage Improvement in Metal–Insulator–Metal Capacitors by Work–Function Tuning. *Chiang, K. C., +, EDL March 2007 235-237*

High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate. *Wu, C. H., +, EDL April 2007 292-294*

Impact of CF₄ Plasma Treatment on GaN. *Chu, R., +, EDL Sept. 2007 781-783*

Impact of High-κ Offset Spacer in 65-nm Node SOI Devices. *Ma, M.-W., +, EDL March 2007 238-241*

Impact of High-κ Gate Dielectrics on the Device and Circuit Performance of Nanoscale FinFETs. *Manoj, C. R., +, EDL April 2007 295-297*

Investigation and Localization of the SiGe Source/Drain (S/D) Strain-Induced Defects in PMOSFET With 45-nm CMOS Technology. *Cheng, C. Y., +, EDL May 2007 408-411*

P-Channel Germanium FinFET Based on Rapid Melt Growth. *Feng, J., +, EDL July 2007 637-639*

Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*

The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs. *Mao, L., EDL Feb. 2007 161-163*

Thickness Scaling and Reliability Comparison for the Inter-Poly High-κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*

Time-Domain-Reflectometry for Capacitance–Voltage Measurement With Very High Leakage Current. *Wang, Y., +, EDL Jan. 2007 51-53*

Life testing

Lifetime Extension of RF MEMS Direct Contact Switches in Hot Switching Operations by Ball Grid Array Dimple Design. *Chow, L. L. W., +, EDL June 2007 479-481*

Light absorption

High-Responsivity Photodetector in Standard SiGe BiCMOS Technology. *Lai, K.-S., +, EDL Sept. 2007 800-802*

Light emitting diodes

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*

- A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry. *Guo, X., +, EDL Oct. 2007 887-889*
- Electrical Compensation of OEDL Luminance Degradation. *Chaji, G. R., +, EDL Dec. 2007 1108-1110*
- Implementation of Side Effects in Thermal Characterization of RGB Full-Color EDLs. *Kim, L., +, EDL July 2007 578-580*
- Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes. *Shei, S.-C., +, EDL May 2007 346-349*
- Strong Efficiency Improvement of SOI-EDLs Through Carrier Confinement. *Hoang, T., +, EDL May 2007 383-385*
- Linearity**
- A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry. *Guo, X., +, EDL Oct. 2007 887-889*
- Lithography**
- High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization. *Tsai, C.-C., +, EDL July 2007 599-602*
- Logic circuits**
- High-Temperature Operation of AlGaN/GaN HEMTs Direct-Coupled EDL FET Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007 328-331*
- Logic gates**
- 1000-V 9.1-m Ω · cm 2 Normally Off 4H-SiC Lateral RESURF JFET for Power Integrated Circuit Applications. *Zhang, Y., +, EDL May 2007 404-407*
- 35-nm Zigzag T-Gate In_{0.52}Al_{0.48}As/In_{0.53}Ga_{0.47}As Metamorphic GaAs HEMTs With an Ultrahigh f_{max} of 520 GHz. *Lee, K.-S., +, EDL Aug. 2007 672-675*
- 50-nm T-Gate InAlAs/InGaAs Metamorphic HEMTs With Low Noise and High f_T Characteristics. *Lim, B. O., +, EDL July 2007 546-548*
- OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors. *Chen, J. F., +, EDL Nov. 2007 1033-1035*
- A New Degradation Mechanism in High-Voltage SiC Power MOSFETs. *Agarwal, A., +, EDL July 2007 587-589*
- A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor. *Na, K.-Y., +, EDL Nov. 2007 1047-1049*
- A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels. *Chang, C.-W., +, EDL Nov. 2007 993-995*
- A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry. *Guo, X., +, EDL Oct. 2007 887-889*
- Achieving Low- V_T Ni-FUSI CMOS by Ultra-Thin Dy₂O₃ Capping of Hafnium Silicate Dielectrics. *Veloso, A., +, EDL Nov. 2007 980-983*
- Active Pixel Concept Combined With Organic Photodiode for Imaging Devices. *Tedde, S., +, EDL Oct. 2007 893-895*
- Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic. *Cherenack, K. H., +, EDL Nov. 2007 1004-1006*
- CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOSFETs Fabricated Using Top-Down Approach. *Rustagi, S. C., +, EDL Nov. 2007 1021-1024*
- Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric. *Kim, T. H., +, EDL Oct. 2007 874-876*
- Demonstration of Low V_t Ni-FUSI N-MOSFETs With SiON Dielectrics by Using a Dy₂O₃ Cap Layer. *Yu, H. Y., +, EDL Nov. 2007 957-959*
- Demonstration of Metal-Gated Low V_t n-MOSFETs Using a Poly-Si/TaN/Dy₂O₃/SiON Gate Stack With a ScaEDL EOT Value. *Yu, H. Y., +, EDL July 2007 656-658*
- Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability. *Kattamis, A. Z., +, EDL July 2007 606-608*
- Effects of Sulfur Passivation on Germanium MOS Capacitors With HfO Gate Dielectric. *Xie, R., +, EDL Nov. 2007 976-979*
- High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization. *Tsai, C.-C., +, EDL July 2007 599-602*
- High-Performance Short-Channel Double-Gate Low-Temperature Polysilicon Thin-Film Transistors Using Excimer Laser Crystallization. *Tsai, C.-C., +, EDL Nov. 2007 1010-1013*
- High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric. *Yang, M.-J., +, EDL Oct. 2007 902-904*
- Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon (Si_{1-y}C_y) Source/Drain Stressors and Its Orientation Dependence. *Ang, K.-W., +, EDL Nov. 2007 996-999*
- Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With Control EDL Ge Epitaxial Layer Thickness on Si Substrates. *Oh, J., +, EDL Nov. 2007 1044-1046*
- Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs. *Sasa, S., +, EDL July 2007 543-545*
- Investigation of Carrier Transport in Germanium MOSFETs With WN/Al₂O₃/AlN Gate Stacks. *Ritenour, A., +, EDL Aug. 2007 746-749*
- Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications. *Chang, C. Y., +, EDL Oct. 2007 856-858*
- Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids. *Tsai, C.-T., +, EDL July 2007 584-586*
- Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET. *Rustagi, S. C., +, EDL Oct. 2007 909-912*
- Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs. *Wang, J.-S., +, EDL Nov. 2007 1040-1043*
- Monolithically Integrated Logic NOR Gate Based on GaAs/AlGaAs Three-Terminal Junctions. *Muller, C. R., +, EDL Oct. 2007 859-861*
- N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. *Liow, T.-Y., +, EDL Nov. 2007 1014-1017*
- NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. *Chen, J., +, EDL Oct. 2007 862-864*
- On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs. *Su, P., +, EDL July 2007 649-651*
- On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate. *Simoen, E., +, EDL Nov. 2007 987-989*
- On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs. *Simoen, E., +, EDL Oct. 2007 919-921*
- Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks. *Kawahara, T., +, EDL Oct. 2007 868-870*
- Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. *Park, S. K., +, EDL Oct. 2007 877-879*
- Solution-Processed n-Type Organic Field-Effect Transistors With High ON /OFF Current Ratios Based on Fullerene Derivatives. *Tiwari, S. P., +, EDL Oct. 2007 880-883*
- Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. *Ang, K.-W., +, EDL July 2007 609-612*
- Strained p-Channel FinFETs With Extended II-Shaped Silicon-Germanium Source and Drain Stressors. *Tan, K.-M., +, EDL Oct. 2007 905-908*
- Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric. *Xuan, Y., +, EDL Nov. 2007 935-938*
- The Origin of Electron Mobility Enhancement in Strained MOSFETs. *Hadjisavvas, G., +, EDL Nov. 2007 1018-1020*
- Trigate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach. *Zaman, R. J., +, EDL Oct. 2007 916-918*
- Low-power electronics**
- Source/Drain Extension Region Engineering in FinFETs for Low-Voltage Analog Applications. *Kranti, A., +, EDL Feb. 2007 139-141*
- 1000-V 9.1-m Ω · cm 2 Normally Off 4H-SiC Lateral RESURF JFET for Power Integrated Circuit Applications. *Zhang, Y., +, EDL May 2007 404-407*
- A Novel Dual-Doping Floating-Gate (DDFG) Flash Memory Featuring Low Power and High Reliability Application. *Li, Y., +, EDL July 2007 622-624*
- Cointegration of High-Performance Tied-Gate Three-Terminal FinFETs and Variable Threshold-Voltage Independent-Gate Four-Terminal FinFETs With Asymmetric Gate-Oxide Thicknesses. *Liu, Y., +, EDL June 2007 517-519*
- Sub-1-V Supply Self-Adaptive CMOS Image Sensor Cell With 86-dB Dynamic Range. *Lee, S., +, EDL June 2007 492-494*
- The Application of an Ultrathin ALD HfSiON Cap Layer on SiON Dielectrics for Ni-FUSI CMOS Technology Targeting at Low-Power Applications. *Chang, S. Z., +, EDL July 2007 634-636*
- Luminescent devices**
- Strong Efficiency Improvement of SOI-EDLs Through Carrier Confinement. *Hoang, T., +, EDL May 2007 383-385*

M**MHEMTs**

- 50-nm T-Gate InAlAs/InGaAs Metamorphic HEMTs With Low Noise and High f_T Characteristics. *Lim, B. O., +, EDL July 2007 546-548*
 35-nm Zigzag T-Gate $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ Metamorphic GaAs HEMTs With an Ultrahigh f_{\max} of 520 GHz. *Lee, K.-S., +, EDL Aug. 2007 672-675*

MIM devices

- High-Performance Metal–Insulator–Metal Capacitors Using Amorphous $\text{BaSm}_2\text{Ti}_4\text{O}_{12}$ Thin Film. *Jeong, Y. H., +, EDL Jan. 2007 17-20*
 Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material. *Song, Y., +, EDL Feb. 2007 107-110*
 High-Temperature Leakage Improvement in Metal–Insulator–Metal Capacitors by Work-Function Tuning. *Chiang, K. C., +, EDL March 2007 235-237*
 Improved High-Temperature Leakage in High-Density MIM Capacitors by Using a TiLaO Dielectric and an Ir Electrode. *Cheng, C. H., +, EDL Dec. 2007 1095-1097*
 Room-Temperature Deposited Titanium Silicate Thin Films for MIM Capacitor Applications. *Brassard, D., +, EDL April 2007 261-263*
 Use of a High-Work-Function Ni Electrode to Improve the Stress Reliability of Analog SrTiO_3 Metal–Insulator–Metal Capacitors. *Chiang, K. C., +, EDL Aug. 2007 694-696*

MIS devices

- Evaluation of RF Capacitance Extraction for Ultrathin Ultraleaky SOI MOS Devices. *Yu, C., +, EDL Jan. 2007 45-47*
 A Novel 700-V SOI LDMOS With Double-Sided Trench. *Luo, X., +, EDL May 2007 422-424*
 Duration of the High Breakdown Voltage Phase in Deep Depletion SOI LDMOS. *Napoli, E., EDL Aug. 2007 753-755*
 Embedded TFT NAND-Type Nonvolatile Memory in Panel. *Chen, H.-T., +, EDL June 2007 499-501*
 Study of the Erase Mechanism of MANOS (Metal/ $\text{Al}_2\text{O}_3/\text{SiN/SiO}_2/\text{Si}$) Device. *Lai, S., +, EDL July 2007 643-645*
 Wide V_{fb} and V_{th} Tunability for Metal-Gated MOS Devices With HfLaO Gate Dielectrics. *Wang, X. P., +, EDL April 2007 258-260*

MIS structures

- A Graphene Field-Effect Device. *Lemme, M. C., +, EDL April 2007 282-284*
 Role of Nitrogen Atoms in Reduction of Electron Charge Traps in Hf-Based High- κ Dielectrics. *Umezawa, N., +, EDL May 2007 363-365*

MISFET

- High Transconductance MISFET With a Single InAs Nanowire Channel. *Do, Q.-T., +, EDL Aug. 2007 682-684*

MMIC

- Fabrication of 0.15- μm I-Shaped Gate $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.6}\text{Ga}_{0.4}\text{As}$ Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007 93-95*

MOCVD

- Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO₂ Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

- Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

- Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*

MODFETs

- 50-nm T-Gate InAlAs/InGaAs Metamorphic HEMTs With Low Noise and High f_T Characteristics. *Lim, B. O., +, EDL July 2007 546-548*

- 35-nm Zigzag T-Gate $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ Metamorphic GaAs HEMTs With an Ultrahigh f_{\max} of 520 GHz. *Lee, K.-S., +, EDL Aug. 2007 672-675*

- A Planar Gunn Diode Operating Above 100 GHz. *Khalid, A., +, EDL Oct. 2007 849-851*

- Comparison of GaN HEMTs on Diamond and SiC Substrates. *Felbinger, J. G., +, EDL Nov. 2007 948-950*

- Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz. *Poblenz, C., +, EDL Nov. 2007 945-947*

- Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current. *Nomoto, K., +, EDL Nov. 2007 939-941*

MOS analogue integrated circuits

- Source/Drain Extension Region Engineering in FinFETs for Low-Voltage Analog Applications. *Kranti, A., +, EDL Feb. 2007 139-141*

MOS capacitors

- Time-Domain-Reflectometry for Capacitance–Voltage Measurement With Very High Leakage Current. *Wang, Y., +, EDL Jan. 2007 51-53*
 A Novel Latch-Up Protection for Bulk-Silicon Scan Driver ICs of Shadow-Mask Plasma-Display Panel. *Sun, W., +, EDL Dec. 2007 1135-1137*
 Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*
 Effect of Gate Dopant Diffusion on Leakage Current in n⁺ Poly-Si/HfO₂ and Examination of Leakage Paths by Conducting Atomic Force Microscopy. *Yu, X., +, EDL May 2007 373-375*
 Electrical Characterization of Leaky Charge-Trapping High- κ MOS Devices Using Pulsed $Q-V$. *Martens, K., +, EDL May 2007 436-439*
 Error and Correction in Capacitance–Voltage Measurement Due to the Presence of Source and Drain. *Wang, Y., +, EDL July 2007 640-642*

MOS devices

- Achieving Low- V_T Ni-FUSI CMOS by Ultra-Thin Dy₂O₃ Capping of Hafnium Silicate Dielectrics. *Veloso, A., +, EDL Nov. 2007 980-983*

MOS integrated circuits

- Duration of the High Breakdown Voltage Phase in Deep Depletion SOI LDMOS. *Napoli, E., EDL Aug. 2007 753-755*

MOSFET

- Improved Reliability by Reduction of Hot-Electron Damage in the Vertical Impact-Ionization MOSFET (I-MOS). *Abelein, U., +, EDL Jan. 2007 65-67*

MOSFET circuits

- Source/Drain Extension Region Engineering in FinFETs for Low-Voltage Analog Applications. *Kranti, A., +, EDL Feb. 2007 139-141*

- Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET. *Han, J.-W., +, EDL July 2007 625-627*

- Demonstration of Low V_t Ni-FUSI N-MOSFETs With SiON Dielectrics by Using a Dy₂O₃ Cap Layer. *Yu, H. Y., +, EDL Nov. 2007 957-959*

- Demonstration of Metal-Gated Low V_t n-MOSFETs Using a Poly-Si/TaN/Dy₂O₃/SiON Gate Stack With a ScaEDL EOT Value. *Yu, H. Y., +, EDL July 2007 656-658*

- Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET. *Rustagi, S. C., +, EDL Oct. 2007 909-912*

- On the Apparent Mobility in Nanometric n-MOSFETs. *Zilli, M., +, EDL Nov. 2007 1036-1039*

- On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs. *Su, P., +, EDL July 2007 649-651*

- Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric. *Xuan, Y., +, EDL Nov. 2007 935-938*

- 1- μm Enhancement Mode GaAs N-Channel MOSFETs With Transconductance Exceeding 250 mS/mm. *Rajagopalan, K., +, EDL Feb. 2007 100-102*

- A Constant-Mobility Method to Enable MOSFET Series-Resistance Extraction. *Lin, D.-W., +, EDL Dec. 2007 1132-1134*

- A Graphene Field-Effect Device. *Lemme, M. C., +, EDL April 2007 282-284*

- A High-Performance Body-Tied FinFET Bandgap Engineered SONOS (BE-SONOS) for NAND-Type Flash Memory. *Hsu, T.-H., +, EDL May 2007 443-445*

- A Novel Approach in Separating the Roles of Electrons and Holes in Causing Degradation in Hf-Based MOSFET Devices By Using Stress-Anneal Technique. *Akbar, M. S., +, EDL Feb. 2007 132-134*

- Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*

- Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*

- Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors. *Severi, S., +, EDL March 2007 198-200*

- Border-Trap Characterization in High- κ Strained-Si MOSFETs. *Maji, D., +, EDL Aug. 2007 731-733*

- CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007 831-833*

- Characteristics of Ni/Gd FUSI for NMOS Gate Electrode Applications. *Lee, B., +, EDL July 2007 555-557*

- Charge Trapping and TDDB Characteristics of Ultrathin MOCVD HfO₂ Gate Dielectric on Nitrided Germanium. *Bai, W., +, EDL May 2007 369-372*

- Cointegration of High-Performance Tied-Gate Three-Terminal FinFETs and Variable Threshold-Voltage Independent-Gate Four-Terminal FinFETs With Asymmetric Gate-Oxide Thicknesses. *Liu, Y., +, EDL June 2007 517-519*

- Comparison of On-The-Fly, DC I_d-V_g , and Single-Pulse Methods for Evaluating Threshold Voltage Instability in High- κ nMOSFETs. *Heh, D., +, EDL March 2007 245-247*
- Correction to "Revision of Tunneling Field-Effect Transistor in Standard CMOS Technologies". *Nirschl, Th., +, EDL April 2007 315-315*
- Demonstration of Asymmetric Gate-Oxide Thickness Four-Terminal Fin-FETs Having Flexible Threshold Voltage and Good Subthreshold Slope. *Masahara, M., +, EDL March 2007 217-219*
- Detection of Border Trap Density and Energy Distribution Along the Gate Dielectric Bulk of High- κ Gated MOS Devices. *Lu, C.-Y., +, EDL May 2007 432-435*
- Direct Measurement of Top and Sidewall Interface Trap Density in SOI Fin-FETs. *Kapila, G., +, EDL March 2007 232-234*
- Effect of F₂ Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric. *Chang, M., +, EDL Jan. 2007 21-23*
- Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics. *Yen, F. Y., +, EDL March 2007 201-203*
- Effects of Measurement Temperature on NBTI. *Zhang, J. F., +, EDL April 2007 298-300*
- Electrical Characterization of ZrO₂/Si Interface Properties in MOSFETs With ZrO₂ Gate Dielectrics. *Liu, C.-H., +, EDL Jan. 2007 62-64*
- Electrical Characterization of Leaky Charge-Trapping High- κ MOS Devices Using Pulsed Q-V. *Martens, K., +, EDL May 2007 436-439*
- Electrical Properties of nMOSFETs Using the NiSi:Yb FUSI Electrode. *Yu, H. Y., +, EDL Feb. 2007 154-156*
- Electron Transport in Strained-Silicon Directly on Insulator Ultrathin-Body n-MOSFETs With Body Thickness Ranging From 2 to 25 nm. *Gomez, L., +, EDL April 2007 285-287*
- Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. *Ang, K.-W., +, EDL April 2007 301-304*
- Enhancement-Mode GaAs MOSFETs With an In_{0.3}Ga_{0.7}As Channel, a Mobility of Over 5000 cm²/V · s, and Transconductance of Over 475 μ S/ μ m. *Hill, R. J. W., +, EDL Dec. 2007 1080-1082*
- Evaluation of RF Capacitance Extraction for Ultrathin Ultraleaky SOI MOS Devices. *Yu, C., +, EDL Jan. 2007 45-47*
- Experimental Evaluation of Effects of Channel Doping on Characteristics of FinFETs. *Endo, K., +, EDL Dec. 2007 1123-1125*
- Experimental and TCAD Investigation of the Two Components of the Impact Ionization MOSFET (IMOS) Switching. *Mayer, F., +, EDL July 2007 619-621*
- Extraction of π -Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. *Kang, I. M., +, EDL May 2007 425-427*
- Extraction of the Threshold-Voltage Shift by the Single-Pulse Technique. *Heh, D., +, EDL Aug. 2007 734-736*
- Flicker Noise and Its Degradation Characteristics Under Electrical Stress in MOSFETs With Thin Strained-Si/SiGe Dual-Quantum Well. *Jiang, Y., +, EDL July 2007 603-605*
- Fluorine Passivation in Gate Stacks of Poly-Si/TaN/HfO₂ (and HfSiON/HfO₂)/Si Through Gate Ion Implantation. *Zhang, M. H., +, EDL March 2007 195-197*
- Frequency Variation of the Small-Signal Output Conductance of Decanometer MOSFETs Due to Substrate Crosstalk. *Kilchytska, V., +, EDL May 2007 419-421*
- Gate Voltage Dependence of MOSFET 1/f Noise Statistics. *Erturk, M., +, EDL Sept. 2007 812-814*
- Gate Workfunction Engineering in Bulk FinFETs for Sub-50-nm DRAM Cell Transistors. *Park, K.-H., +, EDL Feb. 2007 148-150*
- HfLaON n-MOSFETs Using a Low Work Function HfSi_x Gate. *Cheng, C. F., +, EDL Dec. 2007 1092-1094*
- High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007 825-827*
- High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate. *Wu, C. H., +, EDL April 2007 292-294*
- Impact of High- κ Gate Dielectrics on the Device and Circuit Performance of Nanoscale FinFETs. *Manoj, C. R., +, EDL April 2007 295-297*
- Impact of Parameter Variations and Random Dopant Fluctuations on Short-Channel Fully Depleted SOI MOSFETs With Extremely Thin BOX. *Ohtou, T., +, EDL Aug. 2007 740-742*
- Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate. *Liu, J., +, EDL Jan. 2007 11-13*
- Impacts of Notched-Gate Structure on Contact Etch Stop Layer (CESL) Stressed 90-nm nMOSFET. *Lin, C.-T., +, EDL May 2007 376-378*
- Improved Carrier Injection in Ultrathin-Body SOI Schottky-Barrier MOSFETs. *Zhang, M., +, EDL March 2007 223-225*
- Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007 308-311*
- Investigation and Localization of the SiGe Source/Drain (S/D) Strain-Induced Defects in PMOSFET With 45-nm CMOS Technology. *Cheng, C. Y., +, EDL May 2007 408-411*
- Long Retention of Gain-Cell Dynamic Random Access Memory With Undoped Memory Node. *Nishiguchi, K., +, EDL Jan. 2007 48-50*
- Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/ HfO₂ Gate Stack. *Guo, W., +, EDL April 2007 288-291*
- Low-Frequency Noise Characteristics in Strained-Si nMOSFETs. *Wang, Y. P., +, EDL Jan. 2007 36-38*
- Measurement of Channel Stress Using Gate Direct Tunneling Current in Uniaxially Stressed nMOSFETs. *Hsieh, C.-Y., +, EDL Sept. 2007 818-820*
- N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide. *Lee, R. T. P., +, EDL Feb. 2007 164-167*
- New Insights on "Capacitorless" Floating-Body DRAM Cells. *Fossum, J. G., +, EDL June 2007 513-516*
- Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*
- Novel Approach to Reduce Source/Drain Series and Contact Resistance in High-Performance UTSOI CMOS Devices Using Selective Electrodeless CoWP or CoB Process. *Pan, J., +, EDL Aug. 2007 691-693*
- Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures. *Singh, N., +, EDL July 2007 558-561*
- On the Control of Short-Channel Effect for MOSFETs With Reverse Halo Implantation. *Zhu, H., +, EDL Feb. 2007 168-170*
- P-Channel Germanium FinFET Based on Rapid Melt Growth. *Feng, J., +, EDL July 2007 637-639*
- PMOSFET Reliability Study for Direct Silicon Bond (DSB) Hybrid Orientation Technology (HOT). *Huang, Y.-T., +, EDL Sept. 2007 815-817*
- Parasitic Bipolar Junction Transistors in a Floating-Gate MOSFET for Fluorescence Detection. *Shin, K.-S., +, EDL July 2007 581-583*
- Piezoresistance Coefficients of (100) Silicon nMOSFETs Measured at Low and High (\sim 1.5 GPa) Channel Stress. *Suthram, S., +, EDL Jan. 2007 58-61*
- Pinch-Off Voltage-Adjustable High-Voltage Junction Field-Effect Transistor. *Liaw, C.-W., +, EDL Aug. 2007 737-739*
- Role of Nitrogen Atoms in Reduction of Electron Charge Traps in Hf-Based High- κ Dielectrics. *Umezawa, N., +, EDL May 2007 363-365*
- Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET. *Adivarahan, V., +, EDL March 2007 192-194*
- Short-Channel Effects in Independent-Gate FinFETs. *Lu, Z., +, EDL Feb. 2007 145-147*
- Strained-Si Channel Super-Self-Aligned Back-Gate/Double-Gate Planar Transistors. *Lin, H., +, EDL June 2007 506-508*
- Stress Hybridization for Multigate Devices Fabricated on Supercritical Strained-SOI (SC-SSOI). *Collaert, N., +, EDL July 2007 646-648*
- Substrate Bias Effect Linked to Parasitic Series Resistance in Multiple-Gate SOI MOSFETs. *Rudenko, T., +, EDL Sept. 2007 834-836*
- Temperature-Oriented Experiment and Simulation as Corroborating Evidence of MOSFET Backscattering Theory. *Chen, M.-J., +, EDL Feb. 2007 177-179*
- The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs. *Mao, L., EDL Feb. 2007 161-163*
- The Investigation of Post-Annealing-Induced Defects Behavior on 90-nm In Halo nMOSFETs With Low-Frequency Noise and Charge-Pumping Measuring. *Lai, C.-M., +, EDL Feb. 2007 142-144*
- Threshold Voltage Shift Due to Mechanical Stress-Enhanced Plasma Process-Induced Damage in 0.13- μ m pMOSFET. *Li, R., +, EDL May 2007 360-362*
- Valence Band Offset Measurements on Thin Silicon-on-Insulator MOSFETs. *van der Steen, J.-L. P. J., +, EDL Sept. 2007 821-824*
- Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. *Fang, W. W., +, EDL March 2007 211-213*
- Yttrium- and Terbium-Based Interlayer on SiO₂ and HfO₂ Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. *Lim, A. E.-J., +, EDL June 2007 482-485*

MOSFETs

A New Degradation Mechanism in High-Voltage SiC Power MOSFETs. *Agarwal, A., +, EDL July 2007 587-589*

Demonstration of Low V_t Ni-FUSI N-MOSFETs With SiON Dielectrics by Using a Dy_2O_3 Cap Layer. *Yu, H. Y., +, EDL Nov. 2007 957-959*

Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With ControlEDL Ge Epitaxial Layer Thickness on Si Substrates. *Oh, J., +, EDL Nov. 2007 1044-1046*

Investigation of Carrier Transport in Germanium MOSFETs With WN/ Al_2O_3 /AlN Gate Stacks. *Ritenour, A., +, EDL Aug. 2007 746-749*

Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs. *Wang, J.-S., +, EDL Nov. 2007 1040-1043*

On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs. *Su, P., +, EDL July 2007 649-651*

On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate. *Simoen, E., +, EDL Nov. 2007 987-989*

On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs. *Simoen, E., +, EDL Oct. 2007 919-921*

The Origin of Electron Mobility Enhancement in Strained MOSFETs. *Hadjisavvas, G., +, EDL Nov. 2007 1018-1020*

Magnetoresistance

On the Apparent Mobility in Nanometric n-MOSFETs. *Zilli, M., +, EDL Nov. 2007 1036-1039*

Manufacturing

Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs. *Wang, J.-S., +, EDL Nov. 2007 1040-1043*

Masks

A Novel Low-Temperature Polysilicon Thin-Film Transistors With a Self-Aligned Gate and Raised Source/Drain Formed by the Damascene Process. *Chang, K. M., +, EDL Sept. 2007 806-808*

Materials

Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices. *Guo, P., +, EDL July 2007 572-574*

A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device. *Lin, H.-T., +, EDL Nov. 2007 951-953*

Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays. *Mantegazza, D., +, EDL Oct. 2007 865-867*

Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure. *Chao, D.-S., +, EDL Oct. 2007 871-873*

Solution-Processed n-Type Organic Field-Effect Transistors With High ON/OFF Current Ratios Based on Fullerene Derivatives. *Tiwari, S. P., +, EDL Oct. 2007 880-883*

Mathematical model

Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET. *Rustagi, S. C., +, EDL Oct. 2007 909-912*

On the Apparent Mobility in Nanometric n-MOSFETs. *Zilli, M., +, EDL Nov. 2007 1036-1039*

Medical image processing

On-Pixel Voltage-ControlEDL Oscillator in Amorphous-Silicon Technology for Digital Imaging Applications. *Sanaie, G., +, EDL Jan. 2007 33-35*

Memory architecture

A High-Performance Body-Tied FinFET Bandgap Engineered SONOS (BE-SONOS) for NAND-Type Flash Memory. *Hsu, T.-H., +, EDL May 2007 443-445*

Vertical Flash Memory Cell With Nanocrystal Floating Gate for Ultradense Integration and Good Retention. *Sarkar, J., +, EDL May 2007 449-451*

Memory management

A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device. *Lin, H.-T., +, EDL Nov. 2007 951-953*

Mercury compounds

HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007 42-44*

Metal gates

The Effect of an Yttrium Interlayer on a Ni Germanided Metal Gate Work-function in SiO_2/HfO_2 . *Yu, H. P., +, EDL Dec. 2007 1098-1101*

Metal-semiconductor-metal structures

AlGaN Photodetectors Prepared on Si Substrates. *Chiou, Y. Z., +, EDL April 2007 264-266*

Amorphous-SiCBN-Based Metal–Semiconductor–Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007 713-715*

Metallisation

Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*

Metals

Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices. *Guo, P., +, EDL July 2007 572-574*

Achieving Low- V_T Ni-FUSI CMOS by Ultra-Thin Dy_2O_3 Capping of Hafnium Silicate Dielectrics. *Veloso, A., +, EDL Nov. 2007 980-983*

Demonstration of Metal-Gated Low V_T n-MOSFETs Using a Poly-Si/TaN/ Dy_2O_3 /SiON Gate Stack With a ScaEDL EOT Value. *Yu, H. Y., +, EDL July 2007 656-658*

Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance. *Hsu, H.-M., +, EDL Nov. 2007 1029-1032*

Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors. *Huang, F., +, EDL Nov. 2007 1025-1028*

NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. *Chen, J., +, EDL Oct. 2007 862-864*

Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks. *Kawahara, T., +, EDL Oct. 2007 868-870*

The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure. *Xu, C., +, EDL Nov. 2007 942-944*

Micromachining

CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q-Factors. *Zine-El-Abidine, I., +, EDL March 2007 226-228*

Microprocessor chips

Electromigration Resistant Power Delivery Systems. *Sekar, D. C., +, EDL Aug. 2007 767-769*

Microstrip circuits

A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J., +, EDL May 2007 340-342*

Microswitches

Lifetime Extension of RF MEMS Direct Contact Switches in Hot Switching Operations by Ball Grid Array Dimple Design. *Chow, L. L. W., +, EDL June 2007 479-481*

Microwave devices

RF-Enhanced Contacts to Wide-Bandgap Devices. *Simin, G., +, EDL Jan. 2007 2-4*

Microwave field effect transistors

RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*

Microwave measurement

RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*

Microwave switches

Lifetime Extension of RF MEMS Direct Contact Switches in Hot Switching Operations by Ball Grid Array Dimple Design. *Chow, L. L. W., +, EDL June 2007 479-481*

Millimetre wave antenna arrays

100-GHz Quasi-Yagi Antenna in Silicon Technology. *Sun, M., +, EDL May 2007 455-457*

Millimetre wave detectors

Temperature Dependence of High Frequency and Noise Performance of Sb-Heterostructure Millimeter-Wave Detectors. *Su, N., +, EDL May 2007 336-339*

Millimetre wave devices

Lifetime Extension of RF MEMS Direct Contact Switches in Hot Switching Operations by Ball Grid Array Dimple Design. *Chow, L. L. W., +, EDL June 2007 479-481*

Millimetre wave field effect transistors

Extraction of π -Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. *Kang, I. M., +, EDL May 2007 425-427*

Millimetre wave filters

Millimeter-Wave Bandpass Filters by Standard 0.18- μm CMOS Technology. *Sun, S., +, EDL March 2007 220-222*

Mixers

Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. *Koskenvuori, M., +, EDL Nov. 2007 970-972*

Modulation

Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. *Koskenvuo, M., +, EDL Nov. 2007 970-972*

Modulators

Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S., +, EDL Jan. 2007 30-32*

Molecular beam epitaxial growth

InGaAsSb/InP Double Heterojunction Bipolar Transistors Grown by Solid-Source Molecular Beam Epitaxy. *Chen, S.-H., +, EDL Aug. 2007 679-681*

Monte Carlo methods

Temperature-Oriented Experiment and Simulation as Corroborating Evidence of MOSFET Backscattering Theory. *Chen, M.-J., +, EDL Feb. 2007 177-179*

Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs. *Sadi, T., +, EDL Sept. 2007 787-789*

Injected Current and Quantum Transmission Coefficient in Low Schottky Barriers: WKB and Airy Approaches. *Rengel, R., +, EDL Feb. 2007 171-173*

On the Apparent Mobility in Nanometric n-MOSFETs. *Zilli, M., +, EDL Nov. 2007 1036-1039*

Predicting Thermal Neutron-Induced Soft Errors in Static Memories Using TCAD and Physics-Based Monte Carlo Simulation Tools. *Warren, K. M., +, EDL Feb. 2007 180-182*

N**NAND circuits**

A High-Performance Body-Tied FinFET Bandgap Engineered SONOS (BE-SONOS) for NAND-Type Flash Memory. *Hsu, T.-H., +, EDL May 2007 443-445*

Embedded TFT NAND-Type Nonvolatile Memory in Panel. *Chen, H.-T., +, EDL June 2007 499-501*

The Effect of Trapped Charge Distributions on Data Retention Characteristics of NAND Flash Memory Cells. *Park, M., +, EDL Aug. 2007 750-752*

Nanoelectronics

Temperature-Oriented Experiment and Simulation as Corroborating Evidence of MOSFET Backscattering Theory. *Chen, M.-J., +, EDL Feb. 2007 177-179*

A $0.26\text{-}\mu\text{m}^2$ U-Shaped Nitride-Based Programming Cell on Pure 90-nm CMOS Technology. *Lai, H.-C., +, EDL Sept. 2007 837-839*

Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007 428-431*

Electron Transport in Strained-Silicon Directly on Insulator Ultrathin-Body n-MOSFETs With Body Thickness Ranging From 2 to 25 nm. *Gomez, L., +, EDL April 2007 285-287*

Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. *Ang, K.-W., +, EDL April 2007 301-304*

Fermi-Level Pinning in Nanocrystal Memories. *Hou, T.-H., +, EDL Feb. 2007 103-106*

Impact of High- k Gate Dielectrics on the Device and Circuit Performance of Nanoscale FinFETs. *Manoj, C. R., +, EDL April 2007 295-297*

N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide. *Lee, R. T. P., +, EDL Feb. 2007 164-167*

The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs. *Mao, L., EDL Feb. 2007 161-163*

Nanoparticles

Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material. *Song, Y., +, EDL Feb. 2007 107-110*

A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device. *Lin, H.-T., +, EDL Nov. 2007 951-953*

Nanostructured materials

HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007 42-44*

Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007 793-796*

Fermi-Level Pinning in Nanocrystal Memories. *Hou, T.-H., +, EDL Feb. 2007 103-106*

Giant Random Telegraph Signals in Nanoscale Floating-Gate Devices. *Fantini, P., +, EDL Dec. 2007 1114-1116*

High- κ Al₂O₃-HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikhelashvili, V., +, EDL Jan. 2007 24-26*

Temperature-Dependent Characteristics of Cylindrical Gate-All-Around Twin Silicon Nanowire MOSFETs (TSNWFETs). *Cho, K. H., +, EDL Dec. 2007 1129-1131*

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*

Nanotechnology

Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007 793-796*

Nanotube devices

An Efficient Macromodeling Approach for Simulating Carbon-Nanotube Field-Emission Triode Devices in Display Applications. *Guo, X., +, EDL Aug. 2007 710-712*

Nanowires

Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. *Fang, W. W., +, EDL March 2007 211-213*

A Novel Nanowire Channel Poly-Si TFT Functioning as Transistor and Non-volatile SONOS Memory. *Chen, S.-C., +, EDL Sept. 2007 809-811*

Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007 428-431*

High Transconductance MISFET With a Single InAs Nanowire Channel. *Do, Q.-T., +, EDL Aug. 2007 682-684*

Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures. *Singh, N., +, EDL July 2007 558-561*

Neutron effects

Predicting Thermal Neutron-Induced Soft Errors in Static Memories Using TCAD and Physics-Based Monte Carlo Simulation Tools. *Warren, K. M., +, EDL Feb. 2007 180-182*

Nickel

High-Temperature Leakage Improvement in Metal-Insulator-Metal Capacitors by Work-Function Tuning. *Chiang, K. C., +, EDL March 2007 235-237*

Nickel alloys

Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate. *Liu, J., +, EDL Jan. 2007 11-13*

Nickel compounds

A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007 111-113*

Electrical Properties of nMOSFETs Using the NiSi:Yb FUSI Electrode. *Yu, H. Y., +, EDL Feb. 2007 154-156*

Improved Carrier Injection in Ultrathin-Body SOI Schottky-Barrier MOSFETs. *Zhang, M., +, EDL March 2007 223-225*

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Preformed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*

Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. *Wong, H.-S., +, EDL Aug. 2007 703-705*

Yttrium- and Terbium-Based Interlayer on SiO₂ and HfO₂ Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. *Lim, A. E.-J., +, EDL June 2007 482-485*

Achieving Low- V_T Ni-FUSI CMOS by Ultra-Thin Dy₂O₃ Capping of Hafnium Silicate Dielectrics. *Veloso, A., +, EDL Nov. 2007 980-983*

CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007 831-833*

Characteristics of Ni/Gd FUSI for NMOS Gate Electrode Applications. *Lee, B., +, EDL July 2007 555-557*

Demonstration of Low- V_T Ni-FUSI N-MOSFETs With SiON Dielectrics by Using a Dy₂O₃ Cap Layer. *Yu, H. Y., +, EDL Nov. 2007 957-959*

Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007 793-796*

Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation. *Chang, C.-P., +, EDL Nov. 2007 990-992*

Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate. *Hu, C.-M., +, EDL Nov. 2007 1000-1003*

The Effect of an Yttrium Interlayer on a Ni Germanided Metal Gate Work-function in SiO₂/HfO₂. *Yu, H. P., +, EDL Dec. 2007 1098-1101*

Use of a High-Work-Function Ni Electrode to Improve the Stress Reliability of Analog SrTiO₃ Metal-Insulator-Metal Capacitors. *Chiang, K. C., +, EDL Aug. 2007 694-696*

Nitridation

Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics. *Yen, F. Y., +, EDL March 2007 201-203*

- Achieving Conduction Band-Edge Effective Work Functions by La_2O_3 Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*
 Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*
 Nitrogen Incorporation in $\text{HfSiO}(\text{N})/\text{TaN}$ Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*

Nitrogen

- Nitrogen Incorporation in $\text{HfSiO}(\text{N})/\text{TaN}$ Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*
 Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*

Noise measurement

- 50-nm T-Gate InAlAs/InGaAs Metamorphic HEMTs With Low Noise and High f_T Characteristics. *Lim, B. O., +, EDL July 2007 546-548*
 A Phase Change Memory Compact Model for Multilevel Applications. *Venrice, D., +, EDL Nov. 2007 973-975*
 A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique. *Park, D., +, EDL Oct. 2007 890-892*
 Giant Random Telegraph Signals in Nanoscale Floating-Gate Devices. *Fantini, P., +, EDL Dec. 2007 1114-1116*
 On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate. *Simoen, E., +, EDL Nov. 2007 987-989*
 On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs. *Simoen, E., +, EDL Oct. 2007 919-921*

Nondestructive testing

- Duration of the High Breakdown Voltage Phase in Deep Depletion SOI LDMOS. *Napoli, E., EDL Aug. 2007 753-755*

Nonvolatile memory

- Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices. *Guo, P., +, EDL July 2007 572-574*
 A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device. *Lin, H.-T., +, EDL Nov. 2007 951-953*
 A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor. *Na, K.-Y., +, EDL Nov. 2007 1047-1049*
 A Program-Erasable High- κ $\text{Hf}_{0.3}\text{N}_{0.2}\text{O}_{0.5}$ MIS Capacitor With Good Retention. *Yang, H. J., +, EDL Oct. 2007 913-915*

Numerical models

- On the Apparent Mobility in Nanometric n-MOSFETs. *Zilli, M., +, EDL Nov. 2007 1036-1039*

O**OFETs**

- Solution-Processed n-Type Organic Field-Effect Transistors With High ON /OFF Current Ratios Based on Fullerene Derivatives. *Tiwari, S. P., +, EDL Oct. 2007 880-883*

Ohmic contacts

- RF-Enhanced Contacts to Wide-Bandgap Devices. *Simin, G., +, EDL Jan. 2007 2-4*
 SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures. *Shigekawa, N., +, EDL Feb. 2007 90-92*

Optical device fabrication

- GaN-Based High-Q Vertical-Cavity Light-Emitting Diodes. *Lu, T.-C., +, EDL Oct. 2007 884-886*

Optical microscopes

- Direct Monitoring of RF Overstress in High-Power Transistors and Amplifiers. *Stopel, A., +, EDL May 2007 357-359*

Optical reflection

- GaN-Based High-Q Vertical-Cavity Light-Emitting Diodes. *Lu, T.-C., +, EDL Oct. 2007 884-886*

Optimization

- Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures. *Marshall, J. C., +, EDL Nov. 2007 960-963*

Organic compounds

- Performance Improvement of Organic Thin-Film Transistors by Electrode/Pentacene Interface Treatment Using a Hydrogen Plasma. *Lee, J.-W., +, EDL May 2007 379-382*
 Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007 793-796*

Organic light emitting diodes

- A Novel LTPS-TFT Pixel Circuit Compensating for TFT Threshold-Voltage Shift and OEDL Degradation for AMOEDL. *Lin, C.-L., +, EDL Feb. 2007 129-131*
 A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuity. *Guo, X., +, EDL Oct. 2007 887-889*

Organic semiconductors

- Admittance Measurements on OFET Channel and Its Modeling With $R-C$ Network. *Jung, K.-D., +, EDL March 2007 204-206*

Organic thin film transistors

- Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric. *Kim, T. H., +, EDL Oct. 2007 874-876*
 Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. *Park, S. K., +, EDL Oct. 2007 877-879*

Oscillators

- High-Temperature Operation of AlGaN/GaN HEMTs Direct-CoupEDL FET Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007 328-331*
 A Planar Gunn Diode Operating Above 100 GHz. *Khalid, A., +, EDL Oct. 2007 849-851*
 Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. *Koskenvuori, M., +, EDL Nov. 2007 970-972*
 Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. *Park, S. K., +, EDL Oct. 2007 877-879*

Oxidation

- Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. *Fang, W. W., +, EDL March 2007 211-213*
 1200-V 5.2-m $\Omega \cdot \text{cm}^2$ 4H-SiC BJTs With a High Common-Emitter Current Gain. *Lee, H.-S., +, EDL Nov. 2007 1007-1009*
 Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*
 Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/ HfO_2 Gate Stack. *Guo, W., +, EDL April 2007 288-291*

P**P-i-n photodiodes**

- High-Speed InGaP/GaAs p-i-n Photodiodes With Wide Spectral Range. *Wu, M.-C., +, EDL Sept. 2007 797-799*

P-n junctions

- Schottky-Barrier Height Lowering by an Increase of the Substrate Doping in PtSi Schottky Barrier Source/Drain FETs. *Lousberg, G. P., +, EDL Feb. 2007 123-125*
 A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007 312-314*
 Effects of Oxide-Fixed Charge on the Breakdown Voltage of Superjunction Devices. *Balaji, S., +, EDL March 2007 229-231*

Passivation

- A High Schottky-Barrier of 1.1 eV Between Al and S-Passivated p-Type Si(100) Surface. *Song, G., +, EDL Jan. 2007 71-73*
 1200-V 5.2-m $\Omega \cdot \text{cm}^2$ 4H-SiC BJTs With a High Common-Emitter Current Gain. *Lee, H.-S., +, EDL Nov. 2007 1007-1009*
 Effects of Sulfur Passivation on Germanium MOS Capacitors With HfON Gate Dielectric. *Xie, R., +, EDL Nov. 2007 976-979*
 Fluorine Passivation in Gate Stacks of Poly-Si/TaN/ HfO_2 (and HfSiON/ HfO_2)/Si Through Gate Ion Implantation. *Zhang, M. H., +, EDL March 2007 195-197*
 Impact of Channel Dangling Bonds on Reliability Characteristics of Flash Memory on Poly-Si Thin Films. *Lin, Y.-H., +, EDL April 2007 267-269*
 Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007 308-311*
 Improving the Performance of SiGe Metal-Semiconductor-Metal Photodetectors by Using an Amorphous Silicon Passivation Layer. *Chen, Y. H., +, EDL Dec. 2007 1111-1113*
 Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/ HfO_2 Gate Stack. *Guo, W., +, EDL April 2007 288-291*
 Passivation Effects of Aluminum on Polycrystalline Silicon Thin-Film Transistor With Metal-Replaced Junctions. *Zhang, D., +, EDL Feb. 2007 126-128*

Pentacene

Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric. *Kim, T. H., +, EDL Oct. 2007* 874-876
 Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. *Park, S. K., +, EDL Oct. 2007* 877-879

Percolation

Limits of Performance Gain of Aligned CNT Over Randomized Network: Theoretical Predictions and Experimental Validation. *Pimparkar, N., +, EDL July 2007* 593-595

Performance evaluation

Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. *Ang, K.-W., +, EDL July 2007* 609-612

High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization. *Tsai, C.-C., +, EDL July 2007* 599-602

High-Performance Short-Channel Double-Gate Low-Temperature Polysilicon Thin-Film Transistors Using Excimer Laser Crystallization. *Tsai, C.-C., +, EDL Nov. 2007* 1010-1013

Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation. *Chang, C.-P., +, EDL Nov. 2007* 990-992

Investigation of Impact Ionization in InAs-Channel HEMT for High-Speed and Low-Power Applications. *Chang, C. Y., +, EDL Oct. 2007* 856-858

Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz. *Poblenz, C., +, EDL Nov. 2007* 945-947

Strained p-Channel FinFETs With Extended Π -Shaped Silicon-Germanium

Source and Drain Stressors. *Tan, K.-M., +, EDL Oct. 2007* 905-908

Permittivity

High- κ Al_2O_3 -HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikhelashvili, V., +, EDL Jan. 2007* 24-26

Impact of High- κ Gate Dielectrics on the Device and Circuit Performance of Nanoscale FinFETs. *Manoj, C. R., +, EDL April 2007* 295-297

Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007* 700-702

Phase change materials

Analysis of Temperature in Phase Change Memory Scaling. *Kim, S., +, EDL Aug. 2007* 697-699

A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device. *Lin, H.-T., +, EDL Nov. 2007* 951-953

A Phase Change Memory Compact Model for Multilevel Applications. *Venitice, D., +, EDL Nov. 2007* 973-975

Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays. *Mantegazza, D., +, EDL Oct. 2007* 865-867

Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure. *Chao, D.-S., +, EDL Oct. 2007* 871-873

Phase change memory

A Phase Change Memory Compact Model for Multilevel Applications. *Venitice, D., +, EDL Nov. 2007* 973-975

Phase transformations

A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007* 111-113

Phonons

Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs. *Sadi, T., +, EDL Sept. 2007* 787-789

Phosphorus

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007* 565-568

Photodetectors

Three-Dimensional Photodetectors in 3-D Silicon-On-Insulator Technology. *Culurciello, E., +, EDL Feb. 2007* 117-119

AlGaN Photodetectors Prepared on Si Substrates. *Chiou, Y. Z., +, EDL April 2007* 264-266

Amorphous-SiCBN-Based Metal-Semiconductor-Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007* 713-715

High-Responsivity Photodetector in Standard SiGe BiCMOS Technology. *Lai, K.-S., +, EDL Sept. 2007* 800-802

Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget. *Loh, W. Y., +, EDL Nov. 2007* 984-986

Improving the Performance of SiGe Metal-Semiconductor-Metal Photodetectors by Using an Amorphous Silicon Passivation Layer. *Chen, Y. H., +, EDL Dec. 2007* 1111-1113

Parasitic Bipolar Junction Transistors in a Floating-Gate MOSFET for Fluorescence Detection. *Shin, K.-S., +, EDL July 2007* 581-583

Photodiodes

Three-Dimensional Photodetectors in 3-D Silicon-On-Insulator Technology. *Culurciello, E., +, EDL Feb. 2007* 117-119

Active Pixel Concept Combined With Organic Photodiode for Imaging Devices. *Tedde, S., +, EDL Oct. 2007* 893-895

Application of Plasma-Doping (PLAD) Technique to Reduce Dark Current of CMOS Image Sensors. *Moon, C.-R., +, EDL Feb. 2007* 114-116

Parasitic Bipolar Junction Transistors in a Floating-Gate MOSFET for Fluorescence Detection. *Shin, K.-S., +, EDL July 2007* 581-583

Photoemission

Amorphous-SiCBN-Based Metal-Semiconductor-Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007* 713-715

Photovoltaic cells

A Novel Silicon Photovoltaic Cell Using a Low-Temperature Quasi-Epitaxial Silicon Emitter. *Farrokh-Baroughi, M., +, EDL July 2007* 575-577

Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells. *Carnel, L., +, EDL Oct. 2007* 899-901

Piezoresistance

Piezoresistance Coefficients of (100) Silicon nMOSFETs Measured at Low and High (~ 1.5 GPa) Channel Stress. *Suthram, S., +, EDL Jan. 2007* 58-61

Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs. *Wang, J.-S., +, EDL Nov. 2007* 1040-1043

Planarisation

1.3- μm GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planarized and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007* 120-122

Plasma CVD

A Novel Silicon Photovoltaic Cell Using a Low-Temperature Quasi-Epitaxial Silicon Emitter. *Farrokh-Baroughi, M., +, EDL July 2007* 575-577

Plasma CVD coatings

Stability of Amorphous-Silicon and Nanocrystalline Silicon Thin-Film Transistors Under DC and AC Stress. *Hatzopoulos, A. T., +, EDL Sept. 2007* 803-805

Plasma applications

Application of Plasma-Doping (PLAD) Technique to Reduce Dark Current of CMOS Image Sensors. *Moon, C.-R., +, EDL Feb. 2007* 114-116

Threshold Voltage Shift Due to Mechanical Stress-Enhanced Plasma Process-Induced Damage in 0.13- μm pMOSFET. *Li, R., +, EDL May 2007* 360-362

Plasma deposition

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007* 207-210

Plasma displays

A Novel Latch-Up Protection for Bulk-Silicon Scan Driver ICs of Shadow-Mask Plasma-Display Panel. *Sun, W., +, EDL Dec. 2007* 1135-1137

Plasma materials processing

Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007* 613-615

Impact of CF_4 Plasma Treatment on GaN. *Chu, R., +, EDL Sept. 2007* 781-783

Plasma temperature

Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability. *Kattamis, A. Z., +, EDL July 2007* 606-608

Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids. *Tsai, C.-T., +, EDL July 2007* 584-586

Plasmas

A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels. *Chang, C.-W., +, EDL Nov. 2007* 993-995

Plastics

Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic. *Cherenack, K. H., +, EDL Nov. 2007* 1004-1006

Platinum

Effect of Top Electrode Material on Resistive Switching Properties of ZrO_2 Film Memory Devices. *Lin, C.-Y., +, EDL May 2007* 366-368

Platinum alloys

Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007* 82-85

Platinum compounds

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007* 565-568

Poisson equation

A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007* 312-314

Polymer blends

Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007* 793-796

Polymer films

A Novel Low-Temperature Polysilicon Thin-Film Transistors With a Self-Aligned Gate and Raised Source/Drain Formed by the Damascene Process. *Chang, K. M., +, EDL Sept. 2007* 806-808

Polymers

Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material. *Song, Y., +, EDL Feb. 2007* 107-110

A New Nonvolatile Bistable Polymer-Nanoparticle Memory Device. *Lin, H.-T., +, EDL Nov. 2007* 951-953

Porous materials

Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007* 793-796

Positive ions

Resistive Switching Mechanism in $Zn_xCd_{1-x}S$ Nonvolatile Memory Devices. *Wang, Z., +, EDL Jan. 2007* 14-16

Power HEMT

Power Stability of AlGaN/GaN HFETs at 20 W/mm in the Pinched-Off Operation Mode. *Koudymov, A., +, EDL Jan. 2007* 5-7

ON-Resistance Modulation of High Voltage GAN HEMT on Sapphire Substrate Under High Applied Voltage. *Saito, W., +, EDL Aug. 2007* 676-678

Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007* 784-786

Power MOSFET

A Dynamical Power-Management Demonstration Using Four-Terminal Separated-Gate FinFETs. *Endo, K., +, EDL May 2007* 452-454

On-Resistance Degradations for Different Stress Conditions in High-Voltage pEDLMOS Transistor With Thick Gate Oxide. *Sun, W., +, EDL July 2007* 631-633

Power amplifiers

Direct Monitoring of RF Overstress in High-Power Transistors and Amplifiers. *Stopel, A., +, EDL May 2007* 357-359

Power bipolar transistors

High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC. *Sui, Y., +, EDL Aug. 2007* 728-730

Power control

A Dynamical Power-Management Demonstration Using Four-Terminal Separated-Gate FinFETs. *Endo, K., +, EDL May 2007* 452-454

Power factor correction

Pinch-Off Voltage-Adjustable High-Voltage Junction Field-Effect Transistor. *Liau, C.-W., +, EDL Aug. 2007* 737-739

Power field effect transistors

High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC. *Sui, Y., +, EDL Aug. 2007* 728-730

Power integrated circuits

A 20-V CMOS-Based Monolithic Bidirectional Power Switch. *Fu, Y., +, EDL Feb. 2007* 174-176

1000-V $9.1\text{-m}\Omega \cdot \text{cm}^2$ Normally Off 4H-SiC Lateral RESURF JFET for Power Integrated Circuit Applications. *Zhang, Y., +, EDL May 2007* 404-407

Power measurement

RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007* 354-356

Power semiconductor devices

A New Lateral-IGBT Structure With a Wider Safe Operating Area. *Baker, B., +, EDL May 2007* 416-418

Power semiconductor switches

A 20-V CMOS-Based Monolithic Bidirectional Power Switch. *Fu, Y., +, EDL Feb. 2007* 174-176

Duration of the High Breakdown Voltage Phase in Deep Depletion SOI LDMOS. *Napoli, E., EDL Aug. 2007* 753-755

High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC. *Sui, Y., +, EDL Aug. 2007* 728-730

Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007* 784-786

Power supply circuits

Electromigration Resistant Power Delivery Systems. *Sekar, D. C., +, EDL Aug. 2007* 767-769

Power transistors

Direct Monitoring of RF Overstress in High-Power Transistors and Amplifiers. *Stopel, A., +, EDL May 2007* 357-359

Power transmission lines

Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors. *Huang, F., +, EDL Nov. 2007* 1025-1028

Programmable logic devices

A $0.26\text{-}\mu\text{m}^2$ U-Shaped Nitride-Based Programming Cell on Pure 90-nm CMOS Technology. *Lai, H.-C., +, EDL Sept. 2007* 837-839

Programming

Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure. *Chao, D.-S., +, EDL Oct. 2007* 871-873

A Phase Change Memory Compact Model for Multilevel Applications. *Ventrice, D., +, EDL Nov. 2007* 973-975

Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays. *Mantegazza, D., +, EDL Oct. 2007* 865-867

Metal-Oxide-High- κ Dielectric-Oxide-Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications. *Hsu, H., +, EDL Nov. 2007* 964-966

Q**Q-factor**

CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q-Factors. *Zine-El-Abidine, I., +, EDL March 2007* 226-228

High-Q Integrated Inductor Using Post-CMOS Selectively Grown Porous Silicon (SGPS) Technique for RFIC Applications. *Li, C., +, EDL Aug. 2007* 763-766

Quantum Hall effect

A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007* 312-314

Quantum cascade lasers

A Planar Gunn Diode Operating Above 100 GHz. *Khalid, A., +, EDL Oct. 2007* 849-851

Quantum well devices

$1.3\text{-}\mu\text{m}$ GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planarized and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007* 120-122

Flicker Noise and Its Degradation Characteristics Under Electrical Stress in MOSFETs With Thin Strained-Si/SiGe Dual-Quantum Well. *Jiang, Y., +, EDL July 2007* 603-605

Ultrahigh-Speed 0.5 V Supply Voltage $In_{0.7}Ga_{0.3}As$ Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007* 685-687

Quantum wells

Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S., +, EDL Jan. 2007* 30-32

R**Radiation hardening (electronics)**

Short-Channel Effects in Independent-Gate FinFETs. *Lu, Z., +, EDL Feb. 2007* 145-147

Radiofrequency integrated circuits

Bond Pad Design With Low Capacitance in CMOS Technology for RF Applications. *Hsiao, Y.-W., +, EDL Jan. 2007* 68-70

Ferrite-Integrated On-Chip Inductors for RF ICs. *Yang, C., +, EDL July 2007* 652-655

Raman spectroscopy

Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007* 86-89

Random access memory

- A Program-Erasable High- κ Hf_{0.3}N_{0.2}O_{0.5} MIS Capacitor With Good Retention. *Yang, H. J., +, EDL Oct. 2007 913-915*
n⁺/p⁺ Gate Bulk FinFETs With Locally Separated Channel Structure for Sub-50-nm DRAM Cell Transistors. *Jung, H.-A.-R., +, EDL Dec. 2007 1126-1128*
Good High-Temperature Stability of TiN/Al₂O₃/WN/TiN Capacitors. *Pan, T.-M., +, EDL Nov. 2007 954-956*

Random-access storage

- Resistive Switching Mechanism in Zn_xCd_{1-x}S Nonvolatile Memory Devices. *Wang, Z., +, EDL Jan. 2007 14-16*
A Novel Dual-Polarity Nonvolatile Memory. *Lin, H., +, EDL May 2007 412-415*
A Novel Nanowire Channel Poly-Si TFT Functioning as Transistor and Non-volatile SONOS Memory. *Chen, S.-C., +, EDL Sept. 2007 809-811*
Analysis of Temperature in Phase Change Memory Scaling. *Kim, S., +, EDL Aug. 2007 697-699*
Effect of Top Electrode Material on Resistive Switching Properties of ZrO₂ Film Memory Devices. *Lin, C.-Y., +, EDL May 2007 366-368*
Electrically Bistable Thin-Film Device Based on PVK and GNP Polymer Material. *Song, Y., +, EDL Feb. 2007 107-110*
Experimental Study of Data Retention in Nitride Memories by Temperature and Field Acceleration. *Compagnoni, C. M., +, EDL July 2007 628-630*
Intrinsic Mismatch Between Floating-Gate Nonvolatile Memory Cell and Equivalent Transistor. *Duane, R., +, EDL May 2007 440-442*
New Operating Mode Based on Electron/Hole Profile Matching in Nitride-Based Nonvolatile Memories. *Furnemont, A., +, EDL April 2007 276-278*
Predicting Thermal Neutron-Induced Soft Errors in Static Memories Using TCAD and Physics-Based Monte Carlo Simulation Tools. *Warren, K. M., +, EDL Feb. 2007 180-182*

Rapid thermal annealing

- Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors. *Severi, S., +, EDL March 2007 198-200*
A Program-Erasable High- κ Hf_{0.3}N_{0.2}O_{0.5} MIS Capacitor With Good Retention. *Yang, H. J., +, EDL Oct. 2007 913-915*
High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate. *Wu, C. H., +, EDL April 2007 292-294*

Rapid thermal processing

- A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007 111-113*

Relaxation

- Comparison of On-The-Fly, DC I_d-V_g , and Single-Pulse Methods for Evaluating Threshold Voltage Instability in High- κ nMOSFETs. *Heh, D., +, EDL March 2007 245-247*

Reliability

- Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes. *Shei, S.-C., +, EDL May 2007 346-349*

- Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation. *Chang, C.-P., +, EDL Nov. 2007 990-992*
Lifetime Extension of RF MEMS Direct Contact Switches in Hot Switching Operations by Ball Grid Array Dimple Design. *Chow, L. L. W., +, EDL June 2007 479-481*

- Thickness Scaling and Reliability Comparison for the Inter-Poly High- κ Dielectrics. *Chen, Y.-Y., +, EDL Aug. 2007 700-702*

- Use of a High-Work-Function Ni Electrode to Improve the Stress Reliability of Analog SrTiO₃ Metal-Insulator-Metal Capacitors. *Chiang, K. C., +, EDL Aug. 2007 694-696*

Resistance

- 35-nm Zigzag T-Gate In_{0.52}Al_{0.48}As/In_{0.53}Ga_{0.47}As Metamorphic GaAs HEMTs With an Ultrahigh f_{max} of 520 GHz. *Lee, K.-S., +, EDL Aug. 2007 672-675*

- A Phase Change Memory Compact Model for Multilevel Applications. *Venetrice, D., +, EDL Nov. 2007 973-975*

- Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays. *Mantegazza, D., +, EDL Oct. 2007 865-867*

- Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films. *Kim, M., +, EDL Nov. 2007 967-969*

- Design of On-Chip Transformer With Various Coil Widths to Achieve Minimal Metal Resistance. *Hsu, H.-M., +, EDL Nov. 2007 1029-1032*

- Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure. *Chao, D.-S., +, EDL Oct. 2007 871-873*

- Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells. *Carnel, L., +, EDL Oct. 2007 899-901*
N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. *Liow, T.-Y., +, EDL Nov. 2007 1014-1017*

- Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current. *Nomoto, K., +, EDL Nov. 2007 939-941*

- Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric. *Xuan, Y., +, EDL Nov. 2007 935-938*

Resistors

- Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP. *Kim, J.-S., +, EDL Oct. 2007 896-898*

Resonant frequency

- Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. *Koskenvuori, M., +, EDL Nov. 2007 970-972*

- Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures. *Marshall, J. C., +, EDL Nov. 2007 960-963*

Resonators

- Millimeter-Wave Bandpass Filters by Standard 0.18- μ m CMOS Technology. *Sun, S., +, EDL March 2007 220-222*

Ring oscillators

- Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. *Park, S. K., +, EDL Oct. 2007 877-879*

Robust control

- Robust CoupEDL-Quantum-Well Structure for Use in Electrorefraction Modulators. *Ristic, S., +, EDL Jan. 2007 30-32*

S**S-parameters**

- Extraction of π -Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. *Kang, I. M., +, EDL May 2007 425-427*

- A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis. *Srinidhi, E. R., +, EDL May 2007 343-345*

- Temperature Dependence of High Frequency and Noise Performance of Sb-Heterostructure Millimeter-Wave Detectors. *Su, N., +, EDL May 2007 336-339*

SPICE

- An Efficient Macromodeling Approach for Simulating Carbon-Nanotube Field-Emission Triode Devices in Display Applications. *Guo, X., +, EDL Aug. 2007 710-712*

Samarium compounds

- High-Performance Metal-Insulator-Metal Capacitors Using Amorphous BaSm₂Ti₄O₁₂ Thin Film. *Jeong, Y. H., +, EDL Jan. 2007 17-20*

Sandwich structures

- Electrically Bistable Thin-Film Device Based on PVK and GNP Polymer Material. *Song, Y., +, EDL Feb. 2007 107-110*

Sapphire

- HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007 42-44*

- High- κ Al₂O₃-HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikhailashvili, V., +, EDL Jan. 2007 24-26*

- ON-Resistance Modulation of High Voltage GAN HEMT on Sapphire Substrate Under High Applied Voltage. *Saito, W., +, EDL Aug. 2007 676-678*

Scanning electron microscopy

- The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*

Scattering

- Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET. *Rustagi, S. C., +, EDL Oct. 2007 909-912*

- Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs. *Wang, J.-S., +, EDL Nov. 2007 1040-1043*

- The Origin of Electron Mobility Enhancement in Strained MOSFETs. *Hadjisavvas, G., +, EDL Nov. 2007 1018-1020*

Schottky barriers

- A High Schottky-Barrier of 1.1 eV Between Al and S-Passivated p-Type Si(100) Surface. *Song, G., +, EDL Jan. 2007 71-73*
- Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*
- Effective Schottky Barrier Height Reduction Using Sulfur or Selenium at the NiSi/n-Si (100) Interface for Low Resistance Contacts. *Wong, H.-S., +, EDL Dec. 2007 1102-1104*
- Enhanced Gate Swing in InP HEMTs With High Threshold Voltage by Means of InAlAsSb Barrier. *Suemitsu, T., +, EDL Aug. 2007 669-671*
- Improved Carrier Injection in Ultrathin-Body SOI Schottky-Barrier MOS-FETs. *Zhang, M., +, EDL March 2007 223-225*
- Injected Current and Quantum Transmission Coefficient in Low Schottky Barriers: WKB and Airy Approaches. *Rengel, R., +, EDL Feb. 2007 171-173*
- N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide. *Lee, R. T. P., +, EDL Feb. 2007 164-167*
- SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures. *Shigekawa, N., +, EDL Feb. 2007 90-92*
- Schottky-Barrier Height Lowering by an Increase of the Substrate Doping in PtSi Schottky Barrier Source/Drain FETs. *Lousberg, G. P., +, EDL Feb. 2007 123-125*
- Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. *Wong, H.-S., +, EDL Aug. 2007 703-705*
- The Leakage Current of the Schottky Contact on the Mesa Edge of AlGaN/GaN Heterostructure. *Xu, C., +, EDL Nov. 2007 942-944*

Schottky diodes

- Injected Current and Quantum Transmission Coefficient in Low Schottky Barriers: WKB and Airy Approaches. *Rengel, R., +, EDL Feb. 2007 171-173*
- A New Degradation Mechanism in High-Voltage SiC Power MOSFETs. *Agarwal, A., +, EDL July 2007 587-589*
- Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*
- Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. *Wong, H.-S., +, EDL Aug. 2007 703-705*

Schottky gate field effect transistors

- Schottky-Barrier Height Lowering by an Increase of the Substrate Doping in PtSi Schottky Barrier Source/Drain FETs. *Lousberg, G. P., +, EDL Feb. 2007 123-125*
- Impact of CF₄ Plasma Treatment on GaN. *Chu, R., +, EDL Sept. 2007 781-783*
- Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*

Schrodinger equation

- Injected Current and Quantum Transmission Coefficient in Low Schottky Barriers: WKB and Airy Approaches. *Rengel, R., +, EDL Feb. 2007 171-173*
- A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007 312-314*

Segregation

- Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate. *Liu, J., +, EDL Jan. 2007 11-13*

Selenium

- Defect Passivation by Selenium-Ion Implantation for Poly-Si Thin Film Transistors. *Lai, J., +, EDL Aug. 2007 725-727*
- Effective Schottky Barrier Height Reduction Using Sulfur or Selenium at the NiSi/n-Si (100) Interface for Low Resistance Contacts. *Wong, H.-S., +, EDL Dec. 2007 1102-1104*

Self-assembly

- Fabrication of Ni Nanocrystal Flash Memories Using a Polymeric Self-Assembly Approach. *Shahrjerdi, D., +, EDL Sept. 2007 793-796*

Semiconductor device breakdown

- Effects of Oxide-Fixed Charge on the Breakdown Voltage of Superjunction Devices. *Balaji, S., +, EDL March 2007 229-231*
- Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*
- Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics. *Yen, F. Y., +, EDL March 2007 201-203*

Normally Off AlGaN/GaN Low-Density Drain HEMT (LDD-HEMT) With Enhanced Breakdown Voltage and Reduced Current Collapse. *Song, D., +, EDL March 2007 189-191*

On the Use of a SiGe Spike in the Emitter to Improve the *f_T* xBV_{CEO} Product of High-Speed SiGe HBTs. *Choi, L. J., +, EDL April 2007 270-272*

P-Channel Germanium FinFET Based on Rapid Melt Growth. *Feng, J., +, EDL July 2007 637-639*

Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007 784-786*

Semiconductor device manufacture

- Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*
- P-Channel Germanium FinFET Based on Rapid Melt Growth. *Feng, J., +, EDL July 2007 637-639*

Semiconductor device measurement

- Three-Dimensional Photodetectors in 3-D Silicon-On-Insulator Technology. *Culurciello, E., +, EDL Feb. 2007 117-119*
- Direct Measurement of Top and Sidewall Interface Trap Density in SOI FinFETs. *Kapila, G., +, EDL March 2007 232-234*
- Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric. *Xuan, Y., +, EDL Nov. 2007 935-938*
- Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*
- Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures. *Marshall, J. C., +, EDL Nov. 2007 960-963*

Semiconductor device metallisation

- Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007 428-431*
- CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007 831-833*

Semiconductor device models

- Temperature-Oriented Experiment and Simulation as Corroborating Evidence of MOSFET Backscattering Theory. *Chen, M.-J., +, EDL Feb. 2007 177-179*
- A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis. *Srinidhi, E. R., +, EDL May 2007 343-345*
- Admittance Measurements on OFET Channel and Its Modeling With *R-C* Network. *Jung, K.-D., +, EDL March 2007 204-206*
- Compact Model of Current Collapse in Heterostructure Field-Effect Transistors. *Koudymov, A., +, EDL May 2007 332-335*
- Conductance Modeling for Graphene Nanoribbon (GNR) Interconnects. *Naeemi, A., +, EDL May 2007 428-431*
- Current-Voltage Characteristics of Long-Channel Nanobundle Thin-Film Transistors: A "Bottom-Up" Perspective. *Pimparkar, N., +, EDL Feb. 2007 157-160*

Extraction of π -Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. *Kang, I. M., +, EDL May 2007 425-427*

Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs. *Sadi, T., +, EDL Sept. 2007 787-789*

Injected Current and Quantum Transmission Coefficient in Low Schottky Barriers: WKB and Airy Approaches. *Rengel, R., +, EDL Feb. 2007 171-173*

On-Resistance Degradations for Different Stress Conditions in High-Voltage pEDLMOS Transistor With Thick Gate Oxide. *Sun, W., +, EDL July 2007 631-633*

The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs. *Mao, L., EDL Feb. 2007 161-163*

Semiconductor device noise

- Low-Frequency Noise Characteristics in Strained-Si nMOSFETs. *Wang, Y. P., +, EDL Jan. 2007 36-38*
- Flicker Noise and Its Degradation Characteristics Under Electrical Stress in MOSFETs With Thin Strained-Si/SiGe Dual-Quantum Well. *Jiang, Y., +, EDL July 2007 603-605*
- Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007 288-291*
- Numerical Simulation of Low-Frequency Noise in Polysilicon Thin-Film Transistors. *Pichon, L., +, EDL Aug. 2007 716-718*

Semiconductor device reliability

- Improved Reliability by Reduction of Hot-Electron Damage in the Vertical Impact-Ionization MOSFET (I-MOS). *Abelein, U., +, EDL Jan. 2007 65-67*

- A Reliability Model for Low-Temperature Polycrystalline Silicon Thin-Film Transistors. *Chen, C.-Y., +, EDL May 2007 392-394*
- Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge. *Ohashi, T., +, EDL July 2007 562-564*
- Effects of Measurement Temperature on NBTI. *Zhang, J. F., +, EDL April 2007 298-300*
- Enhanced Hole Mobility and Reliability of Panel Epi-Like Silicon Transistors Using Backside Green Laser Activation. *Lin, Y.-T., +, EDL Sept. 2007 790-792*
- Highly Reliable Multilevel and 2-bit/cell Operation of Wrapped Select Gate (WSG) SONOS Memory. *Wu, W.-C., +, EDL March 2007 214-216*
- PMOSFET Reliability Study for Direct Silicon Bond (DSB) Hybrid Orientation Technology (HOT). *Huang, Y.-T., +, EDL Sept. 2007 815-817*
- Semiconductor device testing**
- Impact of High- κ Offset Spacer in 65-nm Node SOI Devices. *Ma, M.-W., +, EDL March 2007 238-241*
- Negligible Effect of Process-Induced Strain on Intrinsic NBTI Behavior. *Shickova, A., +, EDL March 2007 242-244*
- Semiconductor devices**
- Carrier Transport Mechanism in a Nanoparticle-Incorporated Organic Bistable Memory Device. *Lin, H.-T., +, EDL July 2007 569-571*
- Semiconductor diodes**
- Effects of Oxide-Fixed Charge on the Breakdown Voltage of Superjunction Devices. *Balaji, S., +, EDL March 2007 229-231*
- A Planar Gunn Diode Operating Above 100 GHz. *Khalid, A., +, EDL Oct. 2007 849-851*
- Semiconductor doping**
- Threshold Current for the Onset of Kirk Effect in Bipolar Transistors With a Fully Depleted Nonuniformly Doped Collector. *van der Toorn, R., EDL Jan. 2007 54-57*
- Application of Plasma-Doping (PLAD) Technique to Reduce Dark Current of CMOS Image Sensors. *Moon, C.-R., +, EDL Feb. 2007 114-116*
- Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors. *Severi, S., +, EDL March 2007 198-200*
- CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007 831-833*
- Schottky-Barrier Height Lowering by an Increase of the Substrate Doping in PtSi Schottky Barrier Source/Drain FETs. *Lousberg, G. P., +, EDL Feb. 2007 123-125*
- Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007 565-568*
- Selectively Doped High-Power AlGaN/InGaN/GaN MOS-DHFET. *Adi-varahan, V., +, EDL March 2007 192-194*
- Semiconductor epitaxial layers**
- Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors. *Severi, S., +, EDL March 2007 198-200*
- Semiconductor junctions**
- Passivation Effects of Aluminum on Polycrystalline Silicon Thin-Film Transistor With Metal-Replaced Junctions. *Zhang, D., +, EDL Feb. 2007 126-128*
- Semiconductor materials**
- SiGe-Channel Confinement Effects for Short-Channel PFETs With Non-bandedge Gate Workfunctions. *Winstead, B., +, EDL Aug. 2007 719-721*
- Semiconductor quantum dots**
- Transport Mechanism of SiGe Dot MOS Tunneling Diodes. *Kuo, P.-S., +, EDL July 2007 596-598*
- Semiconductor quantum wells**
- Flicker Noise and Its Degradation Characteristics Under Electrical Stress in MOSFETs With Thin Strained-Si/SiGe Dual-Quantum Well. *Jiang, Y., +, EDL July 2007 603-605*
- Ultrahigh-Speed 0.5 V Supply Voltage In_{0.7}Ga_{0.3}As Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*
- Semiconductor quantum wires**
- Physical Modeling of Temperature Coefficient of Resistance for Single- and Multi-Wall Carbon Nanotube Interconnects. *Naeemi, A., +, EDL Feb. 2007 135-138*
- Semiconductor storage**
- Highly Reliable Multilevel and 2-bit/cell Operation of Wrapped Select Gate (WSG) SONOS Memory. *Wu, W.-C., +, EDL March 2007 214-216*
- Carrier Transport Mechanism in a Nanoparticle-Incorporated Organic Bistable Memory Device. *Lin, H.-T., +, EDL July 2007 569-571*
- Semiconductor technology**
- Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007 82-85*
- Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. *Ang, K.-W., +, EDL April 2007 301-304*
- Semiconductor thin films**
- Crystallization of Double-Layered Silicon Thin Films by Solid Green Laser Annealing for High-Performance Thin-Film Transistors. *Sugawara, Y., +, EDL May 2007 395-397*
- A Novel Low-Temperature Polysilicon Thin-Film Transistors With a Self-Aligned Gate and Raised Source/Drain Formed by the Damascene Process. *Chang, K. M., +, EDL Sept. 2007 806-808*
- Amorphous-SiCBN-Based Metal-Semiconductor-Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007 713-715*
- Defect Passivation by Selenium-Ion Implantation for Poly-Si Thin Film Transistors. *Lai, J., +, EDL Aug. 2007 725-727*
- Semiconductor-insulator-semiconductor devices**
- Profiling of Nitride-Trap-Energy Distribution in SONOS Flash Memory by Using a Variable-Amplitude Low-Frequency Charge-Pumping Technique. *Liao, Y.-Y., +, EDL Sept. 2007 828-830*
- Sensors**
- Field-Controllable Flexible Strain Sensors Using Pentacene Semiconductors. *Ji, T., +, EDL Dec. 2007 1105-1107*
- Series resistance**
- A Constant-Mobility Method to Enable MOSFET Series-Resistance Extraction. *Lin, D.-W., +, EDL Dec. 2007 1132-1134*
- Signal to noise ratio**
- A Wide Dynamic-Range CMOS Image Sensor Using Self-Reset Technique. *Park, D., +, EDL Oct. 2007 890-892*
- Silicon**
- Electrical Characterization of ZrO₂/Si Interface Properties in MOSFETs With ZrO₂ Gate Dielectrics. *Liu, C.-H., +, EDL Jan. 2007 62-64*
- Silicon alloys**
- Impacts of Dopant Segregation on the Performance and Interface-State Density of the MOSFET With FUSI NiSi Gate. *Liu, J., +, EDL Jan. 2007 11-13*
- Silicon carbide**
- A New Degradation Mechanism in High-Voltage SiC Power MOSFETs. *Agarwal, A., +, EDL July 2007 587-589*
- 1200-V 5.2-mΩ · cm² 4H-SiC BJTs With a High Common-Emitter Current Gain. *Lee, H.-S., +, EDL Nov. 2007 1007-1009*
- Comparison of GaN HEMTs on Diamond and SiC Substrates. *Felbinger, J. G., +, EDL Nov. 2007 948-950*
- N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. *Liow, T.-Y., +, EDL Nov. 2007 1014-1017*
- Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz. *Poblenz, C., +, EDL Nov. 2007 945-947*
- Silicon compounds**
- Effect of F₂ Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric. *Chang, M., +, EDL Jan. 2007 21-23*
- 1.3-μm GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planarized and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007 120-122*
- 1000-V 9.1-mΩ · cm² Normally Off 4H-SiC Lateral RESURF JFET for Power Integrated Circuit Applications. *Zhang, Y., +, EDL May 2007 404-407*
- A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007 111-113*
- Amorphous-SiCBN-Based Metal-Semiconductor-Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007 713-715*
- Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic. *Cherenack, K. H., +, EDL Nov. 2007 1004-1006*
- Demonstration of Asymmetric Gate-Oxide Thickness Four-Terminal FinFETs Having Flexible Threshold Voltage and Good Subthreshold Slope. *Masahara, M., +, EDL March 2007 217-219*
- Demonstration of Long-Pulse Power Amplification at 1 GHz Using 4H-SiC RF BJTs on a Conductive Substrate. *Zhao, F., +, EDL May 2007 398-400*
- Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability. *Kattamis, A. Z., +, EDL July 2007 606-608*

- Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics. *Yen, F. Y., +, EDL March 2007 201-203*
- Electrical Properties of nMOSFETs Using the NiSi:Yb FUSI Electrode. *Yu, H. Y., +, EDL Feb. 2007 154-156*
- Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. *Ang, K.-W., +, EDL April 2007 301-304*
- Fluorine Passivation in Gate Stacks of Poly-Si/TaN/HfO₂ (and HfSiON/HfO₂)/Si Through Gate Ion Implantation. *Zhang, M. H., +, EDL March 2007 195-197*
- High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007 825-827*
- High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC. *Sui, Y., +, EDL Aug. 2007 728-730*
- Highly Reliable Multilevel and 2-bit/cell Operation of Wrapped Select Gate (WSG) SONOS Memory. *Wu, W.-C., +, EDL March 2007 214-216*
- Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007 308-311*
- Improving the Performance of SiGe Metal-Semiconductor-Metal Photodetectors by Using an Amorphous Silicon Passivation Layer. *Chen, Y. H., +, EDL Dec. 2007 1111-1113*
- Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007 288-291*
- N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. *Liow, T.-Y., +, EDL Nov. 2007 1014-1017*
- N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide. *Lee, R. T. P., +, EDL Feb. 2007 164-167*
- Negligible Effect of Process-Induced Strain on Intrinsic NBTI Behavior. *Shickova, A., +, EDL March 2007 242-244*
- RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*
- Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007 784-786*
- Study of the Erase Mechanism of MANOS (Metal/Al₂O₃/SiN/SiO₂/Si) Device. *Lai, S., +, EDL July 2007 643-645*
- The Application of an Ultrathin ALD HfSiON Cap Layer on SiON Dielectrics for Ni-FUSI CMOS Technology Targeting at Low-Power Applications. *Chang, S. Z., +, EDL July 2007 634-636*
- Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*
- Yttrium- and Terbium-Based Interlayer on SiO₂ and HfO₂ Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. *Lim, A. E.-J., +, EDL June 2007 482-485*
- Silicon germanium**
- Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. *Ang, K.-W., +, EDL July 2007 609-612*
- Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget. *Loh, W. Y., +, EDL Nov. 2007 984-986*
- On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate. *Simoen, E., +, EDL Nov. 2007 987-989*
- Strained p-Channel FinFETs With Extended II-Shaped Silicon-Germanium Source and Drain Stressors. *Tan, K.-M., +, EDL Oct. 2007 905-908*
- Silicon on insulator technology**
- On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs. *Simoen, E., +, EDL Oct. 2007 919-921*
- Trigate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach. *Zaman, R. J., +, EDL Oct. 2007 916-918*
- Silicon-on-insulator**
- Long Retention of Gain-Cell Dynamic Random Access Memory With Undoped Memory Node. *Nishiguchi, K., +, EDL Jan. 2007 48-50*
- A Novel 700-V SOI LDMOS With Double-Sided Trench. *Luo, X., +, EDL May 2007 422-424*
- A Novel Dual-Polarity Nonvolatile Memory. *Lin, H., +, EDL May 2007 412-415*
- Direct Measurement of Top and Sidewall Interface Trap Density in SOI Fin-FETs. *Kapila, G., +, EDL March 2007 232-234*
- Duration of the High Breakdown Voltage Phase in Deep Depletion SOI LDMOS. *Napoli, E., EDL Aug. 2007 753-755*
- Electron Transport in Strained-Silicon Directly on Insulator Ultrathin-Body n-MOSFETs With Body Thickness Ranging From 2 to 25 nm. *Gomez, L., +, EDL April 2007 285-287*
- Evaluation of RF Capacitance Extraction for Ultrathin Ultraleaky SOI MOS Devices. *Yu, C., +, EDL Jan. 2007 45-47*
- Impact of High- κ Offset Spacer in 65-nm Node SOI Devices. *Ma, M.-W., +, EDL March 2007 238-241*
- Impact of Parameter Variations and Random Dopant Fluctuations on Short-Channel Fully Depleted SOI MOSFETs With Extremely Thin BOX. *Ohtou, T., +, EDL Aug. 2007 740-742*
- Improved Carrier Injection in Ultrathin-Body SOI Schottky-Barrier MOSFETs. *Zhang, M., +, EDL March 2007 223-225*
- Low-Temperature Polymer-Based Three-Dimensional Silicon Integration. *Kim, S., +, EDL Aug. 2007 706-709*
- New Insights on "Capacitorless" Floating-Body DRAM Cells. *Fossum, J. G., +, EDL June 2007 513-516*
- Novel Approach to Reduce Source/Drain Series and Contact Resistance in High-Performance UTSOI CMOS Devices Using Selective Electroless CoWP or CoB Process. *Pan, J., +, EDL Aug. 2007 691-693*
- Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007 590-592*
- P-Channel Germanium FinFET Based on Rapid Melt Growth. *Feng, J., +, EDL July 2007 637-639*
- Schottky-Barrier Height Lowering by an Increase of the Substrate Doping in PtSi Schottky Barrier Source/Drain FETs. *Lousberg, G. P., +, EDL Feb. 2007 123-125*
- Stress Hybridization for Multigate Devices Fabricated on Supercritical Strained-SOI (SC-SSOI). *Collaert, N., +, EDL July 2007 646-648*
- Strong Efficiency Improvement of SOI-EDLs Through Carrier Confinement. *Hoang, T., +, EDL May 2007 383-385*
- Substrate Bias Effect Linked to Parasitic Series Resistance in Multiple-Gate SOI MOSFETs. *Rudenko, T., +, EDL Sept. 2007 834-836*
- Symmetric Vertical Parallel Plate Capacitors for On-Chip RF Circuits in 65-nm SOI Technology. *Kim, D., +, EDL July 2007 616-618*
- Three-Dimensional Photodetectors in 3-D Silicon-On-Insulator Technology. *Culurciello, E., +, EDL Feb. 2007 117-119*
- Valence Band Offset Measurements on Thin Silicon-on-Insulator MOSFETs. *van der Steen, J.-L. P. J., +, EDL Sept. 2007 821-824*
- 100-GHz Quasi-Yagi Antenna in Silicon Technology. *Sun, M., +, EDL May 2007 455-457*
- A High Schottky-Barrier of 1.1 eV Between Al and S-Passivated p-Type Si(100) Surface. *Song, G., +, EDL Jan. 2007 71-73*
- A Novel Approach in Separating the Roles of Electrons and Holes in Causing Degradation in Hf-Based MOSFET Devices By Using Stress-Anneal Technique. *Akbar, M. S., +, EDL Feb. 2007 132-134*
- A Novel LTPS-TFT Pixel Circuit Compensating for TFT Threshold-Voltage Shift and OEDL Degradation for AMOEDL. *Lin, C.-L., +, EDL Feb. 2007 129-131*
- A Novel Nanowire Channel Poly-Si TFT Functioning as Transistor and Non-volatile SONOS Memory. *Chen, S.-C., +, EDL Sept. 2007 809-811*
- A Novel Silicon Photovoltaic Cell Using a Low-Temperature Quasi-Epitaxial Silicon Emitter. *Farrok-Baroughi, M., +, EDL July 2007 575-577*
- A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor. *Na, K.-Y., +, EDL Nov. 2007 1047-1049*
- A Program-Erasable High- κ Hf_{0.3}N_{0.2}O_{0.5} MIS Capacitor With Good Retention. *Yang, H. J., +, EDL Oct. 2007 913-915*
- A Quantum-Mechanical View on the Capacitance of a Silicon p-n Junction. *Hurkx, G. A. M., +, EDL April 2007 312-314*
- A Reliability Model for Low-Temperature Polycrystalline Silicon Thin-Film Transistors. *Chen, C.-Y., +, EDL May 2007 392-394*
- A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels. *Chang, C.-W., +, EDL Nov. 2007 993-995*
- Achieving Low- V_T Ni-FUSI CMOS by Ultra-Thin Dy₂O₃ Capping of Hafnium Silicate Dielectrics. *Veloso, A., +, EDL Nov. 2007 980-983*
- AlGaN Photodetectors Prepared on Si Substrates. *Chiou, Y. Z., +, EDL April 2007 264-266*
- An Unassisted, Low Trigger-, and High Holding-Voltage SCR (uSCR) for On-Chip ESD-Protection Applications. *Lou, L., +, EDL Dec. 2007 1120-1122*
- CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOSFETs Fabricated Using Top-Down Approach. *Rustagi, S. C., +, EDL Nov. 2007 1021-1024*

- Crystallization of Double-Layered Silicon Thin Films by Solid Green Laser Annealing for High-Performance Thin-Film Transistors. *Sugawara, Y., +, EDL May 2007 395-397*
- Degradation of Laser-Crystallized Laterally Grown Poly-Si TFT under Dynamic Stress. *Liu, P.-T., +, EDL May 2007 401-403*
- Demonstration of Low V_t Ni-FUSI N-MOSFETs With SiON Dielectrics by Using a Dy₂O₃ Cap Layer. *Yu, H. Y., +, EDL Nov. 2007 957-959*
- Demonstration of Metal-Gated Low V_t n-MOSFETs Using a Poly-Si/TaN/Dy₂O₃/SiON Gate Stack With a ScaEDL EOT Value. *Yu, H. Y., +, EDL July 2007 656-658*
- Detection of Border Trap Density and Energy Distribution Along the Gate Dielectric Bulk of High- κ Gated MOS Devices. *Lu, C.-Y., +, EDL May 2007 432-435*
- Effect of Gate Dopant Diffusion on Leakage Current in n⁺Poly-Si/HfO₂ and Examination of Leakage Paths by Conducting Atomic Force Microscopy. *Yu, X., +, EDL May 2007 373-375*
- Electrical Compensation of OEDL Luminance Degradation. *Chaji, G. R., +, EDL Dec. 2007 1108-1110*
- Gate Workfunction Engineering in Bulk FinFETs for Sub-50-nm DRAM Cell Transistors. *Park, K.-H., +, EDL Feb. 2007 148-150*
- High-Performance Polycrystalline-Silicon TFT by Heat-Retaining Enhanced Lateral Crystallization. *Liu, P.-T., +, EDL Aug. 2007 722-724*
- High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization. *Tsai, C.-C., +, EDL July 2007 599-602*
- High-Performance Short-Channel Double-Gate Low-Temperature Polysilicon Thin-Film Transistors Using Excimer Laser Crystallization. *Tsai, C.-C., +, EDL Nov. 2007 1010-1013*
- High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric. *Yang, M.-J., +, EDL Oct. 2007 902-904*
- High-Quality Factor Electrolyte Insulator Silicon Capacitor for Wireless Chemical Sensing. *Garcia-Cantón, J., +, EDL Jan. 2007 27-29*
- Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon (Si_{1-y}C_y) Source/Drain Stressors and Its Orientation Dependence. *Ang, K.-W., +, EDL Nov. 2007 996-999*
- Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget. *Loh, W. Y., +, EDL Nov. 2007 984-986*
- Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells. *Carnel, L., +, EDL Oct. 2007 899-901*
- Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With ControlEDL Ge Epitaxial Layer Thickness on Si Substrates. *Oh, J., +, EDL Nov. 2007 1044-1046*
- Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate. *Hu, C.-M., +, EDL Nov. 2007 1000-1003*
- Investigation of Carrier Transport in Germanium MOSFETs With WN/Al₂O₃/AlN Gate Stacks. *Ritenour, A., +, EDL Aug. 2007 746-749*
- Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007 288-291*
- Low-Temperature Polymer-Based Three-Dimensional Silicon Integration. *Kim, S., +, EDL Aug. 2007 706-709*
- Metal-Oxide-High- κ Dielectric-Oxide-Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications. *Hsu, H., +, EDL Nov. 2007 964-966*
- Millimeter-Wave Bandpass Filters by Standard 0.18- μ m CMOS Technology. *Sun, S., +, EDL March 2007 220-222*
- N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. *Liow, T.-Y., +, EDL Nov. 2007 1014-1017*
- NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. *Chen, J., +, EDL Oct. 2007 862-864*
- Negligible Effect of Process-Induced Strain on Intrinsic NBTI Behavior. *Shickova, A., +, EDL March 2007 242-244*
- Normally Off n-Channel GaN MOSFETs on Si Substrates Using an SAG Technique and Ion Implantation. *Kambayashi, H., +, EDL Dec. 2007 1077-1079*
- Numerical Simulation of Low-Frequency Noise in Polysilicon Thin-Film Transistors. *Pichon, L., +, EDL Aug. 2007 716-718*
- Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures. *Singh, N., +, EDL July 2007 558-561*
- On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs. *Su, P., +, EDL July 2007 649-651*
- On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate. *Simoen, E., +, EDL Nov. 2007 987-989*
- Passivation Effects of Aluminum on Polycrystalline Silicon Thin-Film Transistor With Metal-Replaced Junctions. *Zhang, D., +, EDL Feb. 2007 126-128*
- Piezoresistance Coefficients of (100) Silicon nMOSFETs Measured at Low and High (\sim 1.5 GPa) Channel Stress. *Suthram, S., +, EDL Jan. 2007 58-61*
- Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks. *Kawahara, T., +, EDL Oct. 2007 868-870*
- Remarkable Reduction of On-Resistance by Ion Implantation in GaN/AlGaN/GaN HEMTs With Low Gate Leakage Current. *Nomoto, K., +, EDL Nov. 2007 939-941*
- Schottky-Barrier Height Lowering by an Increase of the Substrate Doping in PtSi Schottky Barrier Source/Drain FETs. *Lousberg, G. P., +, EDL Feb. 2007 123-125*
- Stability of Amorphous-Silicon and Nanocrystalline Silicon Thin-Film Transistors Under DC and AC Stress. *Hatzopoulos, A. T., +, EDL Sept. 2007 803-805*
- Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. *Ang, K.-W., +, EDL July 2007 609-612*
- Strained p-Channel FinFETs With Extended Π-Shaped Silicon-Germanium Source and Drain Stressors. *Tan, K.-M., +, EDL Oct. 2007 905-908*
- Strained-Si Channel Super-Self-Aligned Back-Gate/Double-Gate Planar Transistors. *Lin, H., +, EDL June 2007 506-508*
- Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. *Wong, H.-S., +, EDL Aug. 2007 703-705*
- The Origin of Electron Mobility Enhancement in Strained MOSFETs. *Hadjisavvas, G., +, EDL Nov. 2007 1018-1020*
- The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007 207-210*
- Transport Mechanism of SiGe Dot MOS Tunneling Diodes. *Kuo, P.-S., +, EDL July 2007 596-598*
- Trigate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach. *Zaman, R. J., +, EDL Oct. 2007 916-918*
- Ultrahigh-Speed 0.5 V Supply Voltage In_{0.7}Ga_{0.3}As Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*
- Vertically Stacked SiGe Nanowire Array Channel CMOS Transistors. *Fang, W. W., +, EDL March 2007 211-213*
- Sintering**
HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007 42-44*
- Solar cells**
A Novel Silicon Photovoltaic Cell Using a Low-Temperature Quasi-Epitaxial Silicon Emitter. *Farrokh-Baroughi, M., +, EDL July 2007 575-577*
- Solders**
Electromigration Resistant Power Delivery Systems. *Sekar, D. C., +, EDL Aug. 2007 767-769*
- Solenoids**
CMOS-Compatible Micromachined Toroid and Solenoid Inductors With High Q-Factors. *Zine-El-Abidine, I., +, EDL March 2007 226-228*
- Solid lasers**
High-Performance Short-Channel Double-Gate Low-Temperature Polysilicon Thin-Film Transistors Using Excimer Laser Crystallization. *Tsai, C.-C., +, EDL Nov. 2007 1010-1013*
- Solid phase epitaxial growth**
PMOSFET Reliability Study for Direct Silicon Bond (DSB) Hybrid Orientation Technology (HOT). *Huang, Y.-T., +, EDL Sept. 2007 815-817*
- Solids**
On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs. *Simoen, E., +, EDL Oct. 2007 919-921*
- Space-charge limited devices**
Carrier Transport Mechanism in a Nanoparticle-Incorporated Organic Bistable Memory Device. *Lin, H.-T., +, EDL July 2007 569-571*
- Spin coating**
HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007 42-44*
- Spontaneous emission**
A New Degradation Mechanism in High-Voltage SiC Power MOSFETs. *Agarwal, A., +, EDL July 2007 587-589*

Springs

Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. *Koskenvuo, M., +, EDL Nov. 2007 970-972*

Sputter deposition

Room-Temperature Deposited Titanium Silicate Thin Films for MIM Capacitor Applications. *Brassard, D., +, EDL April 2007 261-263*
An Improved Planar Triode With ZnO Nanopin Field Emitters. *Wei, L., +, EDL Aug. 2007 688-690*

Sputter etching

Performance Improvement of Organic Thin-Film Transistors by Electrode/Pentacene Interface Treatment Using a Hydrogen Plasma. *Lee, J.-W., +, EDL May 2007 379-382*

Sputtering

Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor. *Ofuji, M., +, EDL April 2007 273-275*
Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*
Amorphous-SiCBN-Based Metal-Semiconductor-Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007 713-715*

Stability

Power Stability of AlGaN/GaN HFETs at 20 W/mm in the Pinched-Off Operation Mode. *Koudymov, A., +, EDL Jan. 2007 5-7*
Comparison of On-The-Fly, DC I_d-V_g , and Single-Pulse Methods for Evaluating Threshold Voltage Instability in High- κ nMOSFETs. *Heh, D., +, EDL March 2007 245-247*
Negligible Effect of Process-Induced Strain on Intrinsic NBTI Behavior. *Shickova, A., +, EDL March 2007 242-244*

Strain

Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. *Ang, K.-W., +, EDL July 2007 609-612*
Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon (Si_{1-y}C_y) Source/Drain Stressors and Its Orientation Dependence. *Ang, K.-W., +, EDL Nov. 2007 996-999*
Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget. *Loh, W. Y., +, EDL Nov. 2007 984-986*
On the Enhanced Impact Ionization in Uniaxial Strained p-MOSFETs. *Su, P., +, EDL July 2007 649-651*
On the Low-Frequency Noise of pMOSFETs With Embedded SiGe Source/Drain and Fully Silicided Metal Gate. *Simoen, E., +, EDL Nov. 2007 987-989*
Strained p-Channel FinFETs With Extended Π-Shaped Silicon-Germanium Source and Drain Stressors. *Tan, K.-M., +, EDL Oct. 2007 905-908*
The Origin of Electron Mobility Enhancement in Strained MOSFETs. *Hadjisavvas, G., +, EDL Nov. 2007 1018-1020*

Stress effects

A New Degradation Mechanism in High-Voltage SiC Power MOSFETs. *Agarwal, A., +, EDL July 2007 587-589*
Stress Hybridization for Multigate Devices Fabricated on Supercritical Strained-SOI (SC-SSOI). *Collaert, N., +, EDL July 2007 646-648*

Stress measurement

Measurement of Channel Stress Using Gate Direct Tunneling Current in Uniaxially Stressed nMOSFETs. *Hsieh, C.-Y., +, EDL Sept. 2007 818-820*
Young's Modulus Measurements in Standard IC CMOS Processes Using MEMS Test Structures. *Marshall, J. C., +, EDL Nov. 2007 960-963*
A Novel Single Polysilicon EEPROM Cell With a Polyfinger Capacitor. *Na, K.-Y., +, EDL Nov. 2007 1047-1049*
Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic. *Cherenack, K. H., +, EDL Nov. 2007 1004-1006*
Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric. *Kim, T. H., +, EDL Oct. 2007 874-876*
Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability. *Kattamis, A. Z., +, EDL July 2007 606-608*
Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon (Si_{1-y}C_y) Source/Drain Stressors and Its Orientation Dependence. *Ang, K.-W., +, EDL Nov. 2007 996-999*
Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation. *Chang, C.-P., +, EDL Nov. 2007 990-992*

Mobility Modeling and Its Extraction Technique for Manufacturing Strained-Si MOSFETs. *Wang, J.-S., +, EDL Nov. 2007 1040-1043*

N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. *Liow, T.-Y., +, EDL Nov. 2007 1014-1017*

Strained p-Channel FinFETs With Extended Π-Shaped Silicon-Germanium Source and Drain Stressors. *Tan, K.-M., +, EDL Oct. 2007 905-908*

Strontium compounds

High-Temperature Leakage Improvement in Metal-Insulator-Metal Capacitors by Work-Function Tuning. *Chiang, K. C., +, EDL March 2007 235-237*

Use of a High-Work-Function Ni Electrode to Improve the Stress Reliability of Analog SrTiO₃ Metal-Insulator-Metal Capacitors. *Chiang, K. C., +, EDL Aug. 2007 694-696*

Substrates

Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007 288-291*

Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic. *Cherenack, K. H., +, EDL Nov. 2007 1004-1006*

Body Thickness Dependence of Impact Ionization in a Multiple-Gate FinFET. *Han, J.-W., +, EDL July 2007 625-627*

Comparison of GaN HEMTs on Diamond and SiC Substrates. *Felbinger, J. G., +, EDL Nov. 2007 948-950*

Demonstration of Long-Pulse Power Amplification at 1 GHz Using 4H-SiC RF BJTs on a Conductive Substrate. *Zhao, F., +, EDL May 2007 398-400*

Effect of Substrate Parasitic Inductance on Silicon-Based Transmission Lines and On-Chip Inductors. *Huang, F., +, EDL Nov. 2007 1025-1028*

Effects of Sulfur Passivation on Germanium MOS Capacitors With HfON Gate Dielectric. *Xie, R., +, EDL Nov. 2007 976-979*

Extraction of π-Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. *Kang, I. M., +, EDL May 2007 425-427*

Flexible Full-Color AMOEDL on Ultrathin Metal Foil. *Jeong, J. K., +, EDL May 2007 389-391*

Impact of Parameter Variations and Random Dopant Fluctuations on Short-Channel Fully Depleted SOI MOSFETs With Extremely Thin BOX. *Ohtou, T., +, EDL Aug. 2007 740-742*

Improved Electrical Characteristics of Ge-on-Si Field-Effect Transistors With ControlEDL Ge Epitaxial Layer Thickness on Si Substrates. *Oh, J., +, EDL Nov. 2007 1044-1046*

Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate. *Hu, C.-M., +, EDL Nov. 2007 1000-1003*

Normally Off n-Channel GaN MOSFETs on Si Substrates Using an SAG Technique and Ion Implantation. *Kambayashi, H., +, EDL Dec. 2007 1077-1079*

Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007 590-592*

Power Performance of AlGaN/GaN HEMTs Grown on SiC by Ammonia-MBE at 4 and 10 GHz. *Poblenz, C., +, EDL Nov. 2007 945-947*

Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks. *Kawahara, T., +, EDL Oct. 2007 868-870*

Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. *Park, S. K., +, EDL Oct. 2007 877-879*

Solution-Processed n-Type Organic Field-Effect Transistors With High ON/OFF Current Ratios Based on Fullerene Derivatives. *Tiwari, S. P., +, EDL Oct. 2007 880-883*

Substrate Bias Effect Linked to Parasitic Series Resistance in Multiple-Gate SOI MOSFETs. *Rudenko, T., +, EDL Sept. 2007 834-836*

Ultrahigh-Speed 0.5 V Supply Voltage In_{0.7}Ga_{0.3}As Quantum-Well Transistors on Silicon Substrate. *Datta, S., +, EDL Aug. 2007 685-687*

Sulfur

Effective Schottky Barrier Height Reduction Using Sulfur or Selenium at the NiSi/n-Si (100) Interface for Low Resistance Contacts. *Wong, H.-S., +, EDL Dec. 2007 1102-1104*

Superconductive tunnelling

Simulation of Graphene Nanoribbon Field-Effect Transistors. *Fiori, G., +, EDL Aug. 2007 760-762*

Surface acoustic wave filters

SAW Filters Composed of Interdigital Schottky and Ohmic Contacts on AlGaN/GaN Heterostructures. *Shigekawa, N., +, EDL Feb. 2007 90-92*

Surface emitting lasers

1.3- μ m GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Plasmarized and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007 120-122*

Surface morphology

Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*

Surface states

Electrical Characterization of ZrO₂/Si Interface Properties in MOSFETs With ZrO₂ Gate Dielectrics. *Liu, C.-H., +, EDL Jan. 2007 62-64*

Surface treatment

Effects of Sulfur Passivation on Germanium MOS Capacitors With HfON Gate Dielectric. *Xie, R., +, EDL Nov. 2007 976-979*

Switches

Nonvolatile Multilevel Conductance and Memory Effect in Molecule-Based Devices. *Guo, P., +, EDL July 2007 572-574*

OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors. *Chen, J. F., +, EDL Nov. 2007 1033-1035*

Active Pixel Concept Combined With Organic Photodiode for Imaging Devices. *Tedde, S., +, EDL Oct. 2007 893-895*

Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays. *Mantegazza, D., +, EDL Oct. 2007 865-867*

Current-Dependent Switching Characteristics of PI-Diphenyl Carbamyl Films. *Kim, M., +, EDL Nov. 2007 967-969*

Switching

Effect of Top Electrode Material on Resistive Switching Properties of ZrO₂ Film Memory Devices. *Lin, C.-Y., +, EDL May 2007 366-368*

Switching circuits

A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry. *Guo, X., +, EDL Oct. 2007 887-889*

System-on-chip

Ferrite-Integrated On-Chip Inductors for RF ICs. *Yang, C., +, EDL July 2007 652-655*

Low-Temperature Polymer-Based Three-Dimensional Silicon Integration. *Kim, S., +, EDL Aug. 2007 706-709*

T

Tantalum compounds

High-Temperature Leakage Improvement in Metal–Insulator–Metal Capacitors by Work-Function Tuning. *Chiang, K. C., +, EDL March 2007 235-237*

Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*

Border-Trap Characterization in High- κ Strained-Si MOSFETs. *Maji, D., +, EDL Aug. 2007 731-733*

Effective Work Function Engineering of Ta_xC_y Metal Gate on Hf-Based Dielectrics. *Yen, F. Y., +, EDL March 2007 201-203*

Fluorine Passivation in Gate Stacks of Poly-Si/TaN/HfO₂ (and HfSiON/HfO₂)/Si Through Gate Ion Implantation. *Zhang, M. H., +, EDL March 2007 195-197*

Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007 288-291*

Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*

Observation of Metal-Layer Stress on Si Nanowires in Gate-All-Around High- κ /Metal-Gate Device Structures. *Singh, N., +, EDL July 2007 558-561*

Technology CAD (electronics)

Experimental and TCAD Investigation of the Two Components of the Impact Ionization MOSFET (IMOS) Switching. *Mayer, F., +, EDL July 2007 619-621*

Telegraphy

Giant Random Telegraph Signals in Nanoscale Floating-Gate Devices. *Fantini, P., +, EDL Dec. 2007 1114-1116*

Temperature

Effects of Measurement Temperature on NBTI. *Zhang, J. F., +, EDL April 2007 298-300*

Temperature dependence

Solution-Processed n-Type Organic Field-Effect Transistors With High ON/OFF Current Ratios Based on Fullerene Derivatives. *Tiwari, S. P., +, EDL Oct. 2007 880-883*

Temperature measurement

Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*

Comparison of GaN HEMTs on Diamond and SiC Substrates. *Felbinger, J. G., +, EDL Nov. 2007 948-950*

Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP. *Kim, J.-S., +, EDL Oct. 2007 896-898*

Impact of Preferential P-Diffusion Along the Grain Boundaries on Fine-Grained Polysilicon Solar Cells. *Carnel, L., +, EDL Oct. 2007 899-901*

Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET. *Rustagi, S. C., +, EDL Oct. 2007 909-912*

Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids. *Tsai, C.-T., +, EDL July 2007 584-586*

Low-Temperature Transport Characteristics and Quantum-Confinement Effects in Gate-All-Around Si-Nanowire N-MOSFET. *Rustagi, S. C., +, EDL Oct. 2007 909-912*

Temperature-Dependent Characteristics of Cylindrical Gate-All-Around Twin Silicon Nanowire MOSFETs (TSNWFTs). *Cho, K. H., +, EDL Dec. 2007 1129-1131*

Tensile strain

The Origin of Electron Mobility Enhancement in Strained MOSFETs. *Hadjisavvas, G., +, EDL Nov. 2007 1018-1020*

Impact of Local Strain From Selective Epitaxial Germanium With Thin Si/SiGe Buffer on High-Performance p-i-n Photodetectors With a Low Thermal Budget. *Loh, W. Y., +, EDL Nov. 2007 984-986*

Tensile strength

Piezoresistance Coefficients of (100) Silicon nMOSFETs Measured at Low and High (\sim 1.5 GPa) Channel Stress. *Suthram, S., +, EDL Jan. 2007 58-61*

A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007 111-113*

Tensile-Strained Germanium CMOS Integration on Silicon. *Zang, H., +, EDL Dec. 2007 1117-1119*

Terbium

Yttrium- and Terbium-Based Interlayer on SiO₂ and HfO₂ Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. *Lim, A. E.-J., +, EDL June 2007 482-485*

Thermal conductivity

Enhanced Thermal Efficiency in Phase-Change Memory Cell by Double GST Thermally Confined Structure. *Chao, D.-S., +, EDL Oct. 2007 871-873*

Thermal diffusion

Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*

Thermal management (packaging)

Implementation of Side Effects in Thermal Characterization of RGB Full-Color EDLs. *Kim, L., +, EDL July 2007 578-580*

Thermal resistance

Implementation of Side Effects in Thermal Characterization of RGB Full-Color EDLs. *Kim, L., +, EDL July 2007 578-580*

Thermal stability

Arsenic Junction Thermal Stability and High-Dose Boron-Pocket Activation During SPER in nMOS Transistors. *Severi, S., +, EDL March 2007 198-200*

A Reliability Model for Low-Temperature Polycrystalline Silicon Thin-Film Transistors. *Chen, C.-Y., +, EDL May 2007 392-394*

Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability. *Kattamis, A. Z., +, EDL July 2007 606-608*

Effects of Sulfur Passivation on Germanium MOS Capacitors With HfON Gate Dielectric. *Xie, R., +, EDL Nov. 2007 976-979*

Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. *Aoulaiche, M., +, EDL July 2007 613-615*

Thin film capacitors

High-Performance Metal–Insulator–Metal Capacitors Using Amorphous BaSm₂Ti₄O₁₂ Thin Film. *Jeong, Y. H., +, EDL Jan. 2007 17-20*

Thin film circuits

A Novel LTIPS-TFT Pixel Circuit Compensating for TFT Threshold-Voltage Shift and OEDL Degradation for AMOEDL. *Lin, C.-L., +, EDL Feb. 2007 129-131*

Electrically Bistable Thin-Film Device Based on PVK and GNPs Polymer Material. *Song, Y., +, EDL Feb. 2007 107-110*

Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor. *Ofuji, M., +, EDL April 2007 273-275*

Thin film devices

- Millimeter-Wave Bandpass Filters by Standard 0.18- μm CMOS Technology. *Sun, S., +, EDL March 2007* 220-222
 Room-Temperature Deposited Titanium Silicate Thin Films for MIM Capacitor Applications. *Brassard, D., +, EDL April 2007* 261-263

Thin film inductors

- Ferrite-Integrated On-Chip Inductors for RF ICs. *Yang, C., +, EDL July 2007* 652-655

Thin film transistors

- A Novel Four-Mask-Step Low-Temperature Polysilicon Thin-Film Transistor With Self-Aligned Raised Source/Drain (SARSD). *Chang, K. M., +, EDL Jan. 2007* 39-41
 A Novel LTPS-TFT Pixel Circuit Compensating for TFT Threshold-Voltage Shift and OEDL Degradation for AMOEDL. *Lin, C.-L., +, EDL Feb. 2007* 129-131
 A Novel Low-Temperature Polysilicon Thin-Film Transistors With a Self-Aligned Gate and Raised Source/Drain Formed by the Damascene Process. *Chang, K. M., +, EDL Sept. 2007* 806-808
 A Novel Nanowire Channel Poly-Si TFT Functioning as Transistor and Non-volatile SONOS Memory. *Chen, S.-C., +, EDL Sept. 2007* 809-811
 A Reliability Model for Low-Temperature Polycrystalline Silicon Thin-Film Transistors. *Chen, C.-Y., +, EDL May 2007* 392-394
 A Simple Spacer Technique to Fabricate Poly-Si TFTs With 50-nm Nanowire Channels. *Chang, C.-W., +, EDL Nov. 2007* 993-995
 A Simple and Effective Approach to Improve the Output Linearity of Switched-Current AMOEDL Pixel Circuitry. *Guo, X., +, EDL Oct. 2007* 887-889
 Active Pixel Concept Combined With Organic Photodiode for Imaging Devices. *Tedde, S., +, EDL Oct. 2007* 893-895
 Amorphous-Silicon Thin-Film Transistors Fabricated at 300 °C on a Free-Standing Foil Substrate of Clear Plastic. *Cherenack, K. H., +, EDL Nov. 2007* 1004-1006
 Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric. *Kim, T. H., +, EDL Oct. 2007* 874-876
 Crystallization of Double-Layered Silicon Thin Films by Solid Green Laser Annealing for High-Performance Thin-Film Transistors. *Sugawara, Y., +, EDL May 2007* 395-397
 Current-Voltage Characteristics of Long-Channel Nanobundle Thin-Film Transistors: A “Bottom-Up” Perspective. *Pimparkar, N., +, EDL Feb. 2007* 157-160
 Defect Passivation by Selenium-Ion Implantation for Poly-Si Thin Film Transistors. *Lai, J., +, EDL Aug. 2007* 725-727
 Degradation of Laser-Crystallized Laterally Grown Poly-Si TFT under Dynamic Stress. *Liu, P.-T., +, EDL May 2007* 401-403
 Effect of SiN_x Gate Dielectric Deposition Power and Temperature on a-Si:H TFT Stability. *Kattamis, A. Z., +, EDL July 2007* 606-608
 Embedded TFT NAND-Type Nonvolatile Memory in Panel. *Chen, H.-T., +, EDL June 2007* 499-501
 Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor. *Ojiji, M., +, EDL April 2007* 273-275
 Flexible Full-Color AMOEDL on Ultrathin Metal Foil. *Jeong, J. K., +, EDL May 2007* 389-391
 HgTe Nanocrystal-Based Thin-Film Transistors Fabricated on Glass Substrates. *Kim, H., +, EDL Jan. 2007* 42-44
 High-Performance Polycrystalline-Silicon TFT by Heat-Retaining Enhanced Lateral Crystallization. *Liu, P.-T., +, EDL Aug. 2007* 722-724
 High-Performance Self-Aligned Bottom-Gate Low-Temperature Poly-Silicon Thin-Film Transistors With Excimer Laser Crystallization. *Tsai, C.-C., +, EDL July 2007* 599-602
 High-Performance Short-Channel Double-Gate Low-Temperature Polysilicon Thin-Film Transistors Using Excimer Laser Crystallization. *Tsai, C.-C., +, EDL Nov. 2007* 1010-1013
 High-Performance and Low-Temperature-Compatible p-Channel Polycrystalline-Silicon TFTs Using Hafnium-Silicate Gate Dielectric. *Yang, M.-J., +, EDL Oct. 2007* 902-904
 Impact of Channel Dangling Bonds on Reliability Characteristics of Flash Memory on Poly-Si Thin Films. *Lin, Y.-H., +, EDL April 2007* 267-269
 Improved Electrical Characteristics and Reliability of MILC Poly-Si TFTs Using Fluorine-Ion Implantation. *Chang, C.-P., +, EDL Nov. 2007* 990-992
 Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs. *Sasa, S., +, EDL July 2007* 543-545
 Improving the Electrical Properties of NILC Poly-Si Films Using a Gettering Substrate. *Hu, C.-M., +, EDL Nov. 2007* 1000-1003

Limits of Performance Gain of Aligned CNT Over Randomized Network: Theoretical Predictions and Experimental Validation. *Pimparkar, N., +, EDL July 2007* 593-595

Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids. *Tsai, C.-T., +, EDL July 2007* 584-586

Numerical Simulation of Low-Frequency Noise in Polysilicon Thin-Film Transistors. *Pichon, L., +, EDL Aug. 2007* 716-718

Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007* 590-592

On-Pixel Voltage-Controlled Oscillator in Amorphous-Silicon Technology for Digital Imaging Applications. *Sanaie, G., +, EDL Jan. 2007* 33-35

Passivation Effects of Aluminum on Polycrystalline Silicon Thin-Film Transistor With Metal-Replaced Junctions. *Zhang, D., +, EDL Feb. 2007* 126-128

Performance Improvement of Organic Thin-Film Transistors by Electrode/Pentacene Interface Treatment Using a Hydrogen Plasma. *Lee, J.-W., +, EDL May 2007* 379-382

Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. *Park, S. K., +, EDL Oct. 2007* 877-879

Stability of Amorphous-Silicon and Nanocrystalline Silicon Thin-Film Transistors Under DC and AC Stress. *Hatzopoulos, A. T., +, EDL Sept. 2007* 803-805

Thin films

Electrical Compensation of OEDL Luminance Degradation. *Chaji, G. R., +, EDL Dec. 2007* 1108-1110

Field-Controllable Flexible Strain Sensors Using Pentacene Semiconductors. *Ji, T., +, EDL Dec. 2007* 1105-1107

Threshold voltage

Low-Temperature Passivation of Amorphous-Silicon Thin-Film Transistors With Supercritical Fluids. *Tsai, C.-T., +, EDL July 2007* 584-586

Anomalous Cells With Low Reset Resistance in Phase-Change-Memory Arrays. *Mantegazza, D., +, EDL Oct. 2007* 865-867

Constant Bias Stress Effects on Threshold Voltage of Pentacene Thin-Film Transistors Employing Polyvinylphenol Gate Dielectric. *Kim, T. H., +, EDL Oct. 2007* 874-876

Experimental Evaluation of Effects of Channel Doping on Characteristics of FinFETs. *Endo, K., +, EDL Dec. 2007* 1123-1125

Monolithically Integrated Logic NOR Gate Based on GaAs/AlGaAs Three-Terminal Junctions. *Muller, C. R., +, EDL Oct. 2007* 859-861

Time-domain reflectometry

Time-Domain-Reflectometry for Capacitance–Voltage Measurement With Very High Leakage Current. *Wang, Y., +, EDL Jan. 2007* 51-53

Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry. *Wang, Y., +, EDL April 2007* 279-281

Error and Correction in Capacitance–Voltage Measurement Due to the Presence of Source and Drain. *Wang, Y., +, EDL July 2007* 640-642

Tin

Reduction of Threshold Voltage by Diffusion Control Technique in p-MISFETs Using Poly-Si/TiN/HfSiON Gate Stacks. *Kawahara, T., +, EDL Oct. 2007* 868-870

Tin compounds

Observation of Threshold-Voltage Instability in Single-Crystal Silicon TFTs on Flexible Plastic Substrate. *Yuan, H.-C., +, EDL July 2007* 590-592

Good High-Temperature Stability of TiN/Al₂O₃/WN/TiN Capacitors. *Pan, T.-M., +, EDL Nov. 2007* 954-956

Titanium

Effect of Top Electrode Material on Resistive Switching Properties of ZrO₂ Film Memory Devices. *Lin, C.-Y., +, EDL May 2007* 366-368

Titanium alloys

Effect of Gate Sinking on the Device Performance of the InGaP/AlGaAs/InGaAs Enhancement-Mode PHEMT. *Chu, L. H., +, EDL Feb. 2007* 82-85

Titanium compounds

High- κ Al₂O₃–HfTiO Nanolaminates With Less Than 0.8-nm Equivalent Oxide Thickness. *Mikhelashvili, V., +, EDL Jan. 2007* 24-26

Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007* 486-488

Cointegration of High-Performance Tied-Gate Three-Terminal FinFETs and Variable Threshold-Voltage Independent-Gate Four-Terminal FinFETs With Asymmetric Gate-Oxide Thicknesses. *Liu, Y., +, EDL June 2007* 517-519

High Mobility Strained Ge pMOSFETs With High- κ /Metal Gate. *Nicholas, G., +, EDL Sept. 2007* 825-827

Low-Frequency Noise Assessment of Silicon Passivated Ge pMOSFETs With TiN/TaN/HfO₂ Gate Stack. *Guo, W., +, EDL April 2007* 288-291
 Room-Temperature Deposited Titanium Silicate Thin Films for MIM Capacitor Applications. *Brassard, D., +, EDL April 2007* 261-263
 The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007* 207-210

Transconductance

Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs. *Sasa, S., +, EDL July 2007* 543-545
 Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al₂O₃ as Gate Dielectric. *Xuan, Y., +, EDL Nov. 2007* 935-938

Transient analysis

Study of the Erase Mechanism of MANOS (Metal/Al₂O₃/SiN/SiO₂/Si) Device. *Lai, S., +, EDL July 2007* 643-645

Transistors

Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. *Ang, K.-W., +, EDL July 2007* 609-612
 OFF-State Avalanche-Breakdown-Induced ON-Resistance Degradation in Lateral DMOS Transistors. *Chen, J. F., +, EDL Nov. 2007* 1033-1035
 n⁺/p⁺ Gate Bulk FinFETs With Locally Separated Channel Structure for Sub-50-nm DRAM Cell Transistors. *Jung, H.-A.-R., +, EDL Dec. 2007* 1126-1128
 CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOSFETs Fabricated Using Top-Down Approach. *Rustagi, S. C., +, EDL Nov. 2007* 1021-1024
 Electrical Compensation of OEDL Luminance Degradation. *Chaji, G. R., +, EDL Dec. 2007* 1108-1110
 Enhanced Hole Mobility and Reliability of Panel Epi-Like Silicon Transistors Using Backside Green Laser Activation. *Lin, Y.-T., +, EDL Sept. 2007* 790-792
 Field-Controllable Flexible Strain Sensors Using Pentacene Semiconductors. *Ji, T., +, EDL Dec. 2007* 1105-1107
 High-Current-Gain InP/GaInP/GaAsSb/InP DHBTs With $f_T = 436$ GHz. *Liu, H. G., +, EDL Oct. 2007* 852-855
 Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon (Si_{1-y}C_y) Source/Drain Stressors and Its Orientation Dependence. *Ang, K.-W., +, EDL Nov. 2007* 996-999
 Metal-Oxide-High- κ Dielectric-Oxide-Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications. *Hsu, H., +, EDL Nov. 2007* 964-966
 Monolithically Integrated Logic NOR Gate Based on GaAs/AlGaAs Three-Terminal Junctions. *Muller, C. R., +, EDL Oct. 2007* 859-861
 On the Apparent Mobility in Nanometric n-MOSFETs. *Zilli, M., +, EDL Nov. 2007* 1036-1039
 On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs. *Simoen, E., +, EDL Oct. 2007* 919-921
 Solution-Processed n-Type Organic Field-Effect Transistors With High ON/OFF Current Ratios Based on Fullerene Derivatives. *Tiwari, S. P., +, EDL Oct. 2007* 880-883
 Trigate FET Device Characteristics Improvement Using a Hydrogen Anneal Process With a Novel Hard Mask Approach. *Zaman, R. J., +, EDL Oct. 2007* 916-918

Transmission electron microscopy

A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007* 111-113
 Electron Transport in Strained-Silicon Directly on Insulator Ultrathin-Body n-MOSFETs With Body Thickness Ranging From 2 to 25 nm. *Gomez, L., +, EDL April 2007* 285-287
 Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007* 539-542
 The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007* 207-210

Trigger circuits

An Unassisted, Low Trigger-, and High Holding-Voltage SCR (uSCR) for On-Chip ESD-Protection Applications. *Lou, L., +, EDL Dec. 2007* 1120-1122

Triodes

Carbon Nanotube-Based Triode Field Emission Lamps Using Metal Meshes With Spacers. *Cho, W.-S., +, EDL May 2007* 386-388

An Improved Planar Triode With ZnO Nanopin Field Emitters. *Wei, L., +, EDL Aug. 2007* 688-690

Tungsten compounds

Improved Ge Surface Passivation With Ultrathin SiO_X Enabling High-Mobility Surface Channel pMOSFETs Featuring a HfSiO/WN Gate Stack. *Joshi, S., +, EDL April 2007* 308-311

Tuning

Schottky-Barrier Height Tuning by Means of Ion Implantation Into Pre-formed Silicide Films Followed by Drive-In Anneal. *Zhang, Z., +, EDL July 2007* 565-568

Tunnel diodes

Temperature Dependence of High Frequency and Noise Performance of Sb-Heterostructure Millimeter-Wave Detectors. *Su, N., +, EDL May 2007* 336-339

Transport Mechanism of SiGe Dot MOS Tunneling Diodes. *Kuo, P.-S., +, EDL July 2007* 596-598

Tunnel transistors

Tunneling Field-Effect Transistors (TFETs) With Subthreshold Swing (SS) Less Than 60 mV/dec. *Choi, W. Y., +, EDL Aug. 2007* 743-745

Tunnelling

The Effects of the Injection-Channel Velocity on the Gate Leakage Current of Nanoscale MOSFETs. *Mao, L., EDL Feb. 2007* 161-163

Correction to "Revision of Tunneling Field-Effect Transistor in Standard CMOS Technologies". *Nirschl, Th., +, EDL April 2007* 315-315

Detection of Border Trap Density and Energy Distribution Along the Gate Dielectric Bulk of High- κ Gated MOS Devices. *Lu, C.-Y., +, EDL May 2007* 432-435

Measurement of Channel Stress Using Gate Direct Tunneling Current in Uniaxially Stressed nMOSFETs. *Hsieh, C.-Y., +, EDL Sept. 2007* 818-820

Study of the Erase Mechanism of MANOS (Metal/Al₂O₃/SiN/SiO₂/Si) Device. *Lai, S., +, EDL July 2007* 643-645

The Effect of Trapped Charge Distributions on Data Retention Characteristics of NAND Flash Memory Cells. *Park, M., +, EDL Aug. 2007* 750-752

The Preparation of Nanocrystalline Silicon by Plasma-Enhanced Hydrogenation for the Fabrication of Light-Emitting Diodes. *Jamei, M., +, EDL March 2007* 207-210

U

UHF bipolar transistors

Demonstration of Long-Pulse Power Amplification at 1 GHz Using 4H-SiC RF BJTs on a Conductive Substrate. *Zhao, F., +, EDL May 2007* 398-400

UHF integrated circuits

Symmetric Vertical Parallel Plate Capacitors for On-Chip RF Circuits in 65-nm SOI Technology. *Kim, D., +, EDL July 2007* 616-618

High-Q Integrated Inductor Using Post-CMOS Selectively Grown Porous Silicon (SGPS) Technique for RFIC Applications. *Li, C., +, EDL Aug. 2007* 763-766

Ultraviolet lithography

Fabrication of 0.15- μ m Γ -Shaped Gate In_{0.52}Al_{0.48}As/In_{0.6}Ga_{0.4}As Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007* 93-95

V

VLSI

On the Control of Short-Channel Effect for MOSFETs With Reverse Halo Implantation. *Zhu, H., +, EDL Feb. 2007* 168-170

Valence bands

Valence Band Offset Measurements on Thin Silicon-on-Insulator MOSFETs. *van der Steen, J.-L. P. J., +, EDL Sept. 2007* 821-824

Varactors

A 0.2-W Heterostructure Barrier Varactor Frequency Tripler at 113 GHz. *Vukusic, J., +, EDL May 2007* 340-342

Vertical cavity surface emitting lasers

GaN-Based High-Q Vertical-Cavity Light-Emitting Diodes. *Lu, T.-C., +, EDL Oct. 2007* 884-886

Voltage control

Demonstration of Asymmetric Gate-Oxide Thickness Four-Terminal FinFETs Having Flexible Threshold Voltage and Good Subthreshold Slope. *Masahara, M., +, EDL March 2007* 217-219

- An Unassisted, Low Trigger-, and High Holding-Voltage SCR (uSCR) for On-Chip ESD-Protection Applications. *Lou, L., +, EDL Dec. 2007 1120-1122*
- Experimental Evaluation of Effects of Channel Doping on Characteristics of FinFETs. *Endo, K., +, EDL Dec. 2007 1123-1125*
- High-Gain Low Turn-On Voltage AlGaN/GaAsNSb/GaAs Heterojunction Bipolar Transistors Grown by Molecular Beam Epitaxy. *Lew, K. L., +, EDL Dec. 2007 1083-1085*
- Voltage measurement**
- A High Schottky-Barrier of 1.1 eV Between Al and S-Passivated p-Type Si(100) Surface. *Song, G., +, EDL Jan. 2007 71-73*
 - Accurate Series-Resistance Extraction From Capacitor Using Time Domain Reflectometry. *Wang, Y., +, EDL April 2007 279-281*
 - Effect of Load Distribution on the Voltage Drop and the Luminance Variation in an AC-PDP. *Kim, J.-S., +, EDL Oct. 2007 896-898*
 - Extraction of the Threshold-Voltage Shift by the Single-Pulse Technique. *Heh, D., +, EDL Aug. 2007 734-736*
 - Metal-Oxide-High- κ Dielectric-Oxide-Semiconductor (MOHOS) Capacitors and Field-Effect Transistors for Memory Applications. *Hsu, H., +, EDL Nov. 2007 964-966*
 - On the Origin of the Excess Low-Frequency Noise in Graded-Channel Silicon-on-Insulator nMOSFETs. *Simoen, E., +, EDL Oct. 2007 919-921*
 - Time-Domain-Reflectometry for Capacitance-Voltage Measurement With Very High Leakage Current. *Wang, Y., +, EDL Jan. 2007 51-53*
- Voltage-controlEDL oscillators**
- On-Pixel Voltage-ControlEDL Oscillator in Amorphous-Silicon Technology for Digital Imaging Applications. *Sanaie, G., +, EDL Jan. 2007 33-35*
- Volterra series**
- A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis. *Srinidhi, E. R., +, EDL May 2007 343-345*
- Wafer bonding**
- DC Characteristics of AlGaN/GaAs/GaN HBTs Formed by Direct Wafer Fusion. *Lian, C., +, EDL Jan. 2007 8-10*
 - Low-Temperature Polymer-Based Three-Dimensional Silicon Integration. *Kim, S., +, EDL Aug. 2007 706-709*
- Wide band gap semiconductors**
- Power Stability of AlGaN/GaN HFETs at 20 W/mm in the Pinched-Off Operation Mode. *Koudymov, A., +, EDL Jan. 2007 5-7*
 - 1- μ m Enhancement Mode GaAs N-Channel MOSFETs With Transconductance Exceeding 250 mS/mm. *Rajagopalan, K., +, EDL Feb. 2007 100-102*
 - 1.3- μ m GaInAsN Vertical-Cavity Surface-Emitting Lasers by Oxide-Planarized and Surface-Relief Processes for Single-Mode Operation. *Lee, F.-M., +, EDL Feb. 2007 120-122*
 - 1000-V 9.1-m Ω · cm² Normally Off 4H-SiC Lateral RESURF JFET for Power Integrated Circuit Applications. *Zhang, Y., +, EDL May 2007 404-407*
 - A New Method for Identification and Minimization of Distortion Sources in GaN HEMT Devices Based on Volterra Series Analysis. *Srinidhi, E. R., +, EDL May 2007 343-345*
 - A Novel Dilute Antimony Channel In_{0.2}Ga_{0.8}AsSb/GaAs HEMT. *Su, K.-H., +, EDL Feb. 2007 96-99*
 - AlGaN Photodetectors Prepared on Si Substrates. *Chiou, Y. Z., +, EDL April 2007 264-266*
 - AlGaN/GaN HEMTs With Thin InGaN Cap Layer for Normally Off Operation. *Mizutani, T., +, EDL July 2007 549-551*
 - Amorphous-SiCBN-Based Metal-Semiconductor-Metal Photodetector for High-Temperature Applications. *Vijayakumar, A., +, EDL Aug. 2007 713-715*
 - Compact Model of Current Collapse in Heterostructure Field-Effect Transistors. *Koudymov, A., +, EDL May 2007 332-335*
 - DC Characteristics of AlGaN/GaAs/GaN HBTs Formed by Direct Wafer Fusion. *Lian, C., +, EDL Jan. 2007 8-10*
 - Demonstration of Long-Pulse Power Amplification at 1 GHz Using 4H-SiC RF BJTs on a Conductive Substrate. *Zhao, F., +, EDL May 2007 398-400*
 - Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. *Ang, K.-W., +, EDL April 2007 301-304*
- Fabrication of 0.15- μ m Γ-Shaped Gate In_{0.52}Al_{0.48}As/In_{0.6}Ga_{0.4}As Metamorphic HEMTs Using DUV Lithography and Tilt Dry-Etching Technique. *Lien, Y.-C., +, EDL Feb. 2007 93-95*
- High-Temperature Operation of AlGaN/GaN HEMTs Direct-CoupEDL FET Logic (DCFL) Integrated Circuits. *Cai, Y., +, EDL May 2007 328-331*
- High-Voltage Self-Aligned p-Channel DMOS-IGBTs in 4H-SiC. *Sui, Y., +, EDL Aug. 2007 728-730*
- Hot-Phonon Effect on the Electrothermal Behavior of Submicrometer III-V HEMTs. *Sadi, T., +, EDL Sept. 2007 787-789*
- Impact of CF₄ Plasma Treatment on GaN. *Chu, R., +, EDL Sept. 2007 781-783*
- Improved Reliability and ESD Characteristics of Flip-Chip GaN-Based EDLs With Internal Inverse-Parallel Protection Diodes. *Shei, S.-C., +, EDL May 2007 346-349*
- ON-Resistance Modulation of High Voltage GAN HEMT on Sapphire Substrate Under High Applied Voltage. *Saito, W., +, EDL Aug. 2007 676-678*
- RF Power Measurements of InAlN/GaN Unstrained HEMTs on SiC Substrates at 10 GHz. *Jessen, G. H., +, EDL May 2007 354-356*
- RF-Enhanced Contacts to Wide-Bandgap Devices. *Simin, G., +, EDL Jan. 2007 2-4*
- Silicon Dioxide-Encapsulated High-Voltage AlGaN/GaN HFETs for Power-Switching Applications. *Tipirneni, N., +, EDL Sept. 2007 784-786*
- Submicrometer Copper T-Gate AlGaN/GaN HFETs: The Gate Metal Stack Effect. *Sun, H. F., +, EDL May 2007 350-353*
- Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. *Kuball, M., +, EDL Feb. 2007 86-89*
- Wireless sensor networks**
- High-Quality Factor Electrolyte Insulator Silicon Capacitor for Wireless Chemical Sensing. *Garcia-Canton, J., +, EDL Jan. 2007 27-29*
- Wires**
- CMOS Inverter Based on Gate-All-Around Silicon-Nanowire MOSFETs Fabricated Using Top-Down Approach. *Rustagi, S. C., +, EDL Nov. 2007 1021-1024*
- Work function**
- Fermi-Level Pinning in Nanocrystal Memories. *Hou, T.-H., +, EDL Feb. 2007 103-106*
 - Achieving Conduction Band-Edge Effective Work Functions by La₂O₃ Capping of Hafnium Silicates. *Ragnarsson, L.-A., +, EDL June 2007 486-488*
 - CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007 831-833*
 - Characteristics of Ni/Gd FUSI for NMOS Gate Electrode Applications. *Lee, B., +, EDL July 2007 555-557*
 - Gate Workfunction Engineering in Bulk FinFETs for Sub-50-nm DRAM Cell Transistors. *Park, K.-H., +, EDL Feb. 2007 148-150*
 - High-Temperature Stable HfLaON p-MOSFETs With High-Work-Function Ir₃Si Gate. *Wu, C. H., +, EDL April 2007 292-294*
 - Novel Single Polysilicon EEPROM Cell With Dual Work Function Floating Gate. *Na, K.-Y., +, EDL Feb. 2007 151-153*
- X**
- X-ray diffraction**
- A Novel Strain Method for Enhancement of 90-nm Node and Beyond FUSI-Gated CMOS Performance. *Lin, C.-T., +, EDL Feb. 2007 111-113*
 - Metamorphic Heterostructure InP/GaAsSb/InP HBTs on GaAs Substrates by MOCVD. *Zhou, W., +, EDL July 2007 539-542*
- X-ray imaging**
- On-Pixel Voltage-ControlEDL Oscillator in Amorphous-Silicon Technology for Digital Imaging Applications. *Sanaie, G., +, EDL Jan. 2007 33-35*
- X-ray photoelectron spectra**
- Effect of F₂ Postmetallization Annealing on the Electrical and Reliability Characteristics of HfSiO Gate Dielectric. *Chang, M., +, EDL Jan. 2007 21-23*
- Y**
- Yagi antenna arrays**
- 100-GHz Quasi-Yagi Antenna in Silicon Technology. *Sun, M., +, EDL May 2007 455-457*

Ytterbium

CMOS Dual-Work-Function Engineering by Using Implanted Ni-FUSI. *Lin, C.-T., +, EDL Sept. 2007* 831-833

Ytterbium compounds

N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide. *Lee, R. T. P., +, EDL Feb. 2007* 164-167

Yttrium

Yttrium- and Terbium-Based Interlayer on SiO_2 and HfO_2 Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. *Lim, A. E.-J., +, EDL June 2007* 482-485

Yttrium compounds

Ferrite-Integrated On-Chip Inductors for RF ICs. *Yang, C., +, EDL July 2007* 652-655

Z**Zinc**

Improved Stability of High-Performance ZnO/ZnMgO Hetero-MISFETs. *Sasa, S., +, EDL July 2007* 543-545

Zinc alloys

Resistive Switching Mechanism in $\text{Zn}_x\text{Cd}_{1-x}\text{S}$ Nonvolatile Memory Devices. *Wang, Z., +, EDL Jan. 2007* 14-16

Zinc compounds

An Improved Planar Triode With ZnO Nanopin Field Emitters. *Wei, L., +, EDL Aug. 2007* 688-690

Zirconium compounds

Electrical Characterization of ZrO_2/Si Interface Properties in MOSFETs With ZrO_2 Gate Dielectrics. *Liu, C.-H., +, EDL Jan. 2007* 62-64

Effect of Top Electrode Material on Resistive Switching Properties of ZrO_2 Film Memory Devices. *Lin, C.-Y., +, EDL May 2007* 366-368