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This index covers all technical items - papers, correspondence, reviews, etc. - that appeared in this periodical during 1995, and items from previous years that were commented upon or corrected in 1995.

The Author Index contains the primary entry for each item, listed under the first author's name, and cross-references from all coauthors. The Subject Index contains several entries for each item under appropriate subject headings, and subject cross-references.

It is always necessary to refer to the primary entry in the Author Index for the exact title, coauthors, and comments/corrections.

AUTHOR INDEX

A

- Abdulsabirov, R.Y.**, *see* Sarukura, N., *J-STQE Sep 95* 792-804
Ackerman, D.A., G.E. Shtengel, M.S. Hybertsen, P.A. Morton, R.F. Kazarinov, T. Tanbun-Ek, and R.A. Logan. Analysis of gain in determining T_0 in 1.3 μm semiconductor lasers; *J-STQE Jun 95* 250-263
Adachi, A., *see* Shima, A., *J-STQE Jun 95* 102-109
Adams, A.R., *see* Meney, A.T., *J-STQE Jun 95* 697-706
Ahmed, K.A., Kai Choong Chan, and Hai-Feng Liu. Femtosecond pulse generation from semiconductor lasers using the soliton-effect compression technique; *J-STQE Jun 95* 592-600
Ahmed, Z., and R.S. Tucker. Small-signal IM response of grating-terminated external cavity semiconductor lasers; *J-STQE Jun 95* 505-515
Ahn Doyeol, *see* Doyeol Ahn, *J-STQE Jun 95* 301-307
Albrechtsen, O., *see* Salzman, J., *J-STQE Jun 95* 346-355
Allerman, A.A., *see* Smith, P.B., *J-STQE Dec 95* 1011-1016
Amann, M.-C., B. Borchert, S. Illek, and T. Wolf. Distributed forward coupled (DFC) laser; *J-STQE Jun 95* 387-395
Andersen, D.R., *see* Hillmer, H., *J-STQE Jun 95* 150-164
Aoki, M., *see* Okai, M., *J-STQE Jun 95* 461-465
Arnold, J.M., *see* Khalpin, V.B., *J-STQE Jun 95* 523-527
Arnold, W.H., P. Hagelstein, M. Obara, and R. Waynant. Introduction to the issue on short wavelength lasers and applications; *J-STQE Sep 95* 765-767
Arora, B.M., *see* Ghosh, S., *J-STQE Dec 95* 1108-1112
Aspnes, D.E. Optical approaches to the determination of composition of semiconductor alloys during epitaxy; *J-STQE Dec 95* 1054-1063
Astfalk, G., *see* Carver, G.E., *J-STQE Dec 95* 980-986
Avrutin, E.A., *see* Portnoi, E.L., *J-STQE Jun 95* 451-460
Avrutin, E.A., *see* Martins-Filho, J.F., *J-STQE Jun 95* 539-551
Awschalom, D.D., *see* Crooker, S.A., *J-STQE Dec 95* 1082-1092
Azouz, A., N. Stelmakh, P. Langlois, J.-M. Lourtioz, and P. Gavrilovic. Nonlinear chirp compensation in high-power broad-spectrum pulses from single-stripe mode-locked laser diodes; *J-STQE Jun 95* 577-582

B

- Baba, T.**, *see* Yuri, M., *J-STQE Jun 95* 473-479
Bacher, K., *see* Eng, L.E., *J-STQE Jun 95* 624-628
Bajaj, K.K., *see* Feng, Z.C., *J-STQE Dec 95* 1119-1125
Balakireva, L.L., and I.V. Kozhevnikov. Computer simulation of damage to CrB₂-C multilayer mirror in double-pass experiment with Ta laser; *J-STQE Sep 95* 962-969
Barber, D.B., *see* Pollock, C.R., *J-STQE Apr 95* 62-66
Barber, P.R., *see* Pask, H.M., *J-STQE Apr 95* 2-13
Barber, R., *see* Fallahi, M., *J-STQE Jun 95* 382-386
Barrow, D.A., *see* Portnoi, E.L., *J-STQE Jun 95* 451-460
Basiev, T., *see* Mirov, S.B., *J-STQE Apr 95* 22-30
Benyon, B., *see* Hanh Lu, *J-STQE Jun 95* 375-381
Bethea, C.G., *see* Passlack, M., *J-STQE Jun 95* 110-116
Bethea, C.G., *see* Fang, W.-C.W., *J-STQE Jun 95* 117-128
Bewtra, N., D.A. Suda, G.L. Tan, F. Chatenoud, and J.M. Xu. Modeling of quantum-well lasers with electro-opto-thermal interaction; *J-STQE Jun 95* 331-340
Bhattacharya, A., *see* Zmudzinski, C., *J-STQE Jun 95* 129-137
Biernacki, P.D., H. Lee, and A.R. Mickelson. Evaluation of defect related diffusion in semiconductors by electrooptical sampling; *J-STQE Dec 95* 1037-1046

- Bimberg, D.**, *see* Schell, M., *J-STQE Jun 95* 528-534
Blaauw, C., *see* Hanh Lu, *J-STQE Jun 95* 375-381
Blood, P., and P. Snowton. Strain dependence of threshold current in fixed-wavelength GaInP laser diodes; *J-STQE Jun 95* 707-711
Bode, G.H., *see* Tobin, R.C., *J-STQE Sep 95* 805-810
Borchert, B., *see* Amann, M.-C., *J-STQE Jun 95* 387-395
Botcharev, A., *see* Grann, E.D., *J-STQE Dec 95* 1093-1099
Botez, D., and R.S. Tucker. Introduction to the special issue on semiconductor lasers; *J-STQE Jun 95* 100-101
Botez, D., *see* Zmudzinski, C., *J-STQE Jun 95* 129-137
Botez, D., *see* Nabiev, R.F., *J-STQE Jun 95* 138-149
Bowers, J.E., *see* Uskov, A.V., *J-STQE Jun 95* 552-561
Brown, D.J.W., *see* Coutts, D.W., *J-STQE Sep 95* 768-778
Brown, D.J.W., *see* Withford, M.J., *J-STQE Sep 95* 779-783
Burkhard, H., *see* Hansmann, S., *J-STQE Jun 95* 341-345
Burkhard, H., *see* Hillmer, H., *J-STQE Jun 95* 356-362
Burrows, E.C., *see* Kang-Yih Liou, *J-STQE Jun 95* 165-172
Burrus, C.A., *see* Kang-Yih Liou, *J-STQE Jun 95* 165-172
- C**
- Cairns, G.F.**, *see* Healy, S.B., *J-STQE Sep 95* 949-957
Cairns, G.F., *see* Healy, S.B., *J-STQE Dec 95* 1156
Caneau, C., *see* Wu, Y.A., *J-STQE Jun 95* 629-637
Carman, R.J., *see* Pask, H.M., *J-STQE Apr 95* 2-13
Carroll, J.E., *see* Nowell, M.C., *J-STQE Jun 95* 433-441
Carver, G.E., R.W. Heebner, and G. Astfalk. Wafer level testing for semiconductor laser manufacture via spatially resolved photoluminescence; *J-STQE Dec 95* 980-986
Castex, M.C., *see* Museur, L., *J-STQE Sep 95* 900-907
Celii, F.G., T.S. Moise, Y.-C. Kao, and A.J. Katz. Optical diagnostic monitoring of resonant-tunneling diode growth; *J-STQE Dec 95* 1064-1072
Cen, J., *see* Feng, Z.C., *J-STQE Dec 95* 1119-1125
Chai, B.H.T., *see* Marshall, C.D., *J-STQE Apr 95* 67-77
Chakrabarti, U.K., *see* Passlack, M., *J-STQE Jun 95* 110-116
Chang, C.-S., S.L. Chuang, J.R. Minch, W.W. Fang, Y.K. Chen, and T. Tanbun-Ek. Amplified spontaneous emission spectroscopy in strained quantum-well lasers; *J-STQE Dec 95* 1100-1107
Chang Chih-Sheng, *see* Chin-Sheng Chang, *J-STQE Jun 95* 218-229
Chang-Hasnain, C.J., *see* Nabiev, R.F., *J-STQE Jun 95* 234-243
Chang-Hasnain, C.J., *see* Eng, L.E., *J-STQE Jun 95* 624-628
Chang-Hasnain, C.J., *see* Wu, Y.A., *J-STQE Jun 95* 629-637
Chang Ji-Ho, *see* Won-Jin Choi, *J-STQE Jun 95* 717-722
Chan Kai Choong, *see* Ahmed, K.A., *J-STQE Jun 95* 592-600
Chatenoud, F., *see* Dion, M., *J-STQE Jun 95* 230-233
Chatenoud, F., *see* Bewtra, N., *J-STQE Jun 95* 331-340
Chatenoud, F., *see* Fallahi, M., *J-STQE Jun 95* 382-386
Chen, Y.K., *see* Fang, W.-C.W., *J-STQE Jun 95* 117-128
Chen, Y.K., *see* Chang, C.-S., *J-STQE Dec 95* 1100-1107
Cheng Yong, *see* Hanmin Zhao, *J-STQE Jun 95* 196-202
Chih-Sheng Chang, and Shun Lien Chuang. Modeling of strained quantum-well lasers with spin-orbit coupling; *J-STQE Jun 95* 218-229
Chik, G., *see* Evans, J.D., *J-STQE Jun 95* 275-284
Chilla, J.L.A., *see* Rocca, J.J., *J-STQE Sep 95* 945-948
Chin-Yao Tsai, *see* Chin-Yi Tsai, *J-STQE Jun 95* 316-330
Chin-Yi Tsai, Chin-Yao Tsai, Yu-Hwa Lo, R.M. Spencer, and L.F. Eastman. Nonlinear gain coefficients in semiconductor quantum-well lasers: effects of carrier diffusion, capture, and escape; *J-STQE Jun 95* 316-330
Chi Zhou, Qi Wang, Zuguang Ma, and Sining Li. VUV spectra of rare-gas fluoride ionic excimers; *J-STQE Sep 95* 872-876
Choi Won-Jin, *see* Won-Jin Choi, *J-STQE Jun 95* 717-722
Choi Won-Tack, *see* Won-Jin Choi, *J-STQE Jun 95* 717-722
Choong Chan Kai, *see* Ahmed, K.A., *J-STQE Jun 95* 592-600
Choquette, K.D., *see* Zhang, T., *J-STQE Jun 95* 606-615
Choquette, K.D., *see* Wu, Y.A., *J-STQE Jun 95* 629-637
Choquette, K.D., R.P. Schneider, K.L. Lear, and R.E. Leibenguth. Gain-dependent polarization properties of vertical-cavity lasers; *J-STQE Jun 95* 661-666
Chow, D.H., *see* Yong-Hang Zhang, *J-STQE Jun 95* 749-756
Chow, W.W., M.H. Crawford, and R.P. Schneider, Jr. Minimization of threshold current in short wavelength AlGaN/P vertical-cavity surface-emitting lasers; *J-STQE Jun 95* 649-653
Chuang, S.L., *see* Chang, C.-S., *J-STQE Dec 95* 1100-1107

- Chuang Shun Lien**, *see* Fang, W.-C.W., *J-STQE Jun* 95 117-128
Chuang Shun Lien, *see* Chih-Sheng Chang, *J-STQE Jun* 95 218-229
Clark, D.P., *see* Rocca, J.J., *J-STQE Sep* 95 945-948
Coldren, L.A., *see* Scott, J.W., *J-STQE Jun* 95 638-648
Cooper, D.G., J.L. Dexter, and R.D. Esman. Widely tunable polarization-stable fiber lasers; *J-STQE Apr* 95 14-21
Coutts, D.W., and D.J.W. Brown. Production of high average power UV by second-harmonic and sum-frequency generation from copper-vapor lasers; *J-STQE Sep* 95 768-778
Crawford, M.H., *see* Chow, W.W., *J-STQE Jun* 95 649-653
Crooker, S.A., D.D. Awschalom, and N. Samarth. Time-resolved Faraday rotation spectroscopy of spin dynamics in digital magnetic heterostructures; *J-STQE Dec* 95 1082-1092

D

- Dadap, J.I.**, X.F. Hu, N.M. Russell, J.G. Ekerdt, J.K. Lowell, and M.C. Downer. Analysis of second-harmonic generation by unamplified, high-repetition-rate, ultrashort laser pulses at Si(001) interfaces; *J-STQE Dec* 95 1145-1155
Dapkus, P.D., *see* Hanmin Zhao, *J-STQE Jun* 95 196-202
Dasgupta, S., *see* Hill, D.E., *J-STQE Jun* 95 150-164
Dawes, J.M., *see* Pask, H.M., *J-STQE Apr* 95 2-13
de Jong, J.F., *see* Passlack, M., *J-STQE Jun* 95 110-116
Delansay, P., *see* Jong-In Shim, *J-STQE Jun* 95 408-415
Delaporte, P., *see* Tischler, H., *J-STQE Sep* 95 877-885
Delaporte, P., *see* Tischler, H., *J-STQE Sep* 95 886-890
DeLaRue, R.M., *see* Krauss, T.F., *J-STQE Jun* 95 757-761
Delorme, F., S. Slempkes, A. Ramdane, B. Rose, and K. Nakajima. Subnanosecond tunable distributed Bragg reflector lasers with an electrooptical Bragg section; *J-STQE Jun* 95 396-400
Dennis, T., H.M. Duiker, Jun Wu, C. Toth, and J.F. Young. Comparison of laser-produced plasma target materials for pumping the 109-nm Xe^{2+} Auger laser; *J-STQE Sep* 95 867-871
Dexter, J.L., *see* Cooper, D.G., *J-STQE Apr* 95 14-21
Dick, S., *see* Dion, M., *J-STQE Jun* 95 230-233
Dion, M., Z.-M. Li, D. Ross, F. Chatenoud, R.L. Williams, and S. Dick. A study of the temperature sensitivity of GaAs-(Al,Ga)As multiple quantum-well GRINSCH lasers; *J-STQE Jun* 95 230-233
Dion, M., *see* Fallahi, M., *J-STQE Jun* 95 382-386
Donko, Z., *see* Tobin, R.C., *J-STQE Sep* 95 805-810
Downer, M.C., *see* Dadap, J.I., *J-STQE Dec* 95 1145-1155
Doyeol Ahn. Theory of non-Markovian gain in semiconductor lasers; *J-STQE Jun* 95 301-307
Dubinskii, M.A., *see* Sarukura, N., *J-STQE Sep* 95 792-804
Duiker, H.M., *see* Dennis, T., *J-STQE Sep* 95 867-871
Duncan, W.M., *see* Smith, P.B., *J-STQE Dec* 95 1011-1016
Dunstan, D.J., *see* Meney, A.T., *J-STQE Jun* 95 697-706
Dutta, N.K., *see* Passlack, M., *J-STQE Jun* 95 110-116
Duttagupta, S.P., *see* Fauchet, P.M., *J-STQE Dec* 95 1126-1139

E

- Eastman, L.F.**, *see* Chin-Yi Tsai, *J-STQE Jun* 95 316-330
Ebeling, K.J., *see* Fiedler, U., *J-STQE Jun* 95 442-450
Ebeling, K.J., *see* Zeeb, E., *J-STQE Jun* 95 616-623
Edamatsu, K., *see* Sarukura, N., *J-STQE Sep* 95 792-804
Eden, J.G., *see* Funk, D.S., *J-STQE Sep* 95 784-791
Eguchi, N., *see* Oka, M., *J-STQE Sep* 95 859-866
Eisenstein, G., *see* Tessler, N., *J-STQE Jun* 95 490-493
Ekerdt, J.G., *see* Dadap, J.I., *J-STQE Dec* 95 1145-1155
Eng, L.E., K. Bacher, Wupen Yuen, J.S. Harris, Jr., and C.J. Chang-Hasnain. Multiple-wavelength vertical cavity laser arrays on patterned substrates; *J-STQE Jun* 95 624-628
Esman, R.D., *see* Cooper, D.G., *J-STQE Apr* 95 14-21
Esterowitz, L. Introduction to the issue on tunable solid-state lasers; *J-STQE Apr* 95 1
Esterowitz, L., *see* Pinto, J.F., *J-STQE Apr* 95 58-61
Esterowitz, L., *see* Stoneman, R.C., *J-STQE Apr* 95 78-81
Evans, J.D., J.G. Simmons, D.A. Thompson, N. Puetz, T. Makino, and G. Chik. An investigation into the temperature sensitivity of strained and unstrained multiple quantum-well, long wavelength lasers: new insight and methods of characterization; *J-STQE Jun* 95 275-284
Ezaki, M., H. Kumagai, K. Toyoda, and M. Obara. Surface modification of III-V compound semiconductors using surface electromagnetic wave etching induced by ultraviolet lasers; *J-STQE Sep* 95 841-847

F

- Fallahi, M.**, F. Chatenoud, M. Dion, I. Templeton, R. Barber, and J. Thompson. Circular-grating surface-emitting distributed Bragg reflector lasers on an InGaAs-GaAs structure for 0.48- μ m applications; *J-STQE Jun* 95 382-386
Fang, W.-C.W., C.G. Bethea, Y.K. Chen, and Shun Lien Chuang. Longitudinal spatial inhomogeneities in high-power semiconductor lasers; *J-STQE Jun* 95 117-128
Fang, W.W., *see* Chang, C.-S., *J-STQE Dec* 95 1100-1107
Fauchet, P.M., L. Tsypbeskov, C. Peng, S.P. Duttagupta, J. von Behren, Y. Kostoulas, J.M.V. Vandyshev, and K.D. Hirschman. Light-emitting porous silicon: Materials science, properties, and device applications; *J-STQE Dec* 95 1126-1139
Feiste, U., *see* Sartorius, B., *J-STQE Jun* 95 535-538
Feng, Z.C., S. Perkowitz, J. Cen, K.K. Bajaj, D.K. Kinell, and R.L. Whitney. Photoluminescence, Raman, and infrared diagnosis of GaAs-AlGaAs superlattices for intersubband infrared detection; *J-STQE Dec* 95 1119-1125
Ferry, D.K., *see* Grann, E.D., *J-STQE Dec* 95 1093-1099
Fiedler, U., and K.J. Ebeling. Design of VCSEL's for feedback insensitive data transmission and external cavity active mode-locking; *J-STQE Jun* 95 442-450
Fill, E.E., Yuelin Li, and G. Pretzler. Study of neon-like lasing in gallium; *J-STQE Sep* 95 958-961
Filoche, M., *see* Kazmierski, C., *J-STQE Jun* 95 371-374
Fontaine, B., *see* Tischler, H., *J-STQE Sep* 95 877-885
Forte, A.R., *see* Rothschild, M., *J-STQE Sep* 95 916-923
Fouquet, J.E., and J.L. Merz. Optical diagnostics of semiconductors [special issue intro.]; *J-STQE Dec* 95 977-979
Fuji, T., *see* Inoue, S., *J-STQE Sep* 95 908-915
Fujikawa, S., *see* Sato, Y., *J-STQE Sep* 95 811-824
Fukumoto, J.M., *see* Komine, H., *J-STQE Apr* 95 44-49
Fukushima, I., *see* Irikawa, M., *J-STQE Jun* 95 285-292
Funabashi, M., *see* Sudoh, T.K., *J-STQE Jun* 95 583-591
Funemizu, M., *see* Tohyama, M., *J-STQE Jun* 95 416-426
Funk, D.S., and J.G. Eden. Glass-fiber lasers in the ultraviolet and visible; *J-STQE Sep* 95 784-791

G

- Gavrilovic, P.**, *see* Azouz, A., *J-STQE Jun* 95 577-582
Ghaemi, H.F., *see* Goldberg, B.B., *J-STQE Dec* 95 1073-1081
Ghosh, S., and B.M. Arora. Double AC photoreflectance spectroscopy of semiconductors; *J-STQE Dec* 95 1108-1112
Glover, A.C.J., E.K. Illy, and J.A. Piper. High-speed UV micro-machining of polymers with frequency-doubled copper vapor lasers; *J-STQE Sep* 95 830-836
Goldberg, B.B., M.S. Unlu, W.D. Herzog, H.F. Ghaemi, and E. Towe. Near-field optical studies of semiconductor heterostructures and laser diodes; *J-STQE Dec* 95 1073-1081
Goldberg, L., *see* Hall, D.C., *J-STQE Dec* 95 1017-1029
Gorlinski, V.B., *see* Portak, E.L., *J-STQE Jun* 95 451-460
Grabmaier, A., *see* Hillmer, H., *J-STQE Jun* 95 356-362
Grann, E.D., S. Sheih, K.T. Tsen, S. Guncer, D.K. Ferry, A. Salvador, A. Botcharev, and H. Morkoc. Nonequilibrium electron distributions and high-field electron transport in an Al_xGa_{1-x}As-based p-i-n nanostructure semiconductor - A picosecond Raman probe; *J-STQE Dec* 95 1093-1099
Grantham, J.W., *see* Sun, D., *J-STQE Jun* 95 674-680
Gray, M.L., *see* Pollak, F.H., *J-STQE Dec* 95 1002-1010
Griffin, R.A., D.A. Jackson, and D.D. Sampson. Coherence and noise properties of gain-switched Fabry-Perot semiconductor lasers; *J-STQE Jun* 95 569-576
Guncer, S., *see* Grann, E.D., *J-STQE Dec* 95 1093-1099
Guodong Zhang. Influence of strain on lasing performances of Al-free strained-layer Ga(In)As(P)-GaN_xP quantum-well lasers emitting at 0.78-λ<1.1 μ m; *J-STQE Jun* 95 183-188
Guo Ping Li, *see* Hanh Lu, *J-STQE Jun* 95 375-381
Gurney, P.C.R., *see* Nguyen, L.V.T., *J-STQE Jun* 95 494-504
Gye-Mo Yang, *see* Hanmin Zhao, *J-STQE Jun* 95 196-202

H

- Hackbarth, T.**, *see* Zeeb, E., *J-STQE Jun* 95 616-623
Hagelstein, P., *see* Arnold, W.H., *J-STQE Sep* 95 765-767
Hai-Feng Liu, *see* Ahmed, K.A., *J-STQE Jun* 95 592-600
Hall, D.C., and L. Goldberg. Interferometric near-field imaging technique for phase and refractive index profiling in large-area planar-waveguide optoelectronic devices; *J-STQE Dec* 95 1017-1029
Hanabusa, M., and K. Tsujihara. Deposition of diamond-like carbon films by excimer lasers using frozen acetylene; *J-STQE Sep* 95 848-851

- Hanberg, J., see Salzman, J., J-STQE Jun 95 346-355**
- Hanh Lu, C. Blaauw, B. Benyon, Guo Ping Li, and T. Makino.** High-power and high-speed performance of 1.3- μm strained MQW gain-coupled DFB lasers; *J-STQE Jun 95* 375-381
- Hannin Zhao, M.H. MacDougal, P.D. Dapkus, K. Uppal, Yong Cheng, and Gye-Mo Yang.** Submilliampere threshold current InGaAs-GaAs-AlGaAs lasers and laser arrays grown on nonplanar substrates; *J-STQE Jun 95* 196-202
- Hanna, D.C., see Pask, H.M., J-STQE Apr 95 2-13**
- Hansmann, S., H. Hillmer, H. Walter, H. Burkhard, B. Hubner, and E. Kuphal.** Variation of coupling coefficients by sampled gratings in complex coupled distributed-feedback lasers; *J-STQE Jun 95* 341-345
- Hansmann, S., see Hillmer, H., J-STQE Jun 95 356-362**
- Hara, K., see Kobayashi, R., J-STQE Jun 95 723-727**
- Harned, N., J. McClay, and J.J. Shamaly.** Laser-damage impact on lithography system throughput; *J-STQE Sep 95* 837-840
- Harris, J.S., Jr., see Eng, L.E., J-STQE Jun 95 624-628**
- Harris, S., Jr., see Yuri, M., J-STQE Jun 95 473-479**
- Haruta, K., see Sato, Y., J-STQE Sep 95 811-824**
- Hatori, N., see Mukaihara, T., J-STQE Jun 95 667-673**
- Hayashi, Y., see Mukaihara, T., J-STQE Jun 95 667-673**
- Healy, S.B., G.F. Cairns, C.L.S. Lewis, G.J. Pert, and J.A. Plowes.** A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses; *J-STQE Sep 95* 949-957
- Healy, S.B., G.F. Cairns, C.L.S. Lewis, G.J. Pert, and J.A. Plowes.** Correction to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957); *J-STQE Dec 95* 1156
- Heebner, R.W., see Carver, G.E., J-STQE Dec 95 980-986**
- Herman, I.P.** Real-time optical thermometry during semiconductor processing; *J-STQE Dec 95* 1047-1053
- Herzog, W.D., see Goldberg, B.B., J-STQE Dec 95 1073-1081**
- Hill, D.E., S. Dasgupta, K.M. Nagpal, and D.R. Andersen.** Feedback stabilization of semiconductor laser arrays with complex coupling coefficients; *J-STQE Jun 95* 150-164
- Hillmer, H., see Hansmann, S., J-STQE Jun 95 341-345**
- Hillmer, H., A. Grabmaier, S. Hansmann, H.-L. Zhu, H. Burkhard, and K. Magari.** Tailored DFB laser properties by individually chirped gratings using bent waveguides; *J-STQE Jun 95* 356-362
- Hiramoto, K., see Sagawa, M., J-STQE Jun 95 189-194**
- Hirata, T., see Sudoh, T.K., J-STQE Jun 95 583-591**
- Hirayama, Y., see Irikawa, M., J-STQE Jun 95 285-292**
- Hirschman, K.D., see Fauchet, P.M., J-STQE Dec 95 1126-1139**
- Hobson, W.S., see Passlack, M., J-STQE Jun 95 110-116**
- Hobson, W.S., see Pollak, F.H., J-STQE Dec 95 1002-1010**
- Horn, M.W., see Rothschild, M., J-STQE Sep 95 916-923**
- Hosoda, M., see Watanabe, M., J-STQE Jun 95 728-733**
- Hotta, H., see Kobayashi, R., J-STQE Jun 95 723-727**
- Hu, X.F., see Dadap, J.I., J-STQE Dec 95 1145-1155**
- Hubner, B., see Hansmann, S., J-STQE Jun 95 341-345**
- Hubse, D., see Schell, M., J-STQE Jun 95 528-534**
- Hybertsen, M.S., see Ackerman, D.A., J-STQE Jun 95 250-263**
- I**
- Iga, K., see Mukaihara, T., J-STQE Jun 95 667-673**
- Igarashi, T., see Kawanaka, J., J-STQE Sep 95 852-858**
- Illek, S., see Amann, M.-C., J-STQE Jun 95 387-395**
- Illy, E.K., see Glover, A.C.J., J-STQE Sep 95 830-836**
- Imafuji, O., see Yuri, M., J-STQE Jun 95 473-479**
- Imafuji, O., see Takayama, T., J-STQE Jun 95 562-568**
- Imler, W.R.** High-speed photoluminescence mapping of III-V epitaxial layers for light emitting diodes; *J-STQE Dec 95* 987-992
- Inoue, M., see Sato, Y., J-STQE Sep 95 811-824**
- Inoue, S., T. Fujii, Y. Ueno, and F. Kannari.** F₂ laser deposition of CdTe microcrystallites-doped fluoropolymer thin films; *J-STQE Sep 95* 908-915
- Irikawa, M., H. Shimizu, I. Fukushima, K. Nishikata, and Y. Hirayama.** Strained GaInAs-AlGaInAs 1.5- μm -wavelength multiquantum-well lasers loaded with GaInAs-AlInAs multiquantum barriers at the p-side optical confinement layer; *J-STQE Jun 95* 285-292
- Ironside, C.N., see Martins-Filho, J.F., J-STQE Jun 95 539-551**
- Ishibashi, A.** II-VI blue-green laser diodes; *J-STQE Jun 95* 741-748
- Ishii, H., F. Kano, Y. Tohmori, Y. Kondo, T. Tamamura, and Y. Yoshikuni.** Narrow spectral linewidth under wavelength tuning in thermally tunable super-structure-grating (SSG) DBR lasers; *J-STQE Jun 95* 401-407
- Ishikawa, M., see Morinaga, M., J-STQE Jun 95 427-432**
- Isyanova, Y., see Rines, G.A., J-STQE Apr 95 50-57**
- Itoh, K., see Yuri, M., J-STQE Jun 95 473-479**
- Itoh, K., see Takayama, T., J-STQE Jun 95 562-568**
- Itoh, T., see Sarukura, N., J-STQE Sep 95 792-804**
- Iwai, N., see Kasukawa, A., J-STQE Jun 95 293-300**
- J**
- Jackson, D.A., see Griffin, R.A., J-STQE Jun 95 569-576**
- Jaeger, A., G. Weiser, and P. Wiedemann.** Inhomogeneous exciton broadening and mean free path in In_{1-x}Ga_xAs_yP_{1-y}InP heterostructures; *J-STQE Dec 95* 1113-1118
- Jansen Van Doorn, A.K., see van Exter, M.P., J-STQE Jun 95 601-605**
- Ji-Ho Chang, see Won-Jin Choi, J-STQE Jun 95 717-722**
- Jong-In Shim, M. Yamaguchi, P. Delansay, and M. Kitamura.** Refractive index and loss changes produced by current injection in InGaAs(P)-InGaAsP multiple quantum-well (MQW) waveguides; *J-STQE Jun 95* 408-415
- Jong-In Shim, H. Olesen, H. Yamazaki, M. Yamaguchi, and M. Kitamura.** 1.5- μm InGaAsP-InP multigain-levered-MQW-DFB-LD with high-efficiency and large-bandwidth FM response; *J-STQE Jun 95* 516-522
- Jong-Seok Kim, see Won-Jin Choi, J-STQE Jun 95 717-722**
- Jonsson, B., see Salzman, J., J-STQE Jun 95 346-355**
- Jopson, R.M., see Kang-Yih Liou, J-STQE Jun 95 165-172**
- Jun Wu, see Dennis, T., J-STQE Sep 95 867-871**
- K**
- Kaessner, J., see Schell, M., J-STQE Jun 95 528-534**
- Kai Choong Chan, see Ahmed, K.A., J-STQE Jun 95 592-600**
- Kajita, M., T. Kawakami, M. Nido, A. Kimura, T. Yoshikawa, K. Kurihara, Y. Sugimoto, and K. Kasahara.** Temperature characteristics of a vertical-cavity surface-emitting laser with a broad-gain bandwidth; *J-STQE Jun 95* 654-660
- Kamizato, T., see Shima, A., J-STQE Jun 95 102-109**
- Kanaev, A.V., see Museur, L., J-STQE Sep 95 900-907**
- Kang-Yih Liou, M.G. Young, E.C. Burrows, R.M. Jopson, G. Raybon, and C.A. Burros.** High-power broad-area tapered amplifier with a monolithically integrated output focusing lens at 0.98- μm wavelength; *J-STQE Jun 95* 165-172
- Kannari, F., see Yamada, T., J-STQE Sep 95 891-899**
- Kannari, F., see Inoue, S., J-STQE Sep 95 908-915**
- Kano, F., see Ishii, H., J-STQE Jun 95 401-407**
- Kao, Y.-C., see Celii, F.G., J-STQE Dec 95 1064-1072**
- Karakida, S., see Shima, A., J-STQE Jun 95 102-109**
- Karin, J.R., see Uskov, A.V., J-STQE Jun 95 552-561**
- Kasahara, K., see Kajita, M., J-STQE Jun 95 654-660**
- Kasukawa, A., N. Iwai, N. Yamanaka, and N. Yokouchi.** Very high characteristic temperature and constant differential quantum efficiency 1.3- μm GaInAsP-InP strained-layer quantum-well lasers by use of temperature dependent reflectivity (TDR) mirror; *J-STQE Jun 95* 293-300
- Kato, M., see Shima, A., J-STQE Jun 95 734-740**
- Kato, Y., see Katto, M., J-STQE Sep 95 924-930**
- Katto, M., M. Okuda, W. Sasaki, K. Kurosawa, and Y. Kato.** Electron beam pumped argon-eximer laser using an unstable resonator; *J-STQE Sep 95* 924-930
- Katz, A.J., see Celii, F.G., J-STQE Dec 95 1064-1072**
- Kawakami, T., see Kajita, M., J-STQE Jun 95 654-660**
- Kawakami, T., S. Kubodera, W. Sasaki, K. Kurosawa, K. Mitsuhashi, and T. Igarashi.** New xenon excimer lamps excited by quasi-CW jet discharges; *J-STQE Sep 95* 852-858
- Kawano, T., see Uomi, K., J-STQE Jun 95 203-210**
- Kazarinov, R.F., see Ackerman, D.A., J-STQE Jun 95 250-263**
- Kazmierski, C., D. Robein, D. Mathoorasing, A. Ougazzaden, and M. Filoche.** 1.5- μm DFB lasers with new current-induced gain gratings; *J-STQE Jun 95* 371-374
- Khalfin, V.B., J.M. Arnold, and J.H. Marsh.** A theoretical model of synchronization of a mode-locked semiconductor laser with an external pulse stream; *J-STQE Jun 95* 523-527
- Kido, T., N. Kishi, and H. Takahashi.** Optical charge-sensing method for testing and characterizing thin-film transistor arrays; *J-STQE Dec 95* 993-1001
- Kikuchi, A., see Yoshida, J., J-STQE Jun 95 173-182**
- Kim Jong-Seok, see Won-Jin Choi, J-STQE Jun 95 717-722**
- Kim Seung-Hee, see Won-Jin Choi, J-STQE Jun 95 717-722**
- Kimura, A., see Kajita, M., J-STQE Jun 95 654-660**
- Kinell, D.K., see Feng, Z.C., J-STQE Dec 95 1119-1125**
- Kishi, N., see Kido, T., J-STQE Dec 95 993-1001**
- Kishino, K., see Yoshida, J., J-STQE Jun 95 173-182**
- Kitamura, M., see Jong-In Shim, J-STQE Jun 95 408-415**
- Kitamura, M., see Jong-In Shim, J-STQE Jun 95 516-522**

- K**
- Kizuki, H., *see* Shima, A., *J-STQE Jun* 95 102-109
 Kobayashi, K., *see* Kobayashi, R., *J-STQE Jun* 95 723-727
 Kobayashi, R., H. Hotta, F. Miyasaka, K. Hara, and K. Kobayashi. Real index-guided AlGaN/P visible laser with high-bandgap energy AlInP current blocking layer grown by HCl-assisted metalorganic vapor phase epitaxy; *J-STQE Jun* 95 723-727
 Komine, H., J.M. Fukumoto, W.H. Long, Jr., and E.A. Stappaerts. Noncritically phase matched mid-infrared generation in AgGaSe₂; *J-STQE Apr* 95 44-49
 Komori, M., *see* Uomi, K., *J-STQE Jun* 95 203-210
 Kondo, Y., *see* Ishii, H., *J-STQE Jun* 95 401-407
 Korableva, S.L., *see* Sarukura, N., *J-STQE Sep* 95 792-804
 Koren, U., *see* Tessier, N., *J-STQE Jun* 95 490-493
 Kostoulas, Y., *see* Fauchet, P.M., *J-STQE Dec* 95 1126-1139
 Koyama, F., *see* Mukaihara, T., *J-STQE Jun* 95 667-673
 Kozhevnikov, I.V., *see* Balakireva, L.L., *J-STQE Sep* 95 962-969
 Kozma, L., *see* Kukhlevsky, S.V., *J-STQE Sep* 95 941-944
 Krauss, T.F., R.M. DeLaRue, P.J.R. Laybourn, B. Vogele, and C.R. Stanley. Efficient semiconductor ring lasers made by a simple self-aligned fabrication process; *J-STQE Jun* 95 757-761
 Krupke, W.F., *see* Marshall, C.D., *J-STQE Apr* 95 67-77
 Krystek, W., *see* Pollak, F.H., *J-STQE Dec* 95 1002-1010
 Kubodera, S., *see* Kawanaka, J., *J-STQE Sep* 95 852-858
 Kubodera, S., *see* Midorikawa, K., *J-STQE Sep* 95 931-940
 Kubota, S., *see* Oka, M., *J-STQE Sep* 95 859-866
 Kukhlevsky, S.V., and L. Kozma. Short-wavelength capillary lasers with tunable spatial coherence; *J-STQE Sep* 95 941-944
 Kumagai, H., *see* Ezaki, M., *J-STQE Sep* 95 841-847
 Kume, M., *see* Yuri, M., *J-STQE Jun* 95 473-479
 Kume, M., *see* Takayama, T., *J-STQE Jun* 95 562-568
 Kunz, R.R., *see* Rothschild, M., *J-STQE Sep* 95 916-923
 Kuphal, E., *see* Hansmann, S., *J-STQE Jun* 95 341-345
 Kurihara, K., *see* Kajita, M., *J-STQE Jun* 95 654-660
 Kuroda, T., *see* Niwa, A., *J-STQE Jun* 95 211-217
 Kurosawa, K., *see* Kawanaka, J., *J-STQE Sep* 95 852-858
 Kurosawa, K., *see* Katto, M., *J-STQE Sep* 95 924-930
- L**
- Langlois, P., *see* Azouz, A., *J-STQE Jun* 95 577-582
 Laybourn, P.J.R., *see* Krauss, T.F., *J-STQE Jun* 95 757-761
 Lear, K.L., *see* Choquette, K.D., *J-STQE Jun* 95 661-666
 Lee, H., *see* Biernacki, P.D., *J-STQE Dec* 95 1037-1046
 Leem Shi-Jong, *see* Won-Jin Choi, *J-STQE Jun* 95 717-722
 Leibenguth, R.E., *see* Choquette, K.D., *J-STQE Jun* 95 661-666
 Leibovitch, M., *see* Pollak, F.H., *J-STQE Dec* 95 1002-1010
 Lenstra, D., *see* Van Tartwijk, G.H.M., *J-STQE Jun* 95 466-472
 Levine, A.M., *see* Van Tartwijk, G.H.M., *J-STQE Jun* 95 466-472
 Lewis, C.L.S., *see* Healy, S.B., *J-STQE Sep* 95 949-957
 Lewis, C.L.S., *see* Healy, S.B., *J-STQE Dec* 95 1156
 Li, G.S., *see* Wu, Y.A., *J-STQE Jun* 95 629-637
 Li, Z.-M., *see* Dion, M., *J-STQE Jun* 95 230-233
 Lien Chuang Shun, *see* Fang, W.-C.W., *J-STQE Jun* 95 117-128
 Lien Chuang Shun, *see* Chih-Sheng Chang, *J-STQE Jun* 95 218-229
 Liew, S.K.C. Above-threshold analysis of three-section DFB/DBR lasers with second-order gratings; *J-STQE Jun* 95 363-370
 Li Guo Ping, *see* Hanh Lu, *J-STQE Jun* 95 375-381
 Ling Yi Liu, *see* Oka, M., *J-STQE Sep* 95 859-866
 Liu Kang-Yih, *see* Kang-Yih Liu, *J-STQE Jun* 95 165-172
 Li Sining, *see* Chi Zhou, *J-STQE Sep* 95 872-876
 Liu Hai-Feng, *see* Ahmed, K.A., *J-STQE Jun* 95 592-600
 Liu Ling Yi, *see* Oka, M., *J-STQE Sep* 95 859-866
 Liu Zhenlin, *see* Sarukura, N., *J-STQE Sep* 95 792-804
 Li Yuelin, *see* Fill, E.E., *J-STQE Sep* 95 958-961
 Logan, R.A., *see* Ackerman, D.A., *J-STQE Jun* 95 250-263
 Long, W.H., Jr., *see* Komine, H., *J-STQE Apr* 95 44-49
 Lopata, J., *see* Passlack, M., *J-STQE Jun* 95 110-116
 Lourtioz, J.-M., *see* Azouz, A., *J-STQE Jun* 95 577-582
 Lowell, J.K., *see* Dadap, J.I., *J-STQE Dec* 95 1145-1155
 Lowery, A.J., *see* Nguyen, L.V.T., *J-STQE Jun* 95 494-504
 Lo Yu-Hwa, *see* Chin-Yi Tsai, *J-STQE Jun* 95 316-330
 Lu, Z.H., A. Majerfeld, P.D. Wright, and L.W. Yang. A comprehensive optical characterization method for high-performance n-p-n AlGaAs-GaAs heterojunction bipolar transistors; *J-STQE Dec* 95 1030-1036
 Lu Hanh, *see* Hanh Lu, *J-STQE Jun* 95 375-381
 Lui, M., *see* McFarlane, R.A., *J-STQE Apr* 95 82-91
 Luryi, S., *see* Portnoi, E.L., *J-STQE Jun* 95 451-460

M

- MacDougal, M.H., *see* Hanmin Zhao, *J-STQE Jun* 95 196-202
 Mackechnie, C.J., *see* Pask, H.M., *J-STQE Apr* 95 2-13
 Magari, K., *see* Hillmer, H., *J-STQE Jun* 95 356-362
 Majorfeld, A., *see* Lu, Z.H., *J-STQE Dec* 95 1030-1036
 Makino, T., *see* Evans, J.D., *J-STQE Jun* 95 275-284
 Makino, T., *see* Hanh Lu, *J-STQE Jun* 95 375-381
 Marcenac, D.D., *see* Nowell, M.C., *J-STQE Jun* 95 433-441
 Marconi, M.C., *see* Rocca, J.J., *J-STQE Sep* 95 945-948
 Margalit, M., *see* Tessier, N., *J-STQE Jun* 95 490-493
 Markgraf, S., *see* Pollock, C.R., *J-STQE Apr* 95 62-66
 Marsh, J.H., *see* Portnoi, E.L., *J-STQE Jun* 95 451-460
 Marsh, J.H., *see* Khalafin, V.B., *J-STQE Jun* 95 523-527
 Marshall, C.D., S.A. Payne, L.K. Smith, H.T. Powell, W.F. Krupke, and B.H.T. Chai. 1.047-μm Yb:Sr₃(PO₄)₃ energy storage optical amplifier; *J-STQE Apr* 95 67-77
 Martins-Filho, J.F., E.A. Avrutin, C.N. Ironside, and J.S. Roberts. Monolithic multiple colliding pulse mode-locked quantum-well lasers, experiment and theory; *J-STQE Jun* 95 539-551
 Mass, J.L., *see* Pollock, C.R., *J-STQE Apr* 95 62-66
 Mathoorasing, D., *see* Kazmierski, C., *J-STQE Jun* 95 371-374
 Matsui, S., *see* Watanabe, M., *J-STQE Jun* 95 728-733
 Matsushima, Y., *see* Usami, M., *J-STQE Jun* 95 244-249
 Matsusura, H., *see* Watanabe, M., *J-STQE Jun* 95 712-716
 Mawst, L.I., *see* Zmudzinski, C., *J-STQE Jun* 95 129-137
 Ma Zuguang, *see* Chi Zhou, *J-STQE Sep* 95 872-876
 McClay, J., *see* Harned, N., *J-STQE Sep* 95 837-840
 McFarlane, R.A., M. Lui, and D. Yap. Rare earth doped fluoride waveguides fabricated using molecular beam epitaxy; *J-STQE Apr* 95 82-91
 Meney, A.T., D. Prins, A.F. Phillips, J.L. Sly, E.P. O'Reilly, D.J. Dunstan, A.R. Adams, and A. Valster. Determination of the band structure of disordered AlGaInP and its influence on visible-laser characteristics; *J-STQE Jun* 95 697-706
 Merz, J.L., *see* Fouquet, J.E., *J-STQE Dec* 95 977-979
 Mickelson, A.R., *see* Biernacki, P.D., *J-STQE Dec* 95 1037-1046
 Midorikawa, K., Y. Nagata, S. Kubodera, M. Obara, and K. Toyoda. An optical field-induced ionization X-ray laser using a preformed plasma scheme; *J-STQE Sep* 95 931-940
 Miles, R.H., *see* Yong-Hang Zhang, *J-STQE Jun* 95 749-756
 Minch, J.R., *see* Chang, C.-S., *J-STQE Dec* 95 1100-1107
 Mirov, S.B., and T. Basiev. Progress in color center lasers; *J-STQE Apr* 95 22-30
 Mitsuhashi, K., *see* Kawanaka, J., *J-STQE Sep* 95 852-858
 Miyasaka, F., *see* Kobayashi, R., *J-STQE Jun* 95 723-727
 Miyashita, M., *see* Shima, A., *J-STQE Jun* 95 102-109
 Mohrle, M., *see* Sartorius, B., *J-STQE Jun* 95 535-538
 Moise, T.S., *see* Celii, F.G., *J-STQE Dec* 95 1064-1072
 Moller, B., *see* Zeeb, E., *J-STQE Jun* 95 616-623
 Moller-Larsen, A., *see* Salzman, J., *J-STQE Jun* 95 346-355
 Morinaga, M., M. Ishikawa, and N. Suzuki. Analysis on wide continuous wavelength tuning of rapid-tunable quantum-well DFB lasers with carrier-transport effects; *J-STQE Jun* 95 427-432
 Morkoc, H., *see* Grann, E.D., *J-STQE Dec* 95 1093-1099
 Morton, P.A., *see* Ackerman, D.A., *J-STQE Jun* 95 250-263
 Motoda, T., *see* Shima, A., *J-STQE Jun* 95 734-740
 Moulton, P.F., *see* Rines, G.A., *J-STQE Apr* 95 50-57
 Mukaihara, T., N. Ohnoki, Y. Hayashi, N. Hatori, F. Koyama, and K. Iga. Polarization control of vertical-cavity surface emitting lasers using a birefringent metal/dielectric polarizer loaded on top distributed Bragg reflector; *J-STQE Jun* 95 667-673
 Museur, L., W.Q. Zheng, A.V. Kanaev, and M.C. Castex. A very convenient setup to generate intense VUV coherent light at 125 nm with use of nonlinear effects in mercury vapor at room temperature; *J-STQE Sep* 95 900-907
- N**
- Nabiev, R.F., *see* Zmudzinski, C., *J-STQE Jun* 95 129-137
 Nabiev, R.F., and D. Botz. Comprehensive above-threshold analysis of antiquidged diode laser arrays; *J-STQE Jun* 95 138-149
 Nabiev, R.F., E.C. Vail, and C.J. Chang-Hasnain. Temperature dependent efficiency and modulation characteristics of Al-free 980-nm laser diodes; *J-STQE Jun* 95 234-243
 Nabiev, R.F., *see* Wu, Y.A., *J-STQE Jun* 95 629-637
 Nagai, H., *see* Sato, Y., *J-STQE Sep* 95 811-824
 Nagai, Y., *see* Shima, A., *J-STQE Jun* 95 102-109
 Nagai, Y., *see* Shima, A., *J-STQE Jun* 95 734-740
 Nagarajan, R., *see* Uskov, A.V., *J-STQE Jun* 95 552-561
 Nagata, Y., *see* Midorikawa, K., *J-STQE Sep* 95 931-940
 Nagpal, K.M., *see* Hill, D.E., *J-STQE Jun* 95 150-164
 Naito, H., *see* Yuri, M., *J-STQE Jun* 95 473-479

- Naito, H., *see* Takayama, T., *J-STQE* Jun 95 562-568
 Nakajima, K., *see* Delorme, F., *J-STQE* Jun 95 396-400
 Nakano, Y., *see* Sudoh, T.K., *J-STQE* Jun 95 583-591
 Nakata, T., *see* Yamada, T., *J-STQE* Sep 95 891-899
 Nakatsu, H., *see* Watanabe, M., *J-STQE* Jun 95 728-733
 Nakawski, W., *see* Osinski, M., *J-STQE* Jun 95 681-696
 Naumov, A.K., *see* Sarukura, N., *J-STQE* Sep 95 792-804
 Nesnidal, M., *see* Zmudzinski, C., *J-STQE* Jun 95 129-137
 Nguyen, L.V.T., A.J. Lowery, P.C.R. Gurney, and D. Novak. A time-domain model for high-speed quantum-well lasers including carrier transport effects; *J-STQE* Jun 95 494-504
 Nichols, D.T., *see* Passlack, M., *J-STQE* Jun 95 110-116
 Nido, M., and A. Suzuki. Slow carrier-phonon interaction in InGaAs-InGaAsP multiquantum well investigated by time-development of carrier temperature and gain; *J-STQE* Jun 95 308-315
 Nido, M., *see* Kajita, M., *J-STQE* Jun 95 654-660
 Nishikawa, K., *see* Irikawa, M., *J-STQE* Jun 95 285-292
 Nishimura, T., *see* Shima, A., *J-STQE* Jun 95 734-740
 Niwa, A., T. Ohtoshi, and T. Kuroda. Orientation dependence of optical properties in long wavelength strained quantum-well lasers; *J-STQE* Jun 95 211-217
 Nomura, I., *see* Yoshida, J., *J-STQE* Jun 95 173-182
 Norregaard, J., *see* Salzman, J., *J-STQE* Jun 95 346-355
 Novak, D., *see* Nguyen, L.V.T., *J-STQE* Jun 95 494-504
 Nowell, M.C., J.E. Carroll, R.G.S. Plumb, D.D. Marcenac, M.J. Robertson, H. Wickes, and L.M. Zhang. Low-chirp and enhanced-resonant frequency by direct push-pull modulation of DFB lasers; *J-STQE* Jun 95 433-441
- O**
- Obara, M., *see* Arnold, W.H., *J-STQE* Sep 95 765-767
 Obara, M., *see* Ezaki, M., *J-STQE* Sep 95 841-847
 Obara, M., *see* Midorikawa, K., *J-STQE* Sep 95 931-940
 Ohnoki, N., *see* Mukaihara, T., *J-STQE* Jun 95 667-673
 Ohtoshi, T., *see* Niwa, A., *J-STQE* Jun 95 211-217
 Oishi, A., *see* Uomi, K., *J-STQE* Jun 95 203-210
 Oka, A., *see* Uomi, K., *J-STQE* Jun 95 203-210
 Oka, M., Ling Yi Liu, W. Wiechmann, N. Eguchi, and S. Kubota. All solid-state continuous-wave frequency-quadrupled Nd:YAG laser; *J-STQE* Sep 95 859-866
 Okai, M., M. Suzuki, and M. Aoki. Complex-coupled $\lambda/4$ -shifted DFB lasers with a flat FM response; *J-STQE* Jun 95 461-465
 Okuda, H., *see* Watanabe, M., *J-STQE* Jun 95 712-716
 Okuda, M., *see* Katto, M., *J-STQE* Sep 95 924-930
 Olesen, H., *see* Salzman, J., *J-STQE* Jun 95 346-355
 Olesen, H., *see* Jong-In Shim, *J-STQE* Jun 95 516-522
 Omura, E., *see* Shima, A., *J-STQE* Jun 95 102-109
 Omura, E., *see* Shima, A., *J-STQE* Jun 95 734-740
 Onomura, M., *see* Tohyama, M., *J-STQE* Jun 95 416-426
 O'Reilly, E.P., *see* Meney, A.T., *J-STQE* Jun 95 697-706
 Osinski, M., and W. Nakawski. Thermal analysis of closely-packed two-dimensional etched-well surface-emitting laser arrays; *J-STQE* Jun 95 681-696
 Ostliek, P.H., *see* Sun, D., *J-STQE* Jun 95 674-680
 Otsubo, M., *see* Shima, A., *J-STQE* Jun 95 102-109
 Otsubo, M., *see* Shima, A., *J-STQE* Jun 95 734-740
 Ougazzaden, A., *see* Kazmierski, C., *J-STQE* Jun 95 371-374
- P**
- Palmateer, S.C., *see* Rothschild, M., *J-STQE* Sep 95 916-923
 Pask, H.M., R.J. Carman, D.C. Hanna, A.C. Tropper, C.J. Mackenzie, P.R. Barber, and J.M. Dawes. Ytterbium-doped silica fiber lasers: versatile sources for the 1-2 μm region; *J-STQE* Apr 95 2-13
 Passlack, M., C.G. Bethea, W.S. Hobson, J. Lopata, E.F. Schubert, G.J. Zydzik, D.T. Nichols, J.F. de Jong, U.K. Chakrabarti, and N.K. Dutta. Infrared microscopy studies on high-power InGaAs-InGaAs-InGaP lasers with Ga₂O₃ facet coatings; *J-STQE* Jun 95 110-116
 Payne, S.A., *see* Marshall, C.D., *J-STQE* Apr 95 67-77
 Peard, K.A., *see* Tobin, R.C., *J-STQE* Sep 95 805-810
 Peng, C., *see* Fauchet, P.M., *J-STQE* Dec 95 1126-1139
 Perkowitz, S., *see* Feng, Z.C., *J-STQE* Dec 95 1119-1125
 Pert, G.J., *see* Healy, S.B., *J-STQE* Sep 95 949-957
 Pert, G.J., *see* Healy, S.B., *J-STQE* Dec 95 1156
 Petermann, K. External optical feedback phenomena in semiconductor lasers; *J-STQE* Jun 95 480-489
 Peters, M.G., *see* Scott, J.W., *J-STQE* Jun 95 638-648
 Phillips, A.F., *see* Meney, A.T., *J-STQE* Jun 95 697-706
 Ping Li Guo, *see* Hanh Lu, *J-STQE* Jun 95 375-381
- Pinto, J.F., L. Esterowitz, and G.H. Rosenblatt. Frequency tripling of a Q-switched Cr:LiSAF laser to the UV region; *J-STQE* Apr 95 58-61
 Piper, J.A., *see* Glover, A.C.J., *J-STQE* Sep 95 830-836
 Plowes, J.A., *see* Healy, S.B., *J-STQE* Sep 95 949-957
 Plowes, J.A., *see* Healy, S.B., *J-STQE* Dec 95 1156
 Plumb, R.G.S., *see* Nowell, M.C., *J-STQE* Jun 95 433-441
 Pollak, F.H., W. Krystek, M. Leibovitch, M.L. Gray, and W.S. Hobson. Contactless electromodulation for the nondestructive, room-temperature analysis of wafer-sized semiconductor device structures; *J-STQE* Dec 95 1002-1010
 Pollock, C.R., D.B. Barber, J.L. Mass, and S. Markgraf. Cr⁴⁺ lasers: present performance and prospects for new host lattices; *J-STQE* Apr 95 62-66
 Portnoi, E.L., V.B. Gorfinkel, E.A. Avrutin, I.G. Thayne, D.A. Barrow, J.H. Marsh, and S. Luryi. Optoelectronic microwave-range frequency mixing in semiconductor lasers; *J-STQE* Jun 95 451-460
 Powell, H.T., *see* Marshall, C.D., *J-STQE* Apr 95 67-77
 Pretzler, G., *see* Fill, E.E., *J-STQE* Sep 95 958-961
 Prins, D., *see* Meney, A.T., *J-STQE* Jun 95 697-706
 Prokes, S.M. Spectroscopic study of red light emission in porous silicon; *J-STQE* Dec 95 1140-1144
 Puetz, N., *see* Evans, J.D., *J-STQE* Jun 95 275-284
- Q**
- Qi Wang, *see* Chi Zhou, *J-STQE* Sep 95 872-876
- R**
- Ramdane, A., *see* Delorme, F., *J-STQE* Jun 95 396-400
 Raybon, G., *see* Kang-Yih Liou, *J-STQE* Jun 95 165-172
 Reiner, C., *see* Zeeb, E., *J-STQE* Jun 95 616-623
 Ries, M., *see* Zeeb, E., *J-STQE* Jun 95 616-623
 Rines, G.A., H.H. Zenzie, R.A. Schwarz, Y. Isyanova, and P.F. Moulton. Nonlinear conversion of Ti:sapphire laser wavelengths; *J-STQE* Apr 95 50-57
 Robein, D., *see* Kazmierski, C., *J-STQE* Jun 95 371-374
 Roberts, J.S., *see* Martins-Filho, J.F., *J-STQE* Jun 95 539-551
 Robertson, M.J., *see* Nowell, M.C., *J-STQE* Jun 95 433-441
 Rocca, J.J., M.C. Marconi, J.L.A. Chilla, D.P. Clark, F.G. Tomasel, and V.N. Shlyaptsev. Discharge-driven 46.9-nm amplifier with gain-length approaching saturation; *J-STQE* Sep 95 945-948
 Rose, B., *see* Delorme, F., *J-STQE* Jun 95 396-400
 Rosenblatt, G.H., *see* Pinto, J.F., *J-STQE* Apr 95 58-61
 Ross, D., *see* Dion, M., *J-STQE* Jun 95 230-233
 Rothschild, M., A.R. Forte, M.W. Horn, R.R. Kunz, S.C. Palmateer, and J.H.C. Sedlacek. 193-nm lithography; *J-STQE* Sep 95 916-923
 Rozsa, K., *see* Tobin, R.C., *J-STQE* Sep 95 805-810
 Russell, N.M., *see* Dadap, J.I., *J-STQE* Dec 95 1145-1155
- S**
- Sagawa, M., T. Toyonaka, K. Hiramoto, K. Shinoda, and K. Uomi. High-power highly-reliable operation of 0.98- μm InGaAs-InGaP strain-compensated single-quantum-well lasers with tensile-strained InGaAsP barriers; *J-STQE* Jun 95 189-194
 Saito, Y., *see* Sato, Y., *J-STQE* Sep 95 811-824
 Salvador, A., *see* Grann, E.D., *J-STQE* Dec 95 1093-1099
 Salzman, J., H. Olesen, A. Moller-Larsen, O. Albrektsen, J. Hanberg, J. Norregaard, B. Jonsson, and B. Tromborg. Distributed feedback lasers with an S-bent waveguide for high-power single-mode operation; *J-STQE* Jun 95 346-355
 Samarth, N., *see* Crooker, S.A., *J-STQE* Dec 95 1082-1092
 Sampson, D.D., *see* Griffin, R.A., *J-STQE* Jun 95 569-576
 Sartorius, B., M. Mohrle, and U. Feiste. 12-64 GHz continuous frequency tuning in self-pulsating 1.55- μm multiquantum-well DFB lasers; *J-STQE* Jun 95 535-538
 Sarukura, N., M.A. Dubinskii, Zhenlin Liu, V.V. Semashko, A.K. Naumov, S.L. Korableva, R.Y. Abdusabirov, K. Edamatsu, Y. Suzuki, T. Itoh, and Y. Segawa. Ce³⁺-activated fluoride crystals as prospective active media for widely tunable ultraviolet ultrafast lasers with direct 10-ns pumping; *J-STQE* Sep 95 792-804
 Sasaki, K., *see* Watanabe, M., *J-STQE* Jun 95 728-733
 Sasaki, W., *see* Kawamura, J., *J-STQE* Sep 95 852-858
 Sasaki, W., *see* Katto, M., *J-STQE* Sep 95 924-930
 Sato, T., *see* Seki, H., *J-STQE* Sep 95 825-829
 Sato, Y., M. Inoue, S. Fujikawa, Y. Saito, A. Suzuki, K. Haruta, and H. Nagai. Development of a 2-kW XeCl laser with a surface corona preionization scheme and a spiker-sustainer circuit; *J-STQE* Sep 95 811-824

- Schell, M., D. Huhse, W. Utz, J. Kaessner, D. Bimberg, and I.S. Tarasov. Jitter and dynamics of self-seeded Fabry-Perot laser diodes; *J-STQE Jun 95* 528-534
- Schneider, R.P., see Choquette, K.D., *J-STQE Jun 95* 661-666
- Schneider, R.P., Jr., see Chow, W.W., *J-STQE Jun 95* 649-653
- Schubert, E.F., see Passlack, M., *J-STQE Jun 95* 110-116
- Schwarz, R.A., see Rines, G.A., *J-STQE Apr 95* 50-57
- Scott, J.W., D.B. Young, B.J. Thibeault, M.G. Peters, and L.A. Coldren. Design of index-guided vertical-cavity lasers for low temperature-sensitivity, sub-milliamp thresholds, and single-mode operation; *J-STQE Jun 95* 638-648
- Sedlacek, J.H.C., see Rothschild, M., *J-STQE Sep 95* 916-923
- Segawa, Y., see Sarukura, N., *J-STQE Sep 95* 792-804
- Seki, H., S. Takemori, and T. Sato. Development of a highly efficient nitrogen laser using an ultra-fast magnetic pulse compression circuit; *J-STQE Sep 95* 825-829
- Seki, S., K. Yokoyama, and P. Sotirelis. Theoretical analysis of high-temperature characteristics of 1.3- μ m InP-based quantum-well lasers; *J-STQE Jun 95* 264-274
- Semashko, V.V., see Sarukura, N., *J-STQE Sep 95* 792-804
- Sentis, M.L., see Tischler, H., *J-STQE Sep 95* 877-885
- Sentis, M.L., see Tischler, H., *J-STQE Sep 95* 886-890
- Seung-Hee Kim, see Won-Jin Choi, *J-STQE Jun 95* 717-722
- Shamaly, J.J., see Harned, N., *J-STQE Sep 95* 837-840
- Sheih, S., see Grann, E.D., *J-STQE Dec 95* 1093-1099
- Shigihara, K., see Shima, A., *J-STQE Jun 95* 102-109
- Shi-Jong Leem, see Won-Jin Choi, *J-STQE Jun 95* 717-722
- Shima, A., H. Kizuki, A. Takekoto, S. Karakida, M. Miyashita, Y. Nagai, T. Kamizato, K. Shigihara, A. Adachi, E. Omura, and M. Otsubo. 0.78- and 0.98- μ m ridge-waveguide lasers buried with AlGaAs confinement layer selectively grown by chloride-assisted MOCVD; *J-STQE Jun 95* 102-109
- Shima, A., M. Kato, Y. Nagai, T. Motoda, T. Nishimura, E. Omura, and M. Otsubo. Uniform and high-power characteristics of AlGaInP visible laser diodes and their four-element arrays fabricated on a three-inch ϕ wafer; *J-STQE Jun 95* 734-740
- Shimada, N., see Watanabe, M., *J-STQE Jun 95* 712-716
- Shimizu, H., see Irikawa, M., *J-STQE Jun 95* 285-292
- Shim Jong-In, see Jong-In Shim, *J-STQE Jun 95* 408-415
- Shim Jong-In, see Jong-In Shim, *J-STQE Jun 95* 516-522
- Shinoda, K., see Sagawa, M., *J-STQE Jun 95* 189-194
- Shlyaptsev, V.N., see Rocca, J.J., *J-STQE Sep 95* 945-948
- Shtengel, G.E., see Ackerman, D.A., *J-STQE Jun 95* 250-263
- Shun Lien Chuang, see Fang, W.-C.W., *J-STQE Jun 95* 117-128
- Shun Lien Chuang, see Chih-Sheng Chang, *J-STQE Jun 95* 218-229
- Simmons, J.G., see Evans, J.D., *J-STQE Jun 95* 275-284
- Sining Li, see Chi Zhou, *J-STQE Sep 95* 872-876
- Slempkes, S., see Delorme, F., *J-STQE Jun 95* 396-400
- Sly, J.L., see Meney, A.T., *J-STQE Jun 95* 697-706
- Smith, L.K., see Marshall, C.D., *J-STQE Apr 95* 67-77
- Smith, P.B., W.M. Duncan, and A.A. Allerman. Optical characterization of heterojunction bipolar transistors; *J-STQE Dec 95* 1011-1016
- Smownt, P., see Blood, P., *J-STQE Jun 95* 707-711
- Sotirelis, P., see Seki, S., *J-STQE Jun 95* 264-274
- Spence, D.E., and C.L. Tang. Characterization and applications of high repetition rate, broadly tunable, femtosecond optical parametric oscillators; *J-STQE Apr 95* 31-43
- Spencer, R.M., see Chin-Yi Tsai, *J-STQE Jun 95* 316-330
- Stanley, C.R., see Krauss, T.F., *J-STQE Jun 95* 757-761
- Stappaerts, E.A., see Komine, H., *J-STQE Apr 95* 44-49
- Stelmakh, N., see Azouz, A., *J-STQE Jun 95* 577-582
- Stoneman, R.C., and L. Esterowitz. Efficient 1.94- μ m Tm:YALO laser; *J-STQE Apr 95* 78-81
- Stulen, R.H. 13-nm extreme ultraviolet lithography; *J-STQE Sep 95* 970-975
- Suda, D.A., see Bewtra, N., *J-STQE Jun 95* 331-340
- Sudoh, T.K., M. Funabashi, Y. Nakano, K. Tada, and T. Hirata. Dynamics of gain-switching operation in gain-coupled distributed-feedback semiconductor lasers with absorptive grating; *J-STQE Jun 95* 583-591
- Sugimoto, Y., see Kajita, M., *J-STQE Jun 95* 654-660
- Sun, D., E. Towe, P.H. Ostdiek, J.W. Grantham, and G.J. Vansuch. Polarization control of vertical-cavity surface-emitting lasers through use of an anisotropic gain distribution in [110]-oriented strained quantum-well structures; *J-STQE Jun 95* 674-680
- Suzuki, A., see Nido, M., *J-STQE Jun 95* 308-315
- Suzuki, A., see Sato, Y., *J-STQE Sep 95* 811-824
- Suzuki, M., see Okai, M., *J-STQE Jun 95* 461-465
- Suzuki, N., see Tohyama, M., *J-STQE Jun 95* 416-426
- Suzuki, N., see Morinaga, M., *J-STQE Jun 95* 427-432
- Suzuki, Y., see Sarukura, N., *J-STQE Sep 95* 792-804
- Szalai, L., see Tobin, R.C., *J-STQE Sep 95* 805-810
- Tabatabaei, N., see Zhang, T., *J-STQE Jun 95* 606-615
- Tada, K., see Sudoh, T.K., *J-STQE Jun 95* 583-591
- Tae-Kyung Yoo, see Won-Jin Choi, *J-STQE Jun 95* 717-722
- Takahashi, H., see Kido, T., *J-STQE Dec 95* 993-1001
- Takahashi, K., see Watanabe, M., *J-STQE Jun 95* 728-733
- Takahashi, Y., see Usami, M., *J-STQE Jun 95* 244-249
- Takakuwa, C., see Tohyama, M., *J-STQE Jun 95* 416-426
- Tohyama, T., see Yuri, M., *J-STQE Jun 95* 473-479
- Takayama, T., O. Imafuiji, M. Yuri, H. Naito, M. Kume, A. Yoshikawa, and K. Itoh. 800 mW peak-power self-sustained pulsation GaAlAs laser diodes; *J-STQE Jun 95* 562-568
- Takemori, S., see Seki, H., *J-STQE Sep 95* 825-829
- Takemoto, A., see Shima, A., *J-STQE Jun 95* 102-109
- Tamamura, T., see Ishii, H., *J-STQE Jun 95* 401-407
- Tan, G.L., see Bewtra, N., *J-STQE Jun 95* 331-340
- Tanbun-Ek, T., see Ackerman, D.A., *J-STQE Jun 95* 250-263
- Tanbun-Ek, T., see Chang, C.-S., *J-STQE Dec 95* 1100-1107
- Tang, C.L., see Spence, D.E., *J-STQE Apr 95* 31-43
- Tani, K., see Watanabe, M., *J-STQE Jun 95* 728-733
- Tarasov, I.S., see Schell, M., *J-STQE Jun 95* 528-534
- Templeton, I., see Fallahi, M., *J-STQE Jun 95* 382-386
- Tessler, N., M. Margalit, G. Eisenstein, and U. Koren. Wide-band amplitude modulation by electrooptic tuning of the center wavelength in short-cavity distributed Bragg reflector lasers; *J-STQE Jun 95* 490-493
- Thayne, I.G., see Portnoi, E.L., *J-STQE Jun 95* 451-460
- Thibeault, B.J., see Scott, J.W., *J-STQE Jun 95* 638-648
- Thompson, D.A., see Evans, J.D., *J-STQE Jun 95* 275-284
- Thompson, J., see Fallahi, M., *J-STQE Jun 95* 382-386
- Tischler, H., P. Delaporte, B. Fontaine, and M.L. Sentis. Vacuum ultraviolet emissions from the ionic excimer molecules (KrCs)⁺ and (HeAr)⁺ by low-energy electron-beam excitation; *J-STQE Sep 95* 877-885
- Tischler, H., P. Delaporte, and M.L. Sentis. Investigations on the VUV emissions of Ne-Xe-Cs gas mixtures excited by an electrical discharge; *J-STQE Sep 95* 886-890
- Tobin, R.C., K.A. Peard, G.H. Bode, K. Rozsa, Z. Donko, and L. Szalai. High-gain hollow-cathode metal ion lasers for the UV and VUV; *J-STQE Sep 95* 805-810
- Tohomi, Y., see Ishii, H., *J-STQE Jun 95* 401-407
- Tohyama, M., M. Funemizu, M. Onomura, C. Takakuwa, and N. Suzuki. Mechanism of wavelength tuning and frequency modulation in three-electrode DFB lasers; *J-STQE Jun 95* 416-426
- Tomasel, F.G., see Rocca, J.J., *J-STQE Sep 95* 945-948
- Toth, C., see Dennis, T., *J-STQE Sep 95* 867-871
- Towe, E., see Sun, D., *J-STQE Jun 95* 674-680
- Towe, E., see Goldberg, B.B., *J-STQE Dec 95* 1073-1081
- Toyoda, K., see Ezaki, M., *J-STQE Sep 95* 841-847
- Toyoda, K., see Midorikawa, K., *J-STQE Sep 95* 931-940
- Toyonaka, T., see Sagawa, M., *J-STQE Jun 95* 189-194
- Tromborg, B., see Salzman, J., *J-STQE Jun 95* 346-355
- Tropper, A.C., see Pask, H.M., *J-STQE Apr 95* 2-13
- Tsai Chin-Yao, see Chin-Yi Tsai, *J-STQE Jun 95* 316-330
- Tsai Chin-Yi, see Chin-Yi Tsai, *J-STQE Jun 95* 316-330
- Tsen, K.T., see Grann, E.D., *J-STQE Dec 95* 1093-1099
- Tsuchiya, T., see Uomi, K., *J-STQE Jun 95* 203-210
- Tsujihara, K., see Hanabusa, M., *J-STQE Sep 95* 848-851
- Tsybeskov, L., see Fauchet, P.M., *J-STQE Dec 95* 1126-1139
- Tucker, R.S., see Botz, D., *J-STQE Jun 95* 100-101
- Tucker, R.S., see Ahmed, Z., *J-STQE Jun 95* 505-515
- U
- Uchida, A., see Yamada, T., *J-STQE Sep 95* 891-899
- Ueno, Y., see Inoue, S., *J-STQE Sep 95* 908-915
- Unlu, M.S., see Goldberg, B.B., *J-STQE Dec 95* 1073-1081
- Uomi, K., see Sagawa, M., *J-STQE Jun 95* 189-194
- Uomi, K., T. Tsuchiya, M. Komori, A. Oka, T. Kawano, and A. Oishi. Ultralow threshold 1.3- μ m InGaAsP-InP compressive-strained multiquantum-well monolithic laser array for parallel high-density optical interconnects; *J-STQE Jun 95* 203-210
- Uppal, K., see Hammin Zhao, *J-STQE Jun 95* 196-202
- Usami, M., Y. Matsushima, and Y. Takahashi. 0.98- μ m InGaAs-InGaP strained quantum-well lasers with GaAs-InGaP superlattice optical confinement layer; *J-STQE Jun 95* 244-249
- Uskov, A.V., J.R. Karin, R. Nagarajan, and J.E. Bowers. Dynamics of carrier heating and sweepout in waveguide saturable absorbers; *J-STQE Jun 95* 552-561
- Utz, W., see Schell, M., *J-STQE Jun 95* 528-534

V

- Vail, E.C., *see* Nabiev, R.F., *J-STQE Jun* 95 234-243
 Valster, A., *see* Meney, A.T., *J-STQE Jun* 95 697-706
 Vandyshov, J.M.V., *see* Fauchet, P.M., *J-STQE Dec* 95 1126-1139
 van Exter, M.P., A.K. Jansen Van Doorn, and J.P. Woerdman. Effect of spatial filtering on the spontaneous emission spectrum of a sub-threshold VCSEL; *J-STQE Jun* 95 601-605
 Vansuch, G.J., *see* Sun, D., *J-STQE Jun* 95 674-680
 Van Tartwijk, G.H.M., A.M. Levine, and D. Lenstra. Sisyphus effect in semiconductor lasers with optical feedback; *J-STQE Jun* 95 466-472
 Vogele, B., *see* Krauss, T.F., *J-STQE Jun* 95 757-761
 von Behren, J., *see* Fauchet, P.M., *J-STQE Dec* 95 1126-1139

W

- Walter, H., *see* Hansmann, S., *J-STQE Jun* 95 341-345
 Wang Qi, *see* Chi Zhou, *J-STQE Sep* 95 872-876
 Watanabe, M., H. Matsuura, N. Shimada, and H. Okuda. Optimum tensile-strained multiquantum-well structure of 630-nm band InGaAlP lasers for high temperature and reliable operation; *J-STQE Jun* 95 712-716
 Watanabe, M., K. Tani, K. Takahashi, K. Sasaki, H. Nakatsu, M. Hosoda, S. Matsui, O. Yamamoto, and S. Yamamoto. Fundamental-transverse-mode high-power AlGaNp laser diode with windows grown on facets; *J-STQE Jun* 95 728-733
 Waynant, R., *see* Arnold, W.H., *J-STQE Sep* 95 765-767
 Weiser, G., *see* Jaeger, A., *J-STQE Dec* 95 1113-1118
 Whitney, R.L., *see* Feng, Z.C., *J-STQE Dec* 95 1119-1125
 Wickes, H., *see* Nowell, M.C., *J-STQE Jun* 95 433-441
 Wiechmann, W., *see* Oka, M., *J-STQE Sep* 95 859-866
 Wiedemann, P., *see* Jaeger, A., *J-STQE Dec* 95 1113-1118
 Williams, R.L., *see* Dion, M., *J-STQE Jun* 95 230-233
 Withford, M.J., and D.J.W. Brown. Improved ultraviolet second-harmonic generation at elevated repetition rates from a medium-scale copper-vapor laser; *J-STQE Sep* 95 779-783
 Woerdman, J.P., *see* van Exter, M.P., *J-STQE Jun* 95 601-605
 Wohlbier, J.G., *see* Zhang, T., *J-STQE Jun* 95 606-615
 Wolf, T., *see* Amann, M.-C., *J-STQE Jun* 95 387-395
 Won-Jin Choi, Ji-Ho Chang, Won-Taek Choi, Seung-Hee Kim, Jong-Seok Kim, Shi-Jong Leem, and Tae-Kyung Yoo. Hydrogen effect on 670-nm AlGaNp visible laser during high temperature operation; *J-STQE Jun* 95 717-722
 Won-Taek Choi, *see* Won-Jin Choi, *J-STQE Jun* 95 717-722
 Wright, P.D., *see* Lu, Z.H., *J-STQE Dec* 95 1030-1036
 Wu, Y.A., G.S. Li, R.F. Nabiev, K.D. Choquette, C. Caneau, and C.J. Chang-Hasnain. Single-mode, passive antiguide vertical cavity surface emitting laser; *J-STQE Jun* 95 629-637
 Wu Jun, *see* Dennis, T., *J-STQE Sep* 95 867-871
 Wupen Yuen, *see* Eng, L.E., *J-STQE Jun* 95 624-628

X

- Xu, J.M., *see* Bewtra, N., *J-STQE Jun* 95 331-340

Y

- Yamada, T., A. Uchida, T. Nakata, and F. Kannari. Subpicosecond pulse compression in the VUV region by induced-phase modulation in Xc; *J-STQE Sep* 95 891-899
 Yamaguchi, M., *see* Jong-In Shim, *J-STQE Jun* 95 408-415
 Yamaguchi, M., *see* Jong-In Shim, *J-STQE Jun* 95 516-522
 Yamamoto, O., *see* Watanabe, M., *J-STQE Jun* 95 728-733
 Yamamoto, S., *see* Watanabe, M., *J-STQE Jun* 95 728-733
 Yamakawa, N., *see* Kasukawa, A., *J-STQE Jun* 95 293-300
 Yamazaki, H., *see* Jong-In Shim, *J-STQE Jun* 95 516-522
 Yang, L.W., *see* Lu, Z.H., *J-STQE Dec* 95 1030-1036
 Yang Gye-Mo, *see* Hanmin Zhao, *J-STQE Jun* 95 196-202
 Yap, D., *see* McFarlane, R.A., *J-STQE Apr* 95 82-91
 Yi Liu Ling, *see* Oka, M., *J-STQE Sep* 95 859-866
 Yokouchi, N., *see* Kasukawa, A., *J-STQE Jun* 95 293-300
 Yokoyama, K., *see* Seki, S., *J-STQE Jun* 95 264-274
 Yong Cheng, *see* Hanmin Zhao, *J-STQE Jun* 95 196-202
 Yong-Hang Zhang, R.H. Miles, and D.H. Chow. InAs-InAs_xSb_{1-x} type-II superlattice midwave infrared lasers grown on InAs substrates; *J-STQE Jun* 95 749-756
 Yoo Tae-Kyung, *see* Won-Jin Choi, *J-STQE Jun* 95 717-722
 Yoshida, J., K. Kishino, A. Kikuchi, and I. Nomura. Continuous-Wave (CW) operation of GaInP-AlGaNp visible compressively strained multiple quantum-wire (CS-WQWR) lasers; *J-STQE Jun* 95 173-182

+ Check author entry for coauthors

Yoshikawa, A., *see* Takayama, T., *J-STQE Jun* 95 562-568

Yoshikawa, T., *see* Kajita, M., *J-STQE Jun* 95 654-660

Yoshikuni, Y., *see* Ishii, H., *J-STQE Jun* 95 401-407

Young, D.B., *see* Scott, J.W., *J-STQE Jun* 95 638-648

Young, J.F., *see* Dennis, T., *J-STQE Sep* 95 867-871

Young, M.G., *see* Kang-Yih Liou, *J-STQE Jun* 95 165-172

Yuelin Li, *see* Fill, E.E., *J-STQE Sep* 95 958-961

Yuen Wupen, *see* Eng, L.E., *J-STQE Jun* 95 624-628

Yu-Hwa Lo, *see* Chin-Yi Tsai, *J-STQE Jun* 95 316-330

Yuri, M., S. Harris, Jr., T. Takayama, O. Imafumi, H. Naito, M. Kume, K. Itoh, and T. Baba. Two-dimensional analysis of self-sustained pulsation for narrow-stripe AlGaAs lasers; *J-STQE Jun* 95 473-479

Yuri, M., *see* Takayama, T., *J-STQE Jun* 95 562-568

Z

Zeeb, E., B. Moller, C. Reiner, M. Ries, T. Hackbarth, and K.J. Ebeling. Planar proton implanted VCSEL's and fiber-coupled 2-D VCSEL arrays; *J-STQE Jun* 95 616-623

Zenzie, H.H., *see* Rines, G.A., *J-STQE Apr* 95 50-57

Zhang, L.M., *see* Nowell, M.C., *J-STQE Jun* 95 433-441

Zhang, T., J.G. Wohlbier, K.D. Choquette, and N. Tabatabaie. Microcavity vacuum-field configuration and the spontaneous emission power; *J-STQE Jun* 95 606-615

Zhang Guodong, *see* Guodong Zhang, *J-STQE Jun* 95 183-188

Zhang Yong-Hang, *see* Yong-Hang Zhang, *J-STQE Jun* 95 749-756

Zhao Hanmin, *see* Hanmin Zhao, *J-STQE Jun* 95 196-202

Zheng, W.Q., *see* Museur, L., *J-STQE Sep* 95 900-907

Zhenlin Liu, *see* Sarukura, N., *J-STQE Sep* 95 792-804

Zhou Chi, *see* Chi Zhou, *J-STQE Sep* 95 872-876

Zhu, H.-L., *see* Hillmer, H., *J-STQE Jun* 95 356-362

Zmudzinski, C., D. Botez, L.I. Mawst, A. Bhattacharya, M. Nesnidal, and R.F. Nabiev. Three-core ARROW-type diode laser: novel high-power, single-mode device, and effective master oscillator for flared antiguide MOPA's; *J-STQE Jun* 95 129-137

Zuguang Ma, *see* Chi Zhou, *J-STQE Sep* 95 872-876

Zydzik, G.J., *see* Passlack, M., *J-STQE Jun* 95 110-116

SUBJECT INDEX**A****Ablation**

C, diamond-like films, excimer laser deposition using frozen acetylene. Hanabusa, M., +, *J-STQE Sep* 95 848-851

CdTe-doped PTFE thin films, laser deposition. Inoue, S., +, *J-STQE Sep* 95 908-915

Aluminum materials/devices

AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emission power. Zhang, T., +, *J-STQE Jun* 95 606-615

AlGaAs narrow-stripe lasers, self-sustained pulsation. Yuri, M., +, *J-STQE Jun* 95 473-479

AlGaAs ridge waveguide LD, 0.78- and 0.98-μm, chloride-assisted MOCVD. Shima, A., +, *J-STQE Jun* 95 102-109

AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. Azouz, A., +, *J-STQE Jun* 95 577-582

AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. van Exter, M.P., +, *J-STQE Jun* 95 601-605

AlGaInP fund.-transverse-mode high-power LD, window-on-facet struct. Watanabe, M., +, *J-STQE Jun* 95 728-733

AlGaInP index-guided high power vis. laser, HCL-assisted MOVPE. Kobayashi, R., +, *J-STQE Jun* 95 723-727

AlGaInP VCSEL, threshold current minimization. Chow, W.W., +, *J-STQE Jun* 95 649-653

AlGaInP vis. laser, H effect, high temp. operation. Won-Jin Choi, +, *J-STQE Jun* 95 717-722

AlGaInP vis. LD and arrays, fab., high-power charact. Shima, A., +, *J-STQE Jun* 95 734-740

GaAlAs LD, 800 mW peak-power self-sustained pulsation. Takayama, T., +, *J-STQE Jun* 95 562-568

GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. Eng, L.E., +, *J-STQE Jun* 95 624-628

GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. Osinski, M., +, *J-STQE Jun* 95 681-696

GaAs-AlGaAs MQW GRINSCH laser temp. sensitivity. Dion, M., +, *J-STQE Jun* 95 230-233

GaAs-GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. Uskov, A.V., +, *J-STQE Jun* 95 552-561

+ Check author entry for subsequent corrections/comments

- GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292
 GaInP-AlGaInP quantum well vis. laser, band struct. determ. *Meney, A.T.*, +, *J-STQE Jun 95* 697-706
 GaInP-AlGaInP vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182
 InGaAlP tensile-strained MQW laser, high temp. and reliable operation. *Watanabe, M.*, +, *J-STQE Jun 95* 712-716
 InGaAs-GaAs-AlGaAs quantum well lasers and laser arrays, threshold current. *Hannin Zhao, +*, *J-STQE Jun 95* 196-202
 InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S.*, +, *J-STQE Jun 95* 341-345
 LiCaAlF₆:Ce³⁺, tunable UV ultrafast lasers, direct pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
 LiSrAlF₆:Cr laser, Q-switched, SHG. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61
 Ti:sapphire laser wavelengths, nonlin. conversion. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57
 ZBLAN:Nd fiber laser in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791
Amplifier noise; cf. Laser noise
Amplifiers; cf. Laser amplifiers; Power amplifiers
Argon materials/devices
 Ar²⁺F⁻ ionic excimers, VUV spectra. *Chi Zhou, +*, *J-STQE Sep 95* 872-876
 discharge-driven 46.9-nm amp., gain-length approaching saturation. *Rocca, J.J.*, +, *J-STQE Sep 95* 945-948
 excimer laser, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930
Arrays
 thin-film transistor arrays testing/charactn., opt. charge-sensing method. *Kido, T.*, +, *J-STQE Dec 95* 993-1001
- B**
- Barium materials/devices**
 BaB₂O₄ cryst. harmonic generation of Ti:sapphire laser wavelengths. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57
 β-BaB₂O₄, intracavity freq. doubled CW Nd:YAG laser. *Oka, M.*, +, *J-STQE Sep 95* 859-866
 ZBLAN:Nd fiber laser in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791
Beams; cf. Gaussian beams
Biomedical applications of optical radiation; cf. Laser biomedical applications
Bipolar transistors; cf. Heterojunction bipolar transistors
Birefringence
 DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A.*, +, *J-STQE Jun 95* 592-600
 InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T.*, +, *J-STQE Jun 95* 667-673
Bragg scattering; cf. Distributed Bragg reflector lasers
- C**
- Cadmium materials/devices**
 CdTe-doped PTFE thin films, laser deposition. *Inoue, S.*, +, *J-STQE Sep 95* 908-915
 laser-prod. plasma target materials for Xe²⁺ Auger laser pumping. *Dennis, T.*, +, *J-STQE Sep 95* 867-871
Calcium materials/devices
 LiCaAlF₆:Ce³⁺, tunable UV ultrafast lasers, direct pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
Carbon materials/devices
 CrB₂-C multilayer mirror damage, Ta laser double-pass, computer simul. *Balakireva, L.L.*, +, *J-STQE Sep 95* 962-969
 diamond-like C films, excimer laser deposition, frozen acetylene. *Hanabusa, M.*, +, *J-STQE Sep 95* 848-851
Carrier processes; cf. Charge carrier processes
Cerium materials/devices
 Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
Cesium materials/devices
 Ne-Xe-Cs gas mixtures, discharge excitation, excimer VUV emission study. *Tischler, H.*, +, *J-STQE Sep 95* 886-890
Chaos
 semicond. lasers, external opt. feedback phenom. *Petermann, K.*, *J-STQE Jun 95* 480-489
Charge carrier processes
 1.3 μm semicond. lasers, gain anal. in T₀ determination. *Ackerman, D.A.*, +, *J-STQE Jun 95* 250-263
- + Check author entry for coauthors
- AlGaAs-based p-i-n nanostruct. semicond., nonequilib. electron distribs. and high-field transport, picosecond Raman probe. *Gramm, E.D.*, +, *J-STQE Dec 95* 1093-1099
 antiguide diode laser arrays, above-threshold anal. *Nabiev, R.F.*, +, *J-STQE Jun 95* 138-149
 corrections to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957). *Healy, S.B.*, +, *J-STQE Dec 95* 1156
 GaAs-GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. *Usov, A.V.*, +, *J-STQE Jun 95* 552-561
 GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292
 Ge, Ne-like collisionally-pumped laser, prepulses effect, computer model. *Healy, S.B.*, +, *J-STQE Sep 95* 949-957
 InGaAs-InGaAsP-InGaP LD temp. depend. efficiency and modulation charact. *Nabiev, R.F.*, +, *J-STQE Jun 95* 234-243
 InGaAs-InGaAsP MQW laser, carrier-phonon interact. *Nido, M.*, +, *J-STQE Jun 95* 308-315
 InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim, +*, *J-STQE Jun 95* 408-415
 InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, *J-STQE Jun 95* 638-648
 InP-based 1.3-μm QW laser high-temp. charact. *Seki, S.*, +, *J-STQE Jun 95* 264-274
 quantum well lasers, electro-opto-thermal interact., equiv. cct. modeling. *Bewtra, N.*, +, *J-STQE Jun 95* 331-340
 rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, *J-STQE Jun 95* 427-432
 semicond. laser, high-power, long. spatial inhomogeneities. *Fang, W.-C.W.*, +, *J-STQE Jun 95* 117-128
 semicond. quantum well laser, carrier transport, nonlin. gain coeffs. *Chin-Yi Tsai*, +, *J-STQE Jun 95* 316-330
 strained quantum-well lasers with spin-orbit coupling, modeling. *Chih-Sheng Chang*, +, *J-STQE Jun 95* 218-229
 three-electrode DFB lasers, wavelength tuning and FM mechanism. *Tohyama, M.*, +, *J-STQE Jun 95* 416-426
Charge carrier processes; cf. Space charge
Chemical vapor deposition; cf. CVD
Chirp modulation
 AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. *Azouz, A.*, +, *J-STQE Jun 95* 577-582
 DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
 DFB semicond. laser with absorptive grating, gain-switching operation. *Sudoh, T.K.*, +, *J-STQE Jun 95* 583-591
 direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C.*, +, *J-STQE Jun 95* 433-441
 GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628
Chromium materials/devices
 Cr:LiSrAlF₆ Q-switched laser freq. tripling, UV region. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61
 CrB₂-C multilayer mirror damage, Ta laser double-pass, computer simul. *Balakireva, L.L.*, +, *J-STQE Sep 95* 962-969
 Cr⁴⁺:doped laser host lattices, tunable output. *Pollock, C.R.*, +, *J-STQE Apr 95* 62-66
Circuits; cf. Equivalent circuits
Collision processes; cf. Particle collisions
Communication equipment; cf. Optical communication equipment
Computer architecture; cf. Parallel architectures
Contacts; cf. Ohmic contacts
Control systems; cf. Optical variables control
Copper materials/devices
 freq.-doubled lasers for polymer high-speed UV micro-machining. *Glover, A.C.J.*, +, *J-STQE Sep 95* 830-836
 He-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
 laser-prod. plasma target materials for Xe²⁺ Auger laser pumping. *Dennis, T.*, +, *J-STQE Sep 95* 867-871
 Ne-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
 vap. lasers, second harmonic and sum-freq. high av. power UV generation. *Coutts, D.W.*, +, *J-STQE Sep 95* 768-778
 vap. laser, UV SHG. *Withford, M.J.*, +, *J-STQE Sep 95* 779-783
Corona
 XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824
- † Check author entry for subsequent corrections/comments

- Correlators; cf.** Optical correlators
Corrugated waveguides; cf. Distributed feedback lasers
Couplers; cf. Laser couplers
Crosstalk; cf. Optical crosstalk
Current
 AlGaNp VCSEL, threshold current minimization. *Chow, W.W.*, +, J-STQE Jun 95 649-653
 GaAsP-InGaAsP long wavelength strained QW lasers, orient. depend. of opt. props. *Niwa, A.*, +, J-STQE Jun 95 211-217
 GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, J-STQE Jun 95 293-300
 GaInP-AlGaNp quantum well vis. laser, band struct. determ. *Meney, A.T.*, +, J-STQE Jun 95 697-706
 InAs-InAs_xSb_{1-x} type-II superlattice midwave IR lasers. *Yong-Hang Zhang*, +, J-STQE Jun 95 749-756
 InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T.*, +, J-STQE Jun 95 667-673
 InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, J-STQE Jun 95 638-648
 MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D.*, +, J-STQE Jun 95 275-284
 strained quantum-well lasers with spin-orbit coupling, modeling. *Chih-Sheng Chang*, +, J-STQE Jun 95 218-229
- CVD**
 C, diamond-like films, excimer laser deposition using frozen acetylene. *Hanabusa, M.*, +, J-STQE Sep 95 848-851
- CW lasers**
 AlGaNp fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M.*, +, J-STQE Jun 95 728-733
 AlGaNp index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R.*, +, J-STQE Jun 95 723-727
 antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, J-STQE Jun 95 129-137
 GaInP-AlGaNp vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, J-STQE Jun 95 173-182
 InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou*, +, J-STQE Jun 95 165-172
 InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M.*, +, J-STQE Jun 95 110-116
 InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, J-STQE Jun 95 203-210
 Nd:YAG, solid-state CW freq.-quadrupled laser. *Oka, M.*, +, J-STQE Sep 95 859-866
 Nd:ZBLAN fiber lasers in UV and vis., upconversion pumping. *Funk, D.S.*, +, J-STQE Sep 95 784-791
 rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, J-STQE Jun 95 427-432
 semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, J-STQE Jun 95 150-164
 semicond. lasers, grating-terminated external cavity, small-sig. IM response. *Ahmed, Z.*, +, J-STQE Jun 95 505-515
 ZnMgSSe blue-green LD operation. *Ishibashi, A.*, J-STQE Jun 95 741-748
- D**
- Dielectric waveguides; cf.** Optical waveguides
Diffusion processes
 eval. of defect related diffusion in semiconds. by electrooptical sampling. *Biernicki, P.D.*, +, J-STQE Dec 95 1037-1046
 GaAs-AlGaAs MQW GRIN SCH laser temp. sensitivity. *Dion, M.*, +, J-STQE Jun 95 230-233
 InGaAs-InGaAsP-InGaP LD temp. depend. efficiency and modulation charact. *Nabiev, R.F.*, +, J-STQE Jun 95 234-243
Diode lasers; cf. Semiconductor lasers
Displays; cf. Flat panel displays
Distortion; cf. Laser beam distortion
Distributed Bragg reflector lasers
 AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emission power. *Zhang, T.*, +, J-STQE Jun 95 606-615
 AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. *van Exter, M.P.*, +, J-STQE Jun 95 601-605
 DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.K.C.*, J-STQE Jun 95 363-370
 InGaAs-GaAs 0.48-μm circ.-grating surface-emitting DBR lasers. *Falohi, M.*, +, J-STQE Jun 95 382-386
 InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T.*, +, J-STQE Jun 95 667-673
 InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H.*, +, J-STQE Jun 95 401-407
 InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, J-STQE Jun 95 396-400
- InGaAs VCSEL with broad-gain bandwidth, temp. charact.** *Kajita, M.*, +, J-STQE Jun 95 654-660
 short-cavity lasers, electrooptic tuning, wide-band AM. *Tessler, N.*, +, J-STQE Jun 95 490-493
- Distributed feedback lasers**
 1.3-μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu*, +, J-STQE Jun 95 375-381
 chirped gratings, bent waveguides. *Hillmer, H.*, +, J-STQE Jun 95 356-362
 complex-coupled λ/4-shifted lasers, flat FM response. *Okai, M.*, +, J-STQE Jun 95 461-465
 DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.K.C.*, J-STQE Jun 95 363-370
 DFB lasers, complex-coupled λ/4-shifted, flat FM response. *Okai, M.*, +, J-STQE Jun 95 461-465
 DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J.*, +, J-STQE Jun 95 346-355
 direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C.*, +, J-STQE Jun 95 433-441
 gain coupled lasers, current-induced gain gratings. *Kazmierski, C.*, +, J-STQE Jun 95 371-374
 high-power single-mode operation, S-bent waveguide. *Salzman, J.*, +, J-STQE Jun 95 346-355
 InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S.*, +, J-STQE Jun 95 341-345
 InGaAsP-InP MQW-DBF LD, 1.5 μm FM response. *Jong-In Shim*, +, J-STQE Jun 95 516-522
 MQW DFB laser, self-pulsating 1.55-μm, 12-64 GHz continuous freq. tuning. *Sartorius, B.*, +, J-STQE Jun 95 535-538
 rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, J-STQE Jun 95 427-432
 semicond. lasers, femtosecond pulse generation, soliton-effect compression tech. *Ahmed, K.A.*, +, J-STQE Jun 95 592-600
 semicond. lasers with absorptive grating, gain-switching operation. *Sudo, T.K.*, +, J-STQE Jun 95 583-591
 three-electrode DFB lasers, wavelength tuning and FM mechanism. *Tohyama, M.*, +, J-STQE Jun 95 416-426
- Doping; cf.** Semiconductor device doping
- E**
- Electric discharge pumping**
 He-Au⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, J-STQE Sep 95 805-810
 He-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, J-STQE Sep 95 805-810
 Ne-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, J-STQE Sep 95 805-810
 Ne-Xe-Cs gas mixtures, discharge excitation, excimer VUV emission study. *Tischler, H.*, +, J-STQE Sep 95 886-890
- Electric field effects; cf.** Electrooptic materials/devices
Electric variables; cf. Current
Electroabsorption; cf. Electrooptic materials/devices; Electrooptic measurements
Electrodes
 three-electrode DFB lasers, wavelength tuning and FM mechanism. *Tohyama, M.*, +, J-STQE Jun 95 416-426
- Electroluminescent materials/devices**
 GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, J-STQE Jun 95 285-292
 light-emitting porous Si materials sci., props., and device appls. *Fauchet, P.M.*, +, J-STQE Dec 95 1126-1139
- Electroluminescent materials/devices; cf.** Light-emitting diodes
Electromagnetic coupling; cf. Optical coupling
Electromagnetic measurements; cf. Optical measurements
Electromagnetic propagation in absorbing media; cf. Optical propagation in absorbing media
Electromagnetic reflection; cf. Optical reflection
Electromagnetic refraction; cf. Optical refraction
Electron beam lithography
 InGaAs-GaAs 0.48-μm circ.-grating surface-emitting DBR lasers. *Falohi, M.*, +, J-STQE Jun 95 382-386
 InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H.*, +, J-STQE Jun 95 401-407
- Electron beam pumping**
 Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, J-STQE Sep 95 924-930
 (HeAr)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H.*, +, J-STQE Sep 95 877-885
 (KrCs)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H.*, +, J-STQE Sep 95 877-885

- Ne-Xe-Cs gas mixtures, discharge excitation, excimer VUV emission study. *Tischler, H.*, +, *J-STQE Sep 95* 886-890
- Electron spectroscopy**
CdTe-doped PTFE thin films, laser deposition. *Inoue, S.*, +, *J-STQE Sep 95* 908-915
- Electrooptic materials/devices**
InGaAsP/InP heterostructs., inhomog. exciton broadening and mean free path. *Jaeger, A.*, +, *J-STQE Dec 95* 1113-1118
semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L.*, +, *J-STQE Jun 95* 451-460
- Electrooptic materials/devices; cf. Electrooptic modulation; Kerr effect**
- Electrooptic measurements**
eval. of defect related diffusion in semiconds. by electrooptical sampling. *Biernicki, P.D.*, +, *J-STQE Dec 95* 1037-1046
wafer-sized semicond. device structures, nondestructive, room-temp. anal. *Pollak, F.H.*, +, *J-STQE Dec 95* 1002-1010
- Electrooptic modulation**
DBR short-cavity laser, electrooptic tuning, wide-band AM. *Tessler, N.*, +, *J-STQE Jun 95* 490-493
InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L.*, +, *J-STQE Jun 95* 451-460
three-electrode DFB lasers, wavelength tuning and FM mechanism. *Tohyama, M.*, +, *J-STQE Jun 95* 416-426
wafer-sized semicond. device structures, nondestructive, room-temp. anal. *Pollak, F.H.*, +, *J-STQE Dec 95* 1002-1010
- Electrostatic analysis**
InP-based 1.3-μm QW laser high-temp. charact. *Seki, S.*, +, *J-STQE Jun 95* 264-274
- Electrostatic processes; cf. Electrostatic analysis; Space charge**
- Energy storage**
Yb:Sr₅(PO₄)₃F 1.047-μm energy storage opt. amp. *Marshall, C.D.*, +, *J-STQE Apr 95* 67-77
- Epitaxial growth**
AlGaAs ridge waveguide LD, 0.78- and 0.98-μm, chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109
AlGaNp fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M.*, +, *J-STQE Jun 95* 728-733
AlGaNp index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R.*, +, *J-STQE Jun 95* 723-727
AlGaNp vis. laser, H effect, high temp. operation. *Won-Jin Choi, +, J-STQE Jun 95* 717-722
AlGaNp vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740
GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628
GaAs-AlGaAs superlattices for intersubband infrared detect., photolum. Raman, and infrared diagnosis. *Feng, Z.C.*, +, *J-STQE Dec 95* 1119-1125
GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292
GaInAs(P)-GaInAsP-GaInP quantum well laser, strain influence on las-ing perform. *Guodong Zhang, J-STQE Jun 95* 183-188
GaInP-AlGaNp vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182
InAs-InAs_xSb_{1-x} type-II superlattice midwave IR lasers. *Yong-Hang Zhang, +, J-STQE Jun 95* 749-756
InGaAs-GaAs 0.48-μm circ.-grating surface-emitting DBR lasers. *Fal-ahi, M.*, +, *J-STQE Jun 95* 382-386
InGaAs-GaAs-AlGaAs quantum well lasers and laser arrays, threshold current. *Hamrin Zhao, +, J-STQE Jun 95* 196-202
InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
InGaAsP-InP MQW-DFB LD, 1.5 μm FM response. *Jong-In Shim, +, J-STQE Jun 95* 516-522
InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
pass. antiguide VCSEL, single-mode operation. *Wu, Y.A.*, +, *J-STQE Jun 95* 629-637
rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A.*, +, *J-STQE Apr 95* 82-91
reson.-tunneling diode growth, opt. diagnostic monitoring. *Celii, F.G.*, +, *J-STQE Dec 95* 1064-1072
semicond. alloy comp. determ. during epitaxy, opt. methods. *Aspnes, D.E.*, *J-STQE Dec 95* 1054-1063
- Equivalent circuits**
quantum well lasers, electro-opto-thermal interact., equiv. cct. modeling. *Bewtra, N.*, +, *J-STQE Jun 95* 331-340
- Erbium materials/devices**
Er-doped widely tunable polariz.-stable fiber lasers. *Cooper, D.G.*, +, *J-STQE Apr 95* 14-21
- Etching**
1.3-μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu, +, J-STQE Jun 95* 375-381
InGaAs-InP, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
- InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
n-GaAs, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
- n-InP, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
- Excimer lasers**
193-nm lithog. technol. *Rothschild, M.*, +, *J-STQE Sep 95* 916-923
Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930
Ar⁺F⁻ ionic excimers, VUV spectra. *Chi Zhou, +, J-STQE Sep 95* 872-876
C, diamond-like films, excimer laser deposition using frozen acetylene. *Hanabusa, M.*, +, *J-STQE Sep 95* 848-851
(HeAr)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H.*, +, *J-STQE Sep 95* 877-885
Kr²⁴F⁻ ionic excimers, VUV spectra. *Chi Zhou, +, J-STQE Sep 95* 872-876
lithog. syst. throughput, laser-damage impact. *Harned, N.*, +, *J-STQE Sep 95* 837-840
- N₂ capillary laser, 337.1 nm, tunable spatial coherence. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944
- xeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824
- Excitation of lasers; cf. Laser excitation**

F

Fabrication; cf. Integrated circuit fabrication; Optical device fabrication; Semiconductor device fabrication

Fabry-Perot resonators

- GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628
GaInAs(P)-GaInAsP-GaInP quantum well laser, strain influence on las-ing perform. *Guodong Zhang, J-STQE Jun 95* 183-188
LD, self-seeded Fabry-Perot, time jitter/dyn. *Schell, M.*, +, *J-STQE Jun 95* 528-534
semicond. lasers, gain-switched operation, coherence and noise props. *Griffin, R.A.*, +, *J-STQE Jun 95* 569-576
SW capillary lasers, tunable spatial coherence. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944

Faraday effect

- digital mag. heterostructs., spin dyns., time resolved Faraday rot. spec-trosc. *Crooker, S.A.*, +, *J-STQE Dec 95* 1082-1092

Feedback lasers

- DBR short-cavity laser, electrooptic tuning, wide-band AM. *Tessler, N.*, +, *J-STQE Jun 95* 490-493
DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.K.C.*, *J-STQE Jun 95* 363-370
DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
DFB laser, current-induced gain gratings. *Kazmierski, C.*, +, *J-STQE Jun 95* 371-374
DFB semicond. laser, femtosecond pulse generation, soliton effect com-pression. *Ahmed, K.A.*, +, *J-STQE Jun 95* 592-600
DFB semicond. laser with absorptive grating, gain-switching operation. *Sudoh, T.K.*, +, *J-STQE Jun 95* 583-591
InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S.*, +, *J-STQE Jun 95* 341-345
InGaAsP-InP MQW-DFB LD, 1.5 μm FM response. *Jong-In Shim, +, J-STQE Jun 95* 516-522
InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, *J-STQE Jun 95* 150-164
semicond. lasers, external opt. feedback phenom. *Petermann, K.*, *J-STQE Jun 95* 480-489
semicond. lasers, grating-terminated external cavity, small-sig. IM re-sponse. *Ahmed, Z.*, +, *J-STQE Jun 95* 505-515

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Feedback lasers; cf. Distributed feedback lasers
Films; cf. Optical films; Semiconductor films
Filters; cf. Spatial filters
Flat panel displays
 thin-film transistor arrays testing/charactn., opt. charge-sensing method.
Kido, T., +, J-STQE Dec 95 993-1001
Fluorescent materials/devices
 $(\text{HeAr})^+$ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H., +, J-STQE Sep 95* 877-885
 $(\text{KrCs})^+$ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H., +, J-STQE Sep 95* 877-885
 Ne-Xe-Cs gas mixtures, discharge excitation, excimer VUV emission study. *Tischler, H., +, J-STQE Sep 95* 886-890
 rare earth doped fluoride planar waveguide laser oscillator, MBE fab.
McFarlane, R.A., +, J-STQE Apr 95 82-91
FM; cf. Frequency modulation
FM pulse compression; cf. Chirp modulation
Focusing; cf. Laser beam focusing; Lenses
Forecasting; cf. Technology forecasting
Fourier spectroscopy
 GaAs-AlGaAs superlattices for intersubband infrared detect., photolum., Raman, and infrared diagnosis. *Feng, Z.C., +, J-STQE Dec 95* 1119-1125
Frequency conversion; cf. Optical frequency conversion
Frequency division multiplexing; cf. Wavelength division multiplexing
Frequency domain analysis
 monolithic multiple colliding pulse mode-locked QW laser. *Martins-Filho, J.F., +, J-STQE Jun 95* 539-551
Frequency modulation
 DFB lasers, complex-coupled $\lambda/4$ -shifted, flat FM response. *Okai, M., +, J-STQE Jun 95* 461-465
 InGaAsP-InP MQW-DFB LD, 1.5 μm FM response. *Jong-In Shim, +, J-STQE Jun 95* 516-522
 three-electrode DFB lasers, wavelength tuning and FM mechanism. *Tohyama, M., +, J-STQE Jun 95* 416-426
Frequency stability; cf. Laser stability

G

Gallium materials/devices
 AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emission power. *Zhang, T., +, J-STQE Jun 95* 606-615
 AlGaAs narrow-stripe lasers, self-sustained pulsation. *Yuri, M., +, J-STQE Jun 95* 473-479
 AlGaAs ridge waveguide LD, 0.78- and 0.98- μm , chloride-assisted MOCVD. *Shima, A., +, J-STQE Jun 95* 102-109
 AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. *Azouz, A., +, J-STQE Jun 95* 577-582
 AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. *van Exter, M.P., +, J-STQE Jun 95* 601-605
 AlGaN fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M., +, J-STQE Jun 95* 728-733
 AlGaN² index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R., +, J-STQE Jun 95* 723-727
 AlGaN P VCSEL, threshold current minimization. *Chow, W.W., +, J-STQE Jun 95* 649-653
 AlGaN² vis. laser, H effect, high temp. operation. *Won-Jin Choi, +, J-STQE Jun 95* 717-722
 AlGaN² vis. LD and arrays, fab., high-power charact. *Shima, A., +, J-STQE Jun 95* 734-740
 GaAlAs LD, 800 mW peak-power self-sustained pulsation. *Takayama, T., +, J-STQE Jun 95* 562-568
 GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E., +, J-STQE Jun 95* 624-628
 GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Olsinski, M., +, J-STQE Jun 95* 681-696
 GaAs-AlGaAs MQW GRINSCH laser temp. sensitivity. *Dion, M., +, J-STQE Jun 95* 230-233
 GaAs-GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. *Uskov, A.V., +, J-STQE Jun 95* 552-561
 GaAsP-InGaAsP long wavelength strained QW lasers, orient. depend. of opt. props. *Niwa, A., +, J-STQE Jun 95* 211-217
 GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D., +, J-STQE Jun 95* 661-666
 GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M., +, J-STQE Jun 95* 285-292
 Ga(In)As(P)-GaInAsP-GaInP quantum well laser, strain influence on las-ing perform. *Guodong Zhang, J-STQE Jun 95* 183-188
 GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A., +, J-STQE Jun 95* 293-300

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GaInP-AlGaInP quantum well vis. laser, band struct. determ. *Meney, A.T., +, J-STQE Jun 95* 697-706
 GaInP-AlGaInP vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J., +, J-STQE Jun 95* 173-182
 GaInP quantum well laser, threshold current strain depend. *Blood, P., +, J-STQE Jun 95* 707-711
 InGaAlP tensile-strained MQW laser, high temp. and reliable operation. *Watanabe, M., +, J-STQE Jun 95* 712-716
 InGaAs-GaAs 0.48- μm circ.-grating surface-emitting DBR lasers. *Falahi, M., +, J-STQE Jun 95* 382-386
 InGaAs-GaAs-AlGaAs quantum well lasers and laser arrays, threshold current. *Hannin Zhao, +, J-STQE Jun 95* 196-202
 InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou, +, J-STQE Jun 95* 165-172
 InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E., +, J-STQE Jun 95* 616-623
 InGaAs-GaAs quantum well VCSEL, anisotropic gain distrib., polaris. control. *Sun, D., +, J-STQE Jun 95* 674-680
 InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T., +, J-STQE Jun 95* 667-673
 InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S., +, J-STQE Jun 95* 341-345
 InGaAs-InGaAsP-InGaP LD temp. depend. efficiency and modulation charact. *Nabiev, R.F., +, J-STQE Jun 95* 234-243
 InGaAs-InGaAsP MQW laser, carrier-phonon interact. *Nido, M., +, J-STQE Jun 95* 308-315
 InGaAs-InGaP 0.98- μm strained quantum-well lasers, superlattice opt. confine. layer. *Usami, M., +, J-STQE Jun 95* 244-249
 InGaAs-InGaP quantum well laser, tensile strained InGaAsP barriers, high-power operation. *Sagawa, M., +, J-STQE Jun 95* 189-194
 InGaAs-InP, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95* 841-847
 InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim, +, J-STQE Jun 95* 408-415
 InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C., +, J-STQE Jun 95* 387-395
 InGaAsP-InP MQW-DFB LD, 1.5 μm FM response. *Jong-In Shim, +, J-STQE Jun 95* 516-522
 InGaAsP-InP MQW monolithic laser array. *Uomi, K., +, J-STQE Jun 95* 203-210
 InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H., +, J-STQE Jun 95* 401-407
 InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W., +, J-STQE Jun 95* 638-648
 InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U., +, J-STQE Jun 95* 442-450
 InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F., +, J-STQE Jun 95* 396-400
 InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D., +, J-STQE Jun 95* 661-666
 InGaAs VCSEL with broad-gain bandwidth, temp. charact. *Kajita, M., +, J-STQE Jun 95* 654-660
 Ne-like lasing, prepulse effect. *Fill, E.E., +, J-STQE Sep 95* 958-961
 n-GaAs, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95* 841-847
Gas discharge devices; cf. Glow discharge devices
Gas discharges; cf. Corona; Ionization; Sparks
Gas lasers
 Cu freq.-doubled lasers for polymer high-speed UV micro-machining. *Glover, A.C.J., +, J-STQE Sep 95* 830-836
 Cu vap. laser, second-harmonic and sum-freq. high av. power UV generation. *Coutts, D.W., +, J-STQE Sep 95* 768-778
 Cu vap. laser, UV SHG. *Withford, M.J., +, J-STQE Sep 95* 779-783
 N₂ laser, ultra-fast mag. pulse compression cct. *Seki, H., +, J-STQE Sep 95* 825-829
Gas lasers; cf. Excimer lasers; Ion lasers
Gaussian beams
 Hg vap., intense VUV coherent light generation, nonlin. effects. *Museur, L., +, J-STQE Sep 95* 900-907
Geometrical optics
 corrections to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957). *Healy, S.B., +, J-STQE Dec 95* 1156
 Ge, Ne-like collisionally-pumped laser, prepulses effect, computer model. *Healy, S.B., +, J-STQE Sep 95* 949-957
Germanium materials/devices
 corrections to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957). *Healy, S.B., +, J-STQE Dec 95* 1156
 Ne-like Ge collisionally-pumped laser, prepulse effect, computer model. *Healy, S.B., +, J-STQE Sep 95* 949-957

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Glass materials/devices; cf. Neodymium:glass lasers**Glow discharge devices**

- He-Ar⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C., +, J-STQE Sep 95 805-810*
- He-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C., +, J-STQE Sep 95 805-810*
- Ne-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C., +, J-STQE Sep 95 805-810*

Gold materials/devices

- He-Ar⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C., +, J-STQE Sep 95 805-810*
- laser-prod. plasma target materials for Xe²⁺ Auger laser pumping. *Dennis, T., +, J-STQE Sep 95 867-871*

Gratings

- DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.K.C., J-STQE Jun 95 363-370*
- DFB laser, bent waveguides and chirped gratings. *Hillmer, H., +, J-STQE Jun 95 356-362*
- DFB laser, current-induced gain gratings. *Kazmierski, C., +, J-STQE Jun 95 371-374*
- DFB lasers, complex-coupled $\lambda/4$ -shifted, flat FM response. *Okai, M., +, J-STQE Jun 95 461-465*
- DFB laser with S-bend waveguide, high-power single-mode operation. *Salzman, J., +, J-STQE Jun 95 346-355*
- DFB semicond. laser with absorptive grating, gain-switching operation. *Sudo, T.K., +, J-STQE Jun 95 583-591*
- InGaAs-GaAs 0.48- μm circ.-grating surface-emitting DBR lasers. *Falihai, M., +, J-STQE Jun 95 382-386*
- InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S., +, J-STQE Jun 95 341-345*
- InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H., +, J-STQE Jun 95 401-407*
- InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F., +, J-STQE Jun 95 396-400*
- semicond. lasers, grating-terminated external cavity, small-sig. IM response. *Ahmed, Z., +, J-STQE Jun 95 505-515*

Gratings; cf. Holographic gratings**H****Harmonic generation; cf. Optical frequency conversion****Helium materials/devices**

- (HeAr)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H., +, J-STQE Sep 95 877-885*
- He-Au⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C., +, J-STQE Sep 95 805-810*
- He-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C., +, J-STQE Sep 95 805-810*

Heterojunction bipolar transistors

- high-perform. n-p-n AlGaAs-GaAs HBTs, comprehensive opt. charactn. *Lu, Z.H., +, J-STQE Dec 95 1030-1036*
- opt. charactn. *Smith, P.B., +, J-STQE Dec 95 1011-1016*

Heterojunctions; cf. Semiconductor heterojunctions**High-temperature factors; cf. High-temperature techniques****High-temperature techniques**

- AlGaAs ridge waveguide LD, 0.78- and 0.98- μm , chloride-assisted MOCVD. *Shima, A., +, J-STQE Jun 95 102-109*

Holographic gratings

- InGaAs-InP, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95 841-847*
- n-GaAs, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95 841-847*
- n-InP, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95 841-847*

Holographic optical components; cf. Holographic gratings**I****Imaging/mapping; cf. Infrared imaging/mapping; Microscopy; Optical imaging/mapping****Indium materials/devices**

- AlGaInP fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M., +, J-STQE Jun 95 728-733*
- AlGaInP index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R., +, J-STQE Jun 95 723-727*
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- AlGaInP vis. laser, H effect, high temp. operation. *Won-Jin Choi, +, J-STQE Jun 95 717-722*

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GaAsP-InGaAsP long wavelength strained QW lasers, orient. depend. of opt. props. *Niwa, A., +, J-STQE Jun 95 211-217*

GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M., +, J-STQE Jun 95 285-292*

Ga(In)As(P)-GaInAsP-GaInP quantum well laser, strain influence on lasing perform. *Guodong Zhang, J-STQE Jun 95 183-188*

GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A., +, J-STQE Jun 95 293-300*

GaInP-AlGaInP quantum well vis. laser, band struct. determ. *Meney, A.T., +, J-STQE Jun 95 697-706*

GaInP-AlGaInP vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J., +, J-STQE Jun 95 173-182*

GaInP quantum well laser, threshold current strain depend. *Blood, P., +, J-STQE Jun 95 707-711*

InAs-InAs:Sb_x type-II superlattice midwave IR lasers. *Yong-Hang Zhang, +, J-STQE Jun 95 749-756*

InGaAlP tensile-strained MQW laser, high temp. and reliable operation. *Watanabe, M., +, J-STQE Jun 95 712-716*

InGaAs-GaAs 0.48- μm circ.-grating surface-emitting DBR lasers. *Falihai, M., +, J-STQE Jun 95 382-386*

InGaAs-GaAs-AlGaAs quantum well lasers and laser arrays, threshold current. *Hammin Zhao, +, J-STQE Jun 95 196-202*

InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou, +, J-STQE Jun 95 165-172*

InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E., +, J-STQE Jun 95 616-623*

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InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T., +, J-STQE Jun 95 667-673*

InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S., +, J-STQE Jun 95 341-345*

InGaAs-InGaP-InGaP LD temp. depend. efficiency and modulation

charact. *Nabiev, R.F., +, J-STQE Jun 95 234-243*

InGaAs-InGaAsP MQW laser, carrier-phonon interact. *Nido, M., +, J-STQE Jun 95 308-315*

InGaAs-InGaP 0.98- μm strained quantum-well lasers, superlattice opt. confine. layer. *Usami, M., +, J-STQE Jun 95 244-249*

InGaAs-InGaP quantum well laser, tensile strained InGaAsP barriers, high-power operation. *Sagawa, M., +, J-STQE Jun 95 189-194*

InGaAs-InP, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95 841-847*

InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim, +, J-STQE Jun 95 408-415*

InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C., +, J-STQE Jun 95 387-395*

InGaAsP/InP heterostructs., inhomog. exciton broadening and mean free path. *Jaeger, A., +, J-STQE Dec 95 1113-1118*

InGaAsP-InP MQW-DBF LD, 1.5 μm FM response. *Jong-In Shim, +, J-STQE Jun 95 516-522*

InGaAsP-InP MQW monolithic laser array. *Uomi, K., +, J-STQE Jun 95 203-210*

InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H., +, J-STQE Jun 95 401-407*

InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W., +, J-STQE Jun 95 638-648*

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InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D., +, J-STQE Jun 95 661-666*

InGaAs VCSEL with broad-gain bandwidth, temp. charact. *Kajita, M., +, J-STQE Jun 95 654-660*

InP-based 1.3- μm QW laser high-temp. charact. *Seki, S., +, J-STQE Jun 95 264-274*

n-InP, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95 841-847*

Industrial control; cf. Process control**Infrared imaging/mapping**

InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M., +, J-STQE Jun 95 110-116*

Infrared lasers; cf. Lasers**Infrared spectroscopy**

GaAs-AlGaAs superlattices for intersubband infrared detect., photolum. Raman, and infrared diagnosis. *Feng, Z.C., +, J-STQE Dec 95 1119-1125*

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Injection lasers; cf. Semiconductor lasers**Innovation; cf. Technological innovation****Integrated circuit fabrication**193-nm lithog. technol. *Rothschild, M.*, +, *J-STQE Sep 95* 916-923**Integrated circuit fabrication; cf. Resists****Integrated circuits; cf. Integrated optoelectronics****Integrated optics**

- AlGaInP vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740
 antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, *J-STQE Jun 95* 129-137
 InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou*, +, *J-STQE Jun 95* 165-172
 InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
 semicond. laser, mode-locked, synchronization with external pulse stream. *Khalpin, V.B.*, +, *J-STQE Jun 95* 523-527

Integrated optoelectronics

- InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, *J-STQE Jun 95* 203-210
 InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
 quantum well lasers, electro-opto-thermal interact., equiv. cct. modeling. *Bewtra, N.*, +, *J-STQE Jun 95* 331-340
 semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L.*, +, *J-STQE Jun 95* 451-460

Interchannel interference; cf. Optical crosstalk**Interconnections; cf. Optical interconnections****Interferometry; cf. Optical interferometry****Invention; cf. Technological innovation****Ion implantation; cf. Semiconductor device ion implantation****Ionization**

- Li^+ opt. field-induced ionization X-ray laser, preformed plasma. *Midorikawa, K.*, +, *J-STQE Sep 95* 931-940
 XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824

Ionization; cf. Photoionization**Ion lasers**

- Ar discharge-driven 46.9-nm amp., gain-length approaching saturation. *Rocca, J.J.*, +, *J-STQE Sep 95* 945-948
 corrections to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957). *Healy, S.B.*, +, *J-STQE Dec 95* 1156
 Ga, Ne-like lasing, prepulse effect. *Fill, E.E.*, +, *J-STQE Sep 95* 958-961
 Ge, Ne-like collisionally-pumped laser, prepulses effect, computer model. *Healy, S.B.*, +, *J-STQE Sep 95* 949-957
 He-Au⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
 He-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
 Li⁺ opt. field-induced ionization X-ray laser, preformed plasma. *Midorikawa, K.*, +, *J-STQE Sep 95* 931-940
 Ne-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
 Ta laser double-pass, CrB₂-C multilayer mirror damage, computer simul. *Balakireva, L.L.*, +, *J-STQE Sep 95* 962-969
 Xe²⁺ Auger laser, pumping by laser-prod. target materials. *Dennis, T.*, +, *J-STQE Sep 95* 867-871

J**Jitter; cf. Timing jitter****Junction lasers; cf. Semiconductor lasers****Junctions; cf. Semiconductor-insulator interfaces****K****Kerr effect**

- Hg vap., intense VUV coherent light generation, nonlin. effects. *Museur, L.*, +, *J-STQE Sep 95* 900-907

Krypton materials/devices

- (KrCs)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H.*, +, *J-STQE Sep 95* 877-885
 Kr²⁺F⁻ ionic excimers, VUV spectra. *Chi Zhou*, +, *J-STQE Sep 95* 872-876

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L**Lamps; cf. Lighting****Lanthanum materials/devices**

- ZBLAN:Nd fiber laser in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791

Laser absorbers

- GaAlAs LD, 800 mW peak-power self-sustained pulsation. *Takayama, T.*, +, *J-STQE Jun 95* 562-568
 GaAs-GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. *Uskov, A.V.*, +, *J-STQE Jun 95* 552-561
 InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C.*, +, *J-STQE Jun 95* 387-395
 Tm:YAlO₃ 1.94-μm laser, biomedical appls. *Stoneman, R.C.*, +, *J-STQE Apr 95* 78-81

Laser accessories

- AlGaInP fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M.*, +, *J-STQE Jun 95* 728-733
 Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930
 CrB₂-C multilayer mirror damage, Ta laser double-pass, computer simul. *Balakireva, L.L.*, +, *J-STQE Sep 95* 962-969
 DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.K.C.*, *J-STQE Jun 95* 363-370
 DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
 DFB laser, current-induced gain gratings. *Kazmierski, C.*, +, *J-STQE Jun 95* 371-374
 DFB lasers, complex-coupled λ/4-shifted, flat FM response. *Okai, M.*, +, *J-STQE Jun 95* 461-465
 DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J.*, +, *J-STQE Jun 95* 346-355
 GaNAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, *J-STQE Jun 95* 293-300
 InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou*, +, *J-STQE Jun 95* 165-172
 InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T.*, +, *J-STQE Jun 95* 667-673
 InGaAs-InGaAlAs-InP DFB lasers, superstructure gratings, coupling coeffs. var. *Hansmann, S.*, +, *J-STQE Jun 95* 341-345
 InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
 N₂ laser, ultra-fast mag. pulse compression cct. *Seki, H.*, +, *J-STQE Sep 95* 825-829
 XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824

Laser accessories; cf. Laser absorbers; Laser couplers; Laser resonators**Laser amplifiers**

- antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, *J-STQE Jun 95* 129-137
 Ar discharge-driven 46.9-nm amp., gain-length approaching saturation. *Rocca, J.J.*, +, *J-STQE Sep 95* 945-948
 Cu vap. laser, second-harmonic and sum-freq. high av. power UV generation. *Coutts, D.W.*, +, *J-STQE Sep 95* 768-778
 semicond. laser, mode-locked, synchronization with external pulse stream. *Khalpin, V.B.*, +, *J-STQE Jun 95* 523-527
 Yb:Sr₃(PO₄)₃ 1.047-μm energy storage opt. amp. *Marshall, C.D.*, +, *J-STQE Apr 95* 67-77

Laser amplifiers; cf. Semiconductor optical amplifiers**Laser applications**

- InGaAs-InP, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
 lithog. syst. throughput, laser-damage impact. *Harned, N.*, +, *J-STQE Sep 95* 837-840
 n-GaAs, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
 n-InP, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
 polymers, high-speed UV micro-machining, freq.-doubled Cu vap. lasers. *Glover, A.C.J.*, +, *J-STQE Sep 95* 830-836

Laser applications; cf. Laser biomedical applications; Laser materials-processing applications**Laser arrays; cf. Semiconductor laser arrays****Laser beam distortion**

- Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930
 Laser beam effects; cf. Laser applications; Laser radiation effects

Laser beam focusing

- Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930

Laser beams

- AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. *Azouz, A.*, +, *J-STQE Jun 95* 577-582

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- AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. *van Exter, M.P.*, +, *J-STQE Jun 95* 601-605
- AlGaN_P fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M.*, +, *J-STQE Jun 95* 728-733
- AlGaN_P index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R.*, +, *J-STQE Jun 95* 723-727
- AlGaN_P VCSEL, threshold current minimization. *Chow, W.W.*, +, *J-STQE Jun 95* 649-653
- AlGaN_P vis. laser, H effect, high temp. operation. *Won-Jin Choi, +*, *J-STQE Jun 95* 717-722
- AlGaN_P vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740
- Cu vap. laser, UV SHG. *Withford, M.J.*, +, *J-STQE Sep 95* 779-783
- DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
- DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J.*, +, *J-STQE Jun 95* 346-355
- DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A.*, +, *J-STQE Jun 95* 592-600
- DFB semicond. laser with absorptive grating, gain-switching operation. *Sudoh, T.K.*, +, *J-STQE Jun 95* 583-591
- Fabry-Perot semicond. laser, gain-switched, coherence and noise props. *Griffin, R.A.*, +, *J-STQE Jun 95* 569-576
- GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
- Ga(In)As(P)-GaInAsP-GaInP quantum well laser, strain influence on las-ing perform. *Guodong Zhang, J-STQE Jun 95* 183-188
- GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, *J-STQE Jun 95* 293-300
- GaInP-AlGaN_P quantum well vis. laser, band struct. determ. *Meney, A.T.*, +, *J-STQE Jun 95* 697-706
- GaInP-AlGaN_P vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182
- GaInP quantum well laser, threshold current strain depend. *Blood, P.*, +, *J-STQE Jun 95* 707-711
- InGaAlP tensile-strained MQW laser, high temp. and reliable operation. *Watanabe, M.*, +, *J-STQE Jun 95* 712-716
- InGaAs-GaAs quantum well lasers and laser arrays, threshold current. *Hammin Zhao, +*, *J-STQE Jun 95* 196-202
- InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang Yih Liou, +*, *J-STQE Jun 95* 165-172
- InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
- InGaAs-GaAs quantum well VCSEL, anisotropic gain distrib., polaris. control. *Sun, D.*, +, *J-STQE Jun 95* 674-680
- InGaAs-InGaAsP MQW laser, carrier-phonon interact. *Nido, M.*, +, *J-STQE Jun 95* 308-315
- InGaAs-InGaP quantum well laser, tensile strained InGaAsP barriers, high-power operation. *Sagawa, M.*, +, *J-STQE Jun 95* 189-194
- InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
- InGaAs VCSEL with broad-gain bandwidth, temp. charact. *Kajita, M.*, +, *J-STQE Jun 95* 654-660
- N₂ laser, ultra-fast mag. pulse compression cct. *Seki, H.*, +, *J-STQE Sep 95* 825-829
- semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, *J-STQE Jun 95* 150-164
- XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824
- ZnMgSSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748
- Laser biomedical applications**
- Tm:YAlO₃ 1.94-μm laser, biomedical appls. *Stoneman, R.C.*, +, *J-STQE Apr 95* 78-81
- Laser cavity resonators; cf. Laser resonators**
- Laser components; cf. Laser accessories**
- Laser couplers**
- DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A.*, +, *J-STQE Jun 95* 592-600
- InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
- InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S.*, +, *J-STQE Jun 95* 341-345
- Nd:YAG, solid-state CW freq.-quadrupled laser. *Oka, M.*, +, *J-STQE Sep 95* 859-866
- semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, *J-STQE Jun 95* 150-164
- semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
- Laser diodes; cf. Semiconductor lasers**
- Laser excitation**
- Yb³⁺:SiO₂ fiber lasers, sources 1, 1.2 μm. *Pask, H.M.*, +, *J-STQE Apr 95* 2-13
- Laser modes**
- 1.3-μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu, +*, *J-STQE Jun 95* 375-381
- AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emis-sion power. *Zhang, T.*, +, *J-STQE Jun 95* 606-615
- AlGaAs narrow-stripe lasers, self-sustained pulsation. *Yuri, M.*, +, *J-STQE Jun 95* 473-479
- AlGaAs ridge waveguide LD, 0.78- and 0.98-μm, chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109
- AlGaN_P fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M.*, +, *J-STQE Jun 95* 728-733
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- AlGaN_P vis. laser, H effect, high temp. operation. *Won-Jin Choi, +*, *J-STQE Jun 95* 717-722
- antiguide diode laser arrays, above-threshold anal. *Nabiev, R.F.*, +, *J-STQE Jun 95* 138-149
- antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, *J-STQE Jun 95* 129-137
- DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
- DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J.*, +, *J-STQE Jun 95* 346-355
- Fabry-Perot semicond. laser, gain-switched, coherence and noise props. *Griffin, R.A.*, +, *J-STQE Jun 95* 569-576
- GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
- InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
- InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C.*, +, *J-STQE Jun 95* 387-395
- InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, *J-STQE Jun 95* 638-648
- InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
- LD, self-seeded Fabry-Perot, time jitter/dyn. *Schell, M.*, +, *J-STQE Jun 95* 528-534
- Nd:YAG, solid-state CW freq.-quadrupled laser. *Oka, M.*, +, *J-STQE Sep 95* 859-866
- N₂ laser, ultra-fast mag. pulse compression cct. *Seki, H.*, +, *J-STQE Sep 95* 825-829
- pass. antiguide VCSEL, single-mode operation. *Wu, Y.A.*, +, *J-STQE Jun 95* 629-637
- quantum well high-speed lasers, carrier transport effects, time-domain model. *Nguyen, L.V.T.*, +, *J-STQE Jun 95* 494-504
- semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, *J-STQE Jun 95* 150-164
- semicond. laser, high-power, long. spatial inhomogeneities. *Fang, W.-C.W.*, +, *J-STQE Jun 95* 117-128
- semicond. laser, opt. feedback, Sisyphus effect. *Van Tartwijk, G.H.M.*, +, *J-STQE Jun 95* 466-472
- semicond. lasers, external opt. feedback phenom. *Petermann, K.*, *J-STQE Jun 95* 480-489
- semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
- Laser modes; cf. Mode locked lasers**
- Laser noise**
- Fabry-Perot semicond. laser, gain-switched, coherence and noise props. *Griffin, R.A.*, +, *J-STQE Jun 95* 569-576
- InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
- semicond. laser, opt. feedback, Sisyphus effect. *Van Tartwijk, G.H.M.*, +, *J-STQE Jun 95* 466-472
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- semicond. lasers, grating-terminated external cavity, small-sig. IM re-sponse. *Ahmed, Z.*, +, *J-STQE Jun 95* 505-515
- Laser pulses; cf. Optical pulses; Pulsed lasers**
- CrB₂-C multilayer mirror damage, Ta laser double-pass, computer simul. *Balakireva, L.L.*, +, *J-STQE Sep 95* 962-969
- lithog. syst. throughput, laser-damage impact. *Harned, N.*, +, *J-STQE Sep 95* 837-840

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Laser reliability

- AlGaAs ridge waveguide LD, 0.78- and 0.98- μm , chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109
 Ce^{3+} activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
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ZnMgSSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748

Laser resonators

- AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emission power. *Zhang, T.*, +, *J-STQE Jun 95* 606-615
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DBR short-cavity laser, electrooptic tuning, wide-band AM. *Tessler, N.*, +, *J-STQE Jun 95* 490-493
DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.K.C.*, *J-STQE Jun 95* 363-370
DFB lasers, complex-coupled $\lambda/4$ -shifted, flat FM response. *Okai, M.*, +, *J-STQE Jun 95* 461-465
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Fabry-Perot semicond. laser, gain-switched, coherence and noise props. *Griffin, R.A.*, +, *J-STQE Jun 95* 569-576
GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628
GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Osinski, M.*, +, *J-STQE Jun 95* 681-696
GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
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MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D.*, +, *J-STQE Jun 95* 275-284
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semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
SW capillary lasers, tunable spatial coherence. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944
XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824

Lasers

- short wavelength lasers and applications (special issue). *J-STQE Sep 95* 765-975

Lasers; cf. CW lasers; Distributed Bragg reflector lasers; Excimer lasers; Feedback lasers; Gas lasers; Laser amplifiers; Power lasers; Pulsed lasers; Ring lasers; Solid lasers; X-ray lasers

Laser stability

- AlGaN_xP index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R.*, +, *J-STQE Jun 95* 723-727
AlGaN_xP vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740
antiguided diode laser arrays, above-threshold anal. *Nabiev, R.F.*, +, *J-STQE Jun 95* 138-149
DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
Er-doped widely tunable polariz.-stable fiber lasers. *Cooper, D.G.*, +, *J-STQE Apr 95* 14-21
InGaAs-GaAs quantum well VCSEL, anisotropic gain distrib., polaris. control. *Sun, D.*, +, *J-STQE Jun 95* 674-680
InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, *J-STQE Jun 95* 638-648
semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, *J-STQE Jun 95* 150-164
semicond. laser, opt. feedback, Sisyphus effect. *Van Tartwijk, G.H.M.*, +, *J-STQE Jun 95* 466-472

Laser thermal factors

- 1.3 μm semicond. lasers, gain anal. in T_0 determination. *Ackerman, D.A.*, +, *J-STQE Jun 95* 250-263
1.3- μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu*, +, *J-STQE Jun 95* 375-381
Cr⁴⁺:doped laser host lattices, tunable output. *Pollock, C.R.*, +, *J-STQE Apr 95* 62-66
GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628
GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Osinski, M.*, +, *J-STQE Jun 95* 681-696
GaAs-AlGaAs MQW GRINSCH laser temp. sensitivity. *Dion, M.*, +, *J-STQE Jun 95* 230-233
GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292
GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, *J-STQE Jun 95* 293-300
InGaAs-InGaP-InGaAl LD temp. depend. efficiency and modulation charact. *Nabiev, R.F.*, +, *J-STQE Jun 95* 234-243
InGaAs-InGaP 0.98- μm strained quantum-well lasers, superlattice opt. confine. layer. *Usami, M.*, +, *J-STQE Jun 95* 244-249
InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H.*, +, *J-STQE Jun 95* 401-407
InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, *J-STQE Jun 95* 638-648
InGaAs VCSEL with broad-gain bandwidth, temp. charact. *Kajita, M.*, +, *J-STQE Jun 95* 654-660
InP-based 1.3- μm QW laser high-temp. charact. *Seki, S.*, +, *J-STQE Jun 95* 264-274
MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D.*, +, *J-STQE Jun 95* 275-284
quantum well lasers, electro-opto-thermal interact., equiv. cct. modeling. *Bewtra, N.*, +, *J-STQE Jun 95* 331-340
rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, *J-STQE Jun 95* 427-432
strained quantum-well lasers with spin-orbit coupling, modeling. *Chih-Sheng Chang*, +, *J-STQE Jun 95* 218-229

Laser tuning

- Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
Cr:LiSrAlF₆ Q-switched laser freq. tripling, UV region. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61
Cr⁴⁺:doped laser host lattices, tunable output. *Pollock, C.R.*, +, *J-STQE Apr 95* 62-66
DBR short-cavity laser, electrooptic tuning, wide-band AM. *Tessler, N.*, +, *J-STQE Jun 95* 490-493
DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
DFB lasers, complex-coupled $\lambda/4$ -shifted, flat FM response. *Okai, M.*, +, *J-STQE Jun 95* 461-465
Er-doped widely tunable polariz.-stable fiber lasers. *Cooper, D.G.*, +, *J-STQE Apr 95* 14-21
InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim*, +, *J-STQE Jun 95* 408-415
InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C.*, +, *J-STQE Jun 95* 387-395
InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H.*, +, *J-STQE Jun 95* 401-407
InGaAs subnw tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400

+ Check author entry for coauthors

† Check author entry for subsequent corrections/comments

- LiF:F₂** color center laser progress. *Mirov, S.B.*, +, *J-STQE Apr 95* 22-30
MQW DFB laser, self-pulsating 1.55-μm, 12-64 GHz continuous freq. tuning. *Sartorius, B.*, +, *J-STQE Jun 95* 535-538
rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, *J-STQE Jun 95* 427-432
semicond. laser, mode-locked, synchronization with external pulse stream. *Khalifin, V.B.*, +, *J-STQE Jun 95* 523-527
SW capillary lasers, tunable spatial coherence. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944
three-electrode DFB lasers, wavelength tuning and FM mechanism. *Tohyama, M.*, +, *J-STQE Jun 95* 416-426
Ti:sapphire laser wavelengths, nonlin. conversion. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57
tunable solid-state lasers (special issue). *J-STQE Apr 95* 1-91
ZnMgSSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748
- LEDs**; cf. Light-emitting diodes
- Lenses**
InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou*, +, *J-STQE Jun 95* 165-172
- Light-emitting diodes**
III-V epitaxial layers, high-speed photolum. mapping. *Imler, W.R.*, *J-STQE Dec 95* 987-992
light-emitting porous Si materials sci., props., and device appls. *Fauchet, P.M.*, +, *J-STQE Dec 95* 1126-1139
- Lighting**
Xe excimer lamp excitation by quasi-CW jet discharges. *Kawanaka, J.*, +, *J-STQE Sep 95* 852-858
- Light sources**; cf. Lasers; Light-emitting diodes; Lighting
- Linear algebra**; cf. Matrices
- Linear FM**; cf. Chirp modulation
- Lithium materials/devices**
Li₂Os cryst. opt. harmonic generation of Ti:sapphire laser wavelengths. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57
LiCaAlF₆:Ce³⁺, tunable UV ultrafast lasers, direct pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
- LiF:F₂** color center laser progress. *Mirov, S.B.*, +, *J-STQE Apr 95* 22-30
LiSrAlF₆:Cr laser, Q-switched, SHG. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61
Li⁺ opt. field-induced ionization X-ray laser, preformed plasma. *Midorikawa, K.*, +, *J-STQE Sep 95* 931-940
LuLiF₄:Ce³⁺, tunable UV ultrafast lasers, direct pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
- Lithography**; cf. Electron beam lithography; Photolithography; X-ray lithography
- Losses**; cf. Optical losses
- Luminescent materials/devices**; cf. Electroluminescent materials/devices; Fluorescent materials/devices; Photoluminescent materials/devices
- Lutetium materials/devices**
LuLiF₄:Ce³⁺, tunable UV ultrafast lasers, direct pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
- M**
- Magnesium materials/devices**
ZnMgSSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748
- Magnetic materials/devices**
digital mag. heterostructs., spin dyns., time resolved Faraday rot. spectrosc. *Crooker, S.A.*, +, *J-STQE Dec 95* 1082-1092
- Magnetooptic materials/devices**; cf. Faraday effect
- Manufacturing testing**
HBT opt. charactn. *Smith, P.B.*, +, *J-STQE Dec 95* 1011-1016
high-perform. n-p-n AlGaAs-GaAs HBTs, comprehensive opt. charactn. *Lu, Z.H.*, +, *J-STQE Dec 95* 1030-1036
large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C.*, +, *J-STQE Dec 95* 1017-1029
LEDs, III-V epitaxial layers, high-speed photolum. mapping. *Imler, W.R.*, *J-STQE Dec 95* 987-992
optical diagnostics of semiconductors (special issue). *J-STQE Dec 95* 977-1155
thin-film transistor arrays testing/charactn., opt. charge-sensing method. *Kido, T.*, +, *J-STQE Dec 95* 993-1001
wafer level testing for semicond. laser manufacture, spatially resolved photolum. *Carver, G.E.*, +, *J-STQE Dec 95* 980-986
wafer-sized semicond. device structures, nondestructive, room-temp. anal. *Pollak, F.H.*, +, *J-STQE Dec 95* 1002-1010
- Mass spectroscopy**
AlGaN/P vis. laser, H effect, high temp. operation. *Won-Jin Choi*, +, *J-STQE Jun 95* 717-722
- Materials processing**; cf. Etching; Laser materials-processing applications
- Materials testing**; cf. Nondestructive testing
- Mathematics**; cf. Optimization methods
- Matrices**
strained quantum-well lasers with spin-orbit coupling, modeling. *Chih-Sheng Chang*, +, *J-STQE Jun 95* 218-229
- Measurement**; cf. Semiconductor device measurements; Semiconductor materials measurements; Spectroscopy
- Mechanical factors**; cf. Semiconductor device mechanical factors; Strain
- Mercury materials/devices**
vap., intense VUV coherent light generation, nonlin. effects. *Museur, L.*, +, *J-STQE Sep 95* 900-907
- Microscopy**
InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M.*, +, *J-STQE Jun 95* 110-116
semicond. heterostructs. and laser diodes, near-field opt. studies. *Goldberg, B.B.*, +, *J-STQE Dec 95* 1073-1081
- Mirrors**
Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930
CrB₂-C multilayer mirror damage, Ta laser double-pass, computer simul. *Balakireva, L.L.*, +, *J-STQE Sep 95* 962-969
GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, *J-STQE Jun 95* 293-300
InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
- Modeling**; cf. Semiconductor device modeling
- Mode locked lasers**
AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. *Azouz, A.*, +, *J-STQE Jun 95* 577-582
GaAs-GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. *Usvyat, A.V.*, +, *J-STQE Jun 95* 552-561
InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
monolithic multiple colliding pulse mode-locked QW laser. *Martins-Filho, J.F.*, +, *J-STQE Jun 95* 539-551
MQW DFB laser, self-pulsating 1.55-μm, 12-64 GHz continuous freq. tuning. *Sartorius, B.*, +, *J-STQE Jun 95* 535-538
semicond. laser, mode-locked, synchronization with external pulse stream. *Khalifin, V.B.*, +, *J-STQE Jun 95* 523-527
semicond. laser, opt. feedback, Sisyphus effect. *Van Tartwijk, G.H.M.*, +, *J-STQE Jun 95* 466-472
semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L.*, +, *J-STQE Jun 95* 451-460
- Modulation/demodulation**; cf. Chirp modulation; Optical modulation/demodulation
- Monitoring**; cf. Process monitoring
- Multiplexing**; cf. Wavelength division multiplexing

N**Negative resistance devices**; cf. Tunnel diodes**Neodymium:glass lasers****Nd:ZBLAN fiber lasers in UV and vis., upconversion pumping**. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791**Neodymium:YAG lasers****Nd:YAG, solid-state CW freq.-quadrupled laser**. *Oka, M.*, +, *J-STQE Sep 95* 859-866**Neon materials/devices****Ne-Cu⁺ high-gain hollow-cathode lasers for UV and VUV**. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810**Ne-Xe-Cs gas mixtures, discharge excitation, excimer VUV emission study**. *Tischler, H.*, +, *J-STQE Sep 95* 886-890**Nitrogen materials/devices****laser, ultra-fast mag. pulse compression ect.** *Seki, H.*, +, *J-STQE Sep 95* 823-829**N₂ capillary laser, 337.1 nm, tunable spatial coherence**. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944**Noble gas materials/devices**; cf. Argon materials/devices; Helium materials/devices; Krypton materials/devices; Neon materials/devices; Xenon materials/devices**Noise**; cf. Laser noise**Nondestructive testing****eval. of defect related diffusion in semiconds. by electrooptical sampling**.*Biernacki, P.D.*, +, *J-STQE Dec 95* 1037-1046**HBT opt. charactn. *Smith, P.B.*, +, *J-STQE Dec 95* 1011-1016**
large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C.*, +, *J-STQE Dec 95* 1017-1029**LEDs, III-V epitaxial layers, high-speed photolum. mapping**. *Imler, W.R.*, *J-STQE Dec 95* 987-992

- wafer level testing for semicond. laser manufacture, spatially resolved photolum. *Carver, G.E.*, +, *J-STQE Dec 95* 980-986
wafer-sized semicond. device structures, nondestructive, room-temp. anal. *Pollak, F.H.*, +, *J-STQE Dec 95* 1002-1010
- Nonlinear optics**
- AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. *Azouz, A.*, +, *J-STQE Jun 95* 577-582
 - antiguide diode laser arrays, above-threshold anal. *Nabiev, R.F.*, +, *J-STQE Jun 95* 138-149
 - semicond. quantum well laser, carrier transport, nonlin. gain coeffs. *Chin-Yi Tsai*, +, *J-STQE Jun 95* 316-330
 - SHG, unamplified high-repetition-rate, ultrashort laser pulses at Si(001) interfaces. *Dadap, J.I.*, +, *J-STQE Dec 95* 1145-1155
 - Xe, UUV subpicosecond pulse compression, induced-PM. *Yamada, T.*, +, *J-STQE Sep 95* 891-899
- Nonlinear optics; cf.** Optical mixing; Optical saturation
- O**
- Ohmic contacts**
- eval. of defect related diffusion in semiconds. by electrooptical sampling. *Biernacki, P.D.*, +, *J-STQE Dec 95* 1037-1046
- Optical amplifiers; cf.** Laser amplifiers; Optical fiber amplifiers; Optical pulse amplifiers; Semiconductor optical amplifiers
- Optical beam focusing; cf.** Laser beam focusing
- Optical beams; cf.** Laser beams
- Optical communication; cf.** Optical fiber communication; Wavelength division multiplexing
- Optical communication equipment**
- InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
 - rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, *J-STQE Jun 95* 427-432
- Optical communication equipment; cf.** Optical receivers
- Optical components; cf.** Lenses; Mirrors
- Optical correlators**
- monolithic multiple colliding pulse mode-locked QW laser. *Martins-Filho, J.F.*, +, *J-STQE Jun 95* 539-551
- Optical couplers; cf.** Laser couplers; Optical fiber couplers; Optical strip waveguide couplers
- Optical coupling**
- 1.3- μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu*, +, *J-STQE Jun 95* 375-381
 - InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S.*, +, *J-STQE Jun 95* 341-345
 - semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, *J-STQE Jun 95* 150-164
 - strained quantum-well lasers with spin-orbit coupling, modeling. *Chih-Sheng Chang*, +, *J-STQE Jun 95* 218-229
- Optical coupling; cf.** Optical fiber coupling
- Optical crosstalk**
- AlGaN_n vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740
 - GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Osiniski, M.*, +, *J-STQE Jun 95* 681-696
- Optical device fabrication**
- AlGaAs narrow-stripe lasers, self-sustained pulsation. *Yuri, M.*, +, *J-STQE Jun 95* 473-479
 - AlGaN_nP fund.-transverse-mode high-power LD, window-on-facet struct. *Watanaue, M.*, +, *J-STQE Jun 95* 728-733
 - AlGaN_n vis. laser, H effect, high temp. operation. *Won-Jin Choi*, +, *J-STQE Jun 95* 717-722
 - AlGaN_n vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740
 - DFB lasers, complex-coupled $\lambda/4$ -shifted, flat FM response. *Okai, M.*, +, *J-STQE Jun 95* 461-465
 - GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628
 - GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
 - GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292
 - Ga(In)As(P)-GaInAsP-GaInP quantum well laser, strain influence on las-ing perform. *Guodong Zhang*, *J-STQE Jun 95* 183-188
 - GaInP-AlGaN_nP vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182
 - InAs-InAs_xSb_{1-x} type-II superlattice midwave IR lasers. *Yong-Hang Zhang*, +, *J-STQE Jun 95* 749-756
 - InGaAs-GaAs 0.48- μm circ.-grating surface-emitting DBR lasers. *Falih, M.*, +, *J-STQE Jun 95* 382-386
- InGaAs-GaAs-AlGaAs quantum well lasers and laser arrays, threshold current. *Hammin Zhao*, +, *J-STQE Jun 95* 196-202
- InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
- InGaAsP-InP MQW-DFB LD, 1.5 μm FM response. *Jong-In Shim*, +, *J-STQE Jun 95* 516-522
- InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
- Nd:ZBLAN fiber lasers in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791
- pass. antiguiding VCSEL, single-mode operation. *Wu, Y.A.*, +, *J-STQE Jun 95* 629-637
- rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A.*, +, *J-STQE Apr 95* 82-91
- semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
- Optical distortion; cf.** Laser beam distortion; Optical crosstalk
- Optical feedback**
- semicond. laser, opt. feedback, Sisyphus effect. *Van Tartwijk, G.H.M.*, +, *J-STQE Jun 95* 466-472
- Optical fiber amplifiers**
- Er-doped widely tunable polariz.-stable fiber lasers. *Cooper, D.G.*, +, *J-STQE Apr 95* 14-21
- Optical fiber communication**
- direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C.*, +, *J-STQE Jun 95* 433-441
- Optical fiber couplers**
- semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
- Optical fiber coupling**
- DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A.*, +, *J-STQE Jun 95* 592-600
 - Er-doped widely tunable polariz.-stable fiber lasers. *Cooper, D.G.*, +, *J-STQE Apr 95* 14-21
 - InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
 - Nd:YAG, solid-state CW freq.-quadrupled laser. *Oka, M.*, +, *J-STQE Sep 95* 859-866
- Optical fiber dispersion**
- direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C.*, +, *J-STQE Jun 95* 433-441
- Optical fiber lasers**
- Nd:ZBLAN fiber lasers in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791
 - Yb³⁺:SiO₂ fiber lasers, sources 1, 1.2 μm . *Pask, H.M.*, +, *J-STQE Apr 95* 2-13
- Optical fiber lasers; cf.** Optical fiber amplifiers
- Optical fiber polarization**
- Er-doped widely tunable polariz.-stable fiber lasers. *Cooper, D.G.*, +, *J-STQE Apr 95* 14-21
- Optical films**
- CrB₂C multilayer mirror damage, Ta laser double-pass, computer simul. *Balakireva, L.L.*, +, *J-STQE Sep 95* 962-969
 - InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M.*, +, *J-STQE Jun 95* 110-116
 - InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, *J-STQE Jun 95* 203-210
 - rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A.*, +, *J-STQE Apr 95* 82-91
- Optical frequency conversion**
- Cr:Li₂AlF₆ Q-switched laser freq. tripling, UV region. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61
 - Cu freq.-doubled lasers for polymer high-speed UV micro-machining. *Glover, A.C.J.*, +, *J-STQE Sep 95* 830-836
 - Cu vap. laser, second-harmonic and sum-freq. high av. power UV generation. *Coutts, D.W.*, +, *J-STQE Sep 95* 768-778
 - Cu vap. laser, UV SHG. *Withford, M.J.*, +, *J-STQE Sep 95* 779-783
 - Hg vap., intense VUV coherent light generation, nonlin. effects. *Museur, L.*, +, *J-STQE Sep 95* 900-907
 - LiF:F₂ color center laser progress. *Mirov, S.B.*, +, *J-STQE Apr 95* 22-30
 - Nd:ZBLAN fiber lasers in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791
 - rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A.*, +, *J-STQE Apr 95* 82-91
- semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L.*, +, *J-STQE Jun 95* 451-460
- SHG, unamplified high-repetition-rate, ultrashort laser pulses at Si(001) interfaces. *Dadap, J.I.*, +, *J-STQE Dec 95* 1145-1155
- β -BaB₂O₄, intracavity freq. doubled CW Nd:YAG laser. *Oka, M.*, +, *J-STQE Sep 95* 859-866
- Ti:sapphire laser wavelengths, nonlin. conversion. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57

- Optical frequency conversion; cf. Optical mixing**
- Optical imaging/mapping**
- large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C., +, J-STQE Dec 95 1017-1029*
- Optical interconnections**
- InGaAsP-InP MQW monolithic laser array. *Uomi, K., +, J-STQE Jun 95 203-210*
- Optical interferometry**
- AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H., +, J-STQE Apr 95 44-49*
 - Fabry-Perot semicond. laser, gain-switched, coherence and noise props. *Griffin, R.A., +, J-STQE Jun 95 569-576*
 - large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C., +, J-STQE Dec 95 1017-1029*
- Optical links; cf. Optical interconnections**
- Optical losses**
- AlGaAs narrow-stripe lasers, self-sustained pulsation. *Yuri, M., +, J-STQE Jun 95 473-479*
 - antiguide diode laser arrays, above-threshold anal. *Nabiev, R.F., +, J-STQE Jun 95 138-149*
 - InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S., +, J-STQE Jun 95 341-345*
 - InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim, +, J-STQE Jun 95 408-415*
 - InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C., +, J-STQE Jun 95 387-395*
 - pass, antiguiding VCSEL, single-mode operation. *Wu, Y.A., +, J-STQE Jun 95 629-637*
 - rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A., +, J-STQE Apr 95 82-91*
 - Tm:YAlO₃ 1.94-μm laser, biomedical appls. *Stoneman, R.C., +, J-STQE Apr 95 78-81*
- Optical materials/devices**
- 193-nm lithog. technol. *Rothschild, M., +, J-STQE Sep 95 916-923*
 - AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H., +, J-STQE Apr 95 44-49*
 - Cr⁴⁺-doped laser host lattices, tunable output. *Pollock, C.R., +, J-STQE Apr 95 62-66*
 - KTiOPo₄ broadly tunable fs opt. parametric oscillators. *Spence, D.E., +, J-STQE Apr 95 31-43*
- Optical materials/devices; cf. Electrooptic materials/devices; Optical correlators; Optical oscillators; Optical receivers; Optical waveguides**
- Optical measurements**
- HBT opt. charactn. *Smith, P.B., +, J-STQE Dec 95 1011-1016*
 - LEDs, III-V epitaxial layers, high-speed photolum. mapping. *Imler, W.R., J-STQE Dec 95 987-992*
 - optical diagnostics of semiconductors (special issue). *J-STQE Dec 95 977-1155*
 - real-time opt. thermometry during semicond. proc. *Herman, I.P., J-STQE Dec 95 1047-1053*
 - reson.-tunneling diode growth, opt. diagnostic monitoring. *Celii, F.G., +, J-STQE Dec 95 1064-1072*
 - semicond. alloy comp. determ. during epitaxy, opt. methods. *Aspnes, D.E., J-STQE Dec 95 1054-1063*
 - thin-film transistor arrays testing/charactn., opt. charge-sensing method. *Kido, T., +, J-STQE Dec 95 993-1001*
 - wafer level testing for semicond. laser manufacture, spatially resolved photolum. *Carver, G.E., +, J-STQE Dec 95 980-986*
- Optical measurements; cf. Electrooptic measurements; Microscopy; Optical interferometry; Optical spectroscopy**
- Optical mixing**
- Cr:LiSrAlF₆ Q-switched laser freq. tripling, UV region. *Pinto, J.F., +, J-STQE Apr 95 58-61*
 - Hg vap., intense UV coherent light generation, nonlin. effects. *Museur, L., +, J-STQE Sep 95 900-907*
 - semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L., +, J-STQE Jun 95 451-460*
- Optical modulation/demodulation**
- 1.3-μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu, +, J-STQE Jun 95 375-381*
 - DFB laser, current-induced gain gratings. *Kazmierski, C., +, J-STQE Jun 95 371-374*
 - DFB lasers, complex-coupled λ/4-shifted, flat FM response. *Okai, M., +, J-STQE Jun 95 461-465*
 - DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J., +, J-STQE Jun 95 346-355*
 - direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C., +, J-STQE Jun 95 433-441*
 - InGaAs-InGaAsP-InGaP LD temp. depend. efficiency and modulation charact. *Nabiev, R.F., +, J-STQE Jun 95 234-243*
 - InGaAsP-InP MQW-DFB LD, 1.5 μm FM response. *Jong-In Shim, +, J-STQE Jun 95 516-522*
- semicond. laser, mode-locked, synchronization with external pulse stream. *Khalpin, V.B., +, J-STQE Jun 95 523-527*
- semicond. lasers, grating-terminated external cavity, small-sig. IM response. *Ahmed, Z., +, J-STQE Jun 95 505-515*
- Optical modulation/demodulation; cf. Electrooptic modulation**
- Optical noise; cf. Laser noise**
- Optical oscillators**
- antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C., +, J-STQE Jun 95 129-137*
 - Cu vap. laser, second-harmonic and sum-freq. high av. power UV generation. *Coutts, D.W., +, J-STQE Sep 95 768-778*
 - rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A., +, J-STQE Apr 95 82-91*
- Optical oscillators; cf. Lasers; Optical parametric oscillators**
- Optical parametric oscillators**
- AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H., +, J-STQE Apr 95 44-49*
 - KTiOPo₄ broadly tunable fs opt. parametric oscillators. *Spence, D.E., +, J-STQE Apr 95 31-43*
- Optical planar waveguide components**
- large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C., +, J-STQE Dec 95 1017-1029*
 - rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A., +, J-STQE Apr 95 82-91*
- Optical polarization**
- InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T., +, J-STQE Jun 95 667-673*
 - Tm:YAlO₃ 1.94-μm laser, biomedical appls. *Stoneman, R.C., +, J-STQE Apr 95 78-81*
 - Yb:Sr(PO₄)₃F 1.047-μm energy storage opt. amp. *Marshall, C.D., +, J-STQE Apr 95 67-77*
- Optical polarization; cf. Optical fiber polarization**
- Optical propagation; cf. Optical propagation in absorbing media; Optical waveguides**
- Optical propagation in absorbing media**
- InGaAsP/InP heterostructs., inhomog. exciton broadening and mean free path. *Jaeger, A., +, J-STQE Dec 95 1113-1118*
 - semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L., +, J-STQE Jun 95 451-460*
- Optical propagation in absorbing media; cf. Laser absorbers**
- Optical propagation in dispersive media; cf. Optical fiber dispersion; Optical solitons**
- Optical propagation in nonlinear media; cf. Optical frequency conversion; Optical solitons**
- Optical pulse amplifiers**
- Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N., +, J-STQE Sep 95 792-804*
- Optical pulse compression**
- DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A., +, J-STQE Jun 95 592-600*
 - monolithic multiple colliding pulse mode-locked QW laser. *Martins-Filho, J.F., +, J-STQE Jun 95 539-551*
 - N₂ laser, ultra-fast mag. pulse compression cct. *Seki, H., +, J-STQE Sep 95 825-829*
 - Xe, VUV subpicosecond pulse compression, induced-PM. *Yamada, T., +, J-STQE Sep 95 891-899*
- Optical pulse generation**
- AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. *Azouz, A., +, J-STQE Jun 95 577-582*
 - Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N., +, J-STQE Sep 95 792-804*
 - DFB semicond. laser with absorptive grating, gain-switching operation. *Sudo, T.K., +, J-STQE Jun 95 583-591*
- Optical pulses**
- Xe excimer lamp excitation by quasi-CW jet discharges. *Kawanaka, J., +, J-STQE Sep 95 852-858*
- Optical pulses; cf. Optical solitons**
- Optical pulse shaping**
- DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A., +, J-STQE Jun 95 592-600*
 - DFB semicond. laser with absorptive grating, gain-switching operation. *Sudo, T.K., +, J-STQE Jun 95 583-591*
- Optical pumping**
- AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H., +, J-STQE Apr 95 44-49*
 - Ar²⁺F ionic excimers, VUV spectra. *Chi Zhou, +, J-STQE Sep 95 872-876*
 - Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N., +, J-STQE Sep 95 792-804*
 - Cr⁴⁺-doped laser host lattices, tunable output. *Pollock, C.R., +, J-STQE Apr 95 62-66*

- DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.K.C., J-STQE Jun 95* 363-370
- InAs-InAs_xSb_{1-x} type-II superlattice midwave IR lasers. *Yong-Hang Zhang, +, J-STQE Jun 95* 749-756
- InGaAs-GaAs quantum well VCSEL, anisotropic gain distrib., polaris. control. *Sun, D., +, J-STQE Jun 95* 674-680
- Kr²⁺F⁻ ionic excimers, VUV spectra. *Chi Zhou, +, J-STQE Sep 95* 872-876
- Nd:YAG, solid-state CW freq.-quadrupled laser. *Oka, M., +, J-STQE Sep 95* 859-866
- rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A., +, J-STQE Apr 95* 82-91
- Xe²⁺ Auger laser, pumping by laser-prod. target materials. *Dennis, T., +, J-STQE Sep 95* 867-871
- Yb:Sr₅(PO₄)₃F 1.047-μm energy storage opt. amp. *Marshall, C.D., +, J-STQE Apr 95* 67-77
- Yb³⁺:SiO₂ fiber lasers, sources 1, 1.2 μm. *Pask, H.M., +, J-STQE Apr 95* 2-13
- Optical radiation effects; cf. Laser radiation effects; Photoionization**
- Optical receivers**
- direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C., +, J-STQE Jun 95* 433-441
- Optical reflection**
- CrB₂-C multilayer mirror damage, Ta laser double-pass, computer simul. *Balakireva, L.L., +, J-STQE Sep 95* 962-969
 - GaNAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A., +, J-STQE Jun 95* 293-300
 - InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T., +, J-STQE Jun 95* 667-673
 - InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U., +, J-STQE Jun 95* 442-450
 - MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D., +, J-STQE Jun 95* 275-284
 - semicond. laser, high-power, long. spatial inhomogeneities. *Fang, W.-C.W., +, J-STQE Jun 95* 117-128
- Optical reflection; cf. Mirrors**
- Optical refraction**
- AlGaAs narrow-stripe lasers, self-sustained pulsation. *Yuri, M., +, J-STQE Jun 95* 473-479
 - DBR short-cavity laser, electrooptic tuning, wide-band AM. *Tessler, N., +, J-STQE Jun 95* 490-493
 - Ga, Ne-like lasing, prepulse effect. *Fill, E.E., +, J-STQE Sep 95* 958-961
 - InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim, +, J-STQE Jun 95* 408-415
 - InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C., +, J-STQE Jun 95* 387-395
 - Li⁺ opt. field-induced ionization X-ray laser, preformed plasma. *Midorikawa, K., +, J-STQE Sep 95* 931-940
 - pass. antiguide VCSEL, single-mode operation. *Wu, Y.A., +, J-STQE Jun 95* 629-637
- Optical resonance**
- direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C., +, J-STQE Jun 95* 433-441
- Optical resonators; cf. Fabry-Perot resonators; Laser resonators**
- Optical saturation**
- AlGaAs narrow-stripe lasers, self-sustained pulsation. *Yuri, M., +, J-STQE Jun 95* 473-479
 - Ar discharge-driven 46.9-nm amp., gain-length approaching saturation. *Rocca, J.J., +, J-STQE Sep 95* 945-948
 - semicond. laser, mode-locked, synchronization with external pulse stream. *Khalpin, V.B., +, J-STQE Jun 95* 523-527
 - Yb:Sr₅(PO₄)₃F 1.047-μm energy storage opt. amp. *Marshall, C.D., +, J-STQE Apr 95* 67-77
- Optical signal processing; cf. Optical correlators**
- Optical solitons**
- DBR semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A., +, J-STQE Jun 95* 592-600
- Optical spectroscopy**
- ASE spectrosc. in strained quantum-well lasers. *Chang, C.-S., +, J-STQE Dec 95* 1100-1107
 - digital mag. heterostructs., spin dyns., time resolved Faraday rot. spectrosc. *Crooker, S.A., +, J-STQE Dec 95* 1082-1092
 - GaAs-AlGaAs superlattices for intersubband infrared detect., photolum. Raman, and infrared diagnosis. *Feng, Z.C., +, J-STQE Dec 95* 1119-1125
 - HBT opt. charactn. *Smith, P.B., +, J-STQE Dec 95* 1011-1016
 - high-perform. n-p-n AlGaAs-GaAs HBTs, comprehensive opt. charactn. *Lu, Z.H., +, J-STQE Dec 95* 1030-1036
 - semicond. heterostructs. and laser diodes, near-field opt. studies. *Goldberg, B.B., +, J-STQE Dec 95* 1073-1081
 - semiconds., double AC photoreflectance spectrosc. *Ghosh, S., +, J-STQE Dec 95* 1108-1112
- spectrosc. study of red light emission in porous Si. *Prokes, S.M., J-STQE Dec 95* 1140-1144
- Optical spectroscopy; cf. Raman spectroscopy**
- Optical strip waveguide components; cf. Optical strip waveguide couplers**
- Optical strip waveguide couplers**
- semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F., +, J-STQE Jun 95* 757-761
- Optical transient propagation; cf. Optical solitons**
- Optical variables control**
- semicond. laser arrays, feedback stabilization, complex coupling coeffs. *Hill, D.E., +, J-STQE Jun 95* 150-164
- Optical waveguides**
- GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. *Uskov, A.V., +, J-STQE Jun 95* 552-561
 - InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou, +, J-STQE Jun 95* 165-172
- Optics; cf. Geometrical optics; Integrated optics; Nonlinear optics; Ultrafast optics**
- Optimization methods**
- MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D., +, J-STQE Jun 95* 275-284
- Optoelectronic devices**
- DFB laser, current-induced gain gratings. *Kazmierski, C., +, J-STQE Jun 95* 371-374
 - large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C., +, J-STQE Dec 95* 1017-1029
- Optoelectronic devices; cf. Integrated optoelectronics; Lasers; Light-emitting diodes**
- Oscillator noise; cf. Laser noise**
- Oscillators; cf. Lasers; Optical oscillators; Tunable oscillators**
- Oscillator stability; cf. Laser stability**

P**Parallel architectures**

InGaAsP-InP MQW monolithic laser array. *Uomi, K., +, J-STQE Jun 95* 203-210

Parametric oscillators; cf. Optical parametric oscillators**Particle collisions**

corrections to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957). *Healy, S.B., +, J-STQE Dec 95* 1156

Ge, Ne-like collisionally-pumped laser, prepulses effect, computer model. *Healy, S.B., +, J-STQE Sep 95* 949-957

(HeAr)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H., +, J-STQE Sep 95* 877-885

(KrCs)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H., +, J-STQE Sep 95* 877-885

Periodic structures; cf. Arrays; Gratings**Photoionization**

Xe²⁺ Auger laser, pumping by laser-prod. target materials. *Dennis, T., +, J-STQE Sep 95* 867-871

Photolithography

193-nm lithog. technol. *Rothschild, M., +, J-STQE Sep 95* 916-923

EUV lithog. at 13 nm, current status. *Stulen, R.H., J-STQE Sep 95* 970-975

Laser-damage impact on lithog. syst. throughput. *Harned, N., +, J-STQE Sep 95* 837-840

Photoluminescent materials/devices

AlGaInP fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M., +, J-STQE Jun 95* 728-733

AlGaInP vis. laser, H effect, high temp. operation. *Won-Jin Choi, +, J-STQE Jun 95* 717-722

GaAs-AlGaAs superlattices for intersubband infrared detect., photolum. Raman, and infrared diagnosis. *Feng, Z.C., +, J-STQE Dec 95* 1119-1125

GaInP-AlGaInP quantum well vis. laser, band struct. determ. *Meney, A.T., +, J-STQE Jun 95* 697-706

GaInP-AlGaInP vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J., +, J-STQE Jun 95* 173-182

InGaAs-InP, surface modif., UV laser induced etching. *Ezaki, M., +, J-STQE Sep 95* 841-847

LEDs, III-V epitaxial layers, high-speed photolum. mapping. *Imler, W.R., J-STQE Dec 95* 987-992

spectrosc. study of red light emission in porous Si. *Prokes, S.M., J-STQE Dec 95* 1140-1144

wafer level testing for semicond. laser manufacture, spatially resolved photolum. *Carver, G.E., +, J-STQE Dec 95* 980-986

- Photon beams; cf. Laser beams**
- Photonic integrated circuits; cf. Integrated optics**
- Photonics; cf. Optical materials/devices**
- Photovoltaic materials/devices**
- high-perform. n-p-n AlGaAs-GaAs HBTs, comprehensive opt. charactn. *Lu, Z.H.*, +, *J-STQE Dec 95* 1030-1036
- p-i-n diodes**
- AlGaAs-based p-i-n nanostruct. semicond., nonequilib. electron distribs. and high-field transport, picosecond Raman probe. *Grann, E.D.*, +, *J-STQE Dec 95* 1093-1099
- semicond. heterostructs. and laser diodes, near-field opt. studies. *Goldberg, B.B.*, +, *J-STQE Dec 95* 1073-1081
- p-n junctions**
- GaAs-GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. *Uskov, A.V.*, +, *J-STQE Jun 95* 552-561
- Polarization; cf. Optical polarization**
- Potassium materials/devices**
- KTiOPO₄ broadly tunable fs opt. parametric oscillators. *Spence, D.E.*, +, *J-STQE Apr 95* 31-43
- KTiOPO₄ cryst. opt. parametric generation of Ti:sapphire laser wavelengths. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57
- Power amplifiers**
- antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, *J-STQE Jun 95* 129-137
- InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou*, +, *J-STQE Jun 95* 165-172
- Power lasers**
- 1.3-μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu*, +, *J-STQE Jun 95* 375-381
- AlGaAs ridge waveguide LD, 0.78- and 0.98-μm, chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109
- AlGaNp fund.-transverse-mode high-power LD, window-on-facet struct. *Watanabe, M.*, +, *J-STQE Jun 95* 728-733
- AlGaNp index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R.*, +, *J-STQE Jun 95* 723-727
- AlGaNp vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740
- antiguide diode laser arrays, above-threshold anal. *Nabiev, R.F.*, +, *J-STQE Jun 95* 138-149
- antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, *J-STQE Jun 95* 129-137
- Cu vap. laser, second-harmonic and sum-freq. high av. power UV generation. *Coutts, D.W.*, +, *J-STQE Sep 95* 768-778
- Cu vap. laser, UV SHG. *Withford, M.J.*, +, *J-STQE Sep 95* 779-783
- DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J.*, +, *J-STQE Jun 95* 346-355
- GaAlAs LD, 800 mW peak-power self-sustained pulsation. *Takayama, T.*, +, *J-STQE Jun 95* 562-568
- InGaAs-GaAs 0.48-μm circ.-grating surface-emitting DBR lasers. *Falahi, M.*, +, *J-STQE Jun 95* 382-386
- InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou*, +, *J-STQE Jun 95* 165-172
- InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M.*, +, *J-STQE Jun 95* 110-116
- InGaAs-InGaP quantum well laser, tensile strained InGaAsP barriers, high-power operation. *Sagawa, M.*, +, *J-STQE Jun 95* 189-194
- InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim*, +, *J-STQE Jun 95* 408-415
- InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, *J-STQE Jun 95* 203-210
- InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
- InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
- Nd:YAG, solid-state CW freq.-quadrupled laser. *Oka, M.*, +, *J-STQE Sep 95* 859-866
- semicond. laser, high-power, long. spatial inhomogeneities. *Fang, W.-C.W.*, +, *J-STQE Jun 95* 117-128
- XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer ect. *Sato, Y.*, +, *J-STQE Sep 95* 811-824
- ZnMgSSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748
- Process control**
- semicond. alloy comp. determ. during epitaxy, opt. methods. *Aspnes, D.E.*, *J-STQE Dec 95* 1054-1063
- Process monitoring**
- real-time opt. thermometry during semicond. proc. *Herman, I.P.*, *J-STQE Dec 95* 1047-1053
- reson.-tunneling diode growth, opt. diagnostic monitoring. *Celii, F.G.*, +, *J-STQE Dec 95* 1064-1072
- wafer level testing for semicond. laser manufacture, spatially resolved photolum. *Carver, G.E.*, +, *J-STQE Dec 95* 980-986
- Pulse amplifiers; cf. Optical pulse amplifiers**
- Pulse compression methods; cf. Chirp modulation; Optical pulse compression**
- Pulsed lasers**
- Cu freq.-doubled lasers for polymer high-speed UV micro-machining. *Glover, A.C.J.*, +, *J-STQE Sep 95* 830-836
- GaAlAs LD, 800 mW peak-power self-sustained pulsation. *Takayama, T.*, +, *J-STQE Jun 95* 562-568
- He-Ar⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
- He-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
- InGaAs-GaAs 0.48-μm circ.-grating surface-emitting DBR lasers. *Falahi, M.*, +, *J-STQE Jun 95* 382-386
- Ne-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810
- N₂ laser, ultra-fast mag. pulse compression ect. *Seki, H.*, +, *J-STQE Sep 95* 825-829
- SHG, unamplified high-repetition-rate, ultrashort laser pulses at Si(001) interfaces. *Dadap, J.I.*, +, *J-STQE Dec 95* 1145-1155
- Pulsed lasers; cf. Mode-locked lasers**
- Pulse generation; cf. Optical pulse generation**
- Pulse shaping methods; cf. Optical pulse shaping**
- Pumping of lasers; cf. Laser excitation**

Q**Q-switched lasers**

Cr:LiSrAlF₆ Q-switched laser freq. tripling, UV region. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61

DFB semicond. laser with absorptive grating, gain-switching operation. *Sudo, T.K.*, +, *J-STQE Jun 95* 583-591

Fabry-Perot semicond. laser, gain-switched, coherence and noise props. *Griffin, R.A.*, +, *J-STQE Jun 95* 569-576

LD, self-seeded Fabry-Perot, time jitter/dyn. *Schell, M.*, +, *J-STQE Jun 95* 528-534

semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L.*, +, *J-STQE Jun 95* 451-460

Quantum well lasers

1.3 μm semicond. lasers, gain anal. in T₀ determination. *Ackerman, D.A.*, +, *J-STQE Jun 95* 250-263

1.3-μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu*, +, *J-STQE Jun 95* 375-381

AlGaAs ridge waveguide LD, 0.78- and 0.98-μm, chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109

AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum from *Exter, M.P.*, +, *J-STQE Jun 95* 601-605

AlGaNp VCSEL, threshold current minimization. *Chow, W.W.*, +, *J-STQE Jun 95* 649-653

AlGaNp vis. laser, H effect, high temp. operation. *Won-Jin Choi*, +, *J-STQE Jun 95* 717-722

ASE spectrosc. in strained quantum-well lasers. *Chang, C.-S.*, +, *J-STQE Dec 95* 1100-1107

carrier transport, nonlin. gain coeffs. *Chin-Yi Tsai*, +, *J-STQE Jun 95* 316-330

DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J.*, +, *J-STQE Jun 95* 346-355

electro-opto-therm. interact., equiv. ect. model. *Bewtra, N.*, +, *J-STQE Jun 95* 331-340

GaAlAs LD, 800 mW peak-power self-sustained pulsation. *Takayama, T.*, +, *J-STQE Jun 95* 562-568

GaAs-AlGaAs MQW GRINSCH laser temp. sensitivity. *Dion, M.*, +, *J-STQE Jun 95* 230-233

GaAsP-InGaAsP long wavelength strained QW lasers, orient. depend. of opt. props. *Niwa, A.*, +, *J-STQE Jun 95* 211-217

GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666

GalnAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292

Ga(In)As(P)-GaInAsP-GaInP quantum well laser, strain influence on las. perform. *Guodong Zhang*, *J-STQE Jun 95* 183-188

GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, *J-STQE Jun 95* 293-300

GaInP-AlGaNp quantum well vis. laser, band struct. determ. *Menev, A.T.*, +, *J-STQE Jun 95* 697-706

GaInP-AlGaNp vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182

- GaNInP quantum well laser, threshold current strain depend. *Blood, P.*, +, *J-STQE Jun 95* 707-711
 high-speed lasers, carrier transport effects, time-domain model. *Nguyen, L.V.T.*, +, *J-STQE Jun 95* 494-504
 InAs-InAs_xSn_{1-x} type-II superlattice midwave IR lasers. *Yong-Hang Zhang*, +, *J-STQE Jun 95* 749-756
 InGaAlP tensile-strained MQW laser, high temp. and reliable operation. *Watanabe, M.*, +, *J-STQE Jun 95* 712-716
 InGaAs-GaAs-AlGaAs quantum well lasers and laser arrays, threshold current. *Hanmin Zhao*, +, *J-STQE Jun 95* 196-202
 InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M.*, +, *J-STQE Jun 95* 110-116
 InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
 InGaAs-GaAs quantum well VCSEL, anisotropic gain distrib., polaris. control. *Sun, D.*, +, *J-STQE Jun 95* 674-680
 InGaAs-InGaAsP-InGaP LD temp. depend. efficiency and modulation charact. *Nabiev, R.F.*, +, *J-STQE Jun 95* 234-243
 InGaAs-InGaAsP MQW laser, carrier-phonon interact. *Nido, M.*, +, *J-STQE Jun 95* 308-315
 InGaAs-InGaP 98-μm strained quantum-well lasers, superlattice opt. confine. layer. *Usami, M.*, +, *J-STQE Jun 95* 244-249
 InGaAs-InGaP quantum well laser, tensile strained InGaAsP barriers, high-power operation. *Sagawa, M.*, +, *J-STQE Jun 95* 189-194
 InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim*, +, *J-STQE Jun 95* 408-415
 InGaAsP-InP MQW-DFB LD, 1.5 μm FM response. *Jong-In Shim*, +, *J-STQE Jun 95* 516-522
 InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, *J-STQE Jun 95* 203-210
 InGaAsP-InP thermally tunable super-struct.-grating DBR laser spectral linewidth under wavelength tuning. *Ishii, H.*, +, *J-STQE Jun 95* 401-407
 InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, *J-STQE Jun 95* 638-648
 InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
 InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
 InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
 InGaAs VCSEL with broad-gain bandwidth, temp. charact. *Kajita, M.*, +, *J-STQE Jun 95* 654-660
 InP-based 1.3-μm QW laser high-temp. charact. *Seki, S.*, +, *J-STQE Jun 95* 264-274
 monolithic multiple colliding pulse mode-locked QW laser. *Martins-Filho, J.F.*, +, *J-STQE Jun 95* 539-551
 MQW DFB laser, self-pulsating 1.55-μm, 12-64 GHz continuous freq. tuning. *Sartorius, B.*, +, *J-STQE Jun 95* 535-538
 MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D.*, +, *J-STQE Jun 95* 275-284
 pass. antiguide VCSEL, single-mode operation. *Wu, Y.A.*, +, *J-STQE Jun 95* 629-637
 rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, *J-STQE Jun 95* 427-432
 ring resonator lasers, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
 semicond. heterostructs. and laser diodes, near-field opt. studies. *Goldberg, B.B.*, +, *J-STQE Dec 95* 1073-1081
 strained quantum-well lasers with spin-orbit coupling, modeling. *Chih-Sheng Chang*, +, *J-STQE Jun 95* 218-229
- Quantum wells**
 GaInP-AlGaNp vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182
 InGaAs-InP, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
 n-GaAs, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
 n-InP, surface modif., UV laser induced etching. *Ezaki, M.*, +, *J-STQE Sep 95* 841-847
- R**
- Radiation effects; cf. Laser radiation effects**
Raman spectroscopy
 AlGaAs-based p-i-n nanostruct. semicond., nonequilibr. electron distribs. and high-field transport, picosecond Raman probe. *Gramm, E.D.*, +, *J-STQE Dec 95* 1093-1099
 GaAs-AlGaAs superlattices for intersubband infrared detect., photolum. Raman, and infrared diagnosis. *Feng, Z.C.*, +, *J-STQE Dec 95* 1119-1125
- Rare earth materials/devices; cf. Cerium materials/devices; Erbium materials/devices; Lanthanum materials/devices; Lutetium materials/devices; Thulium materials/devices; Ytterbium materials/devices**
Ray optics; cf. Geometrical optics
Receivers; cf. Optical receivers
Reflection; cf. Mirrors
Reliability; cf. Laser reliability; Semiconductor device reliability
Resists
 193-nm lithog. technol. *Rothschild, M.*, +, *J-STQE Sep 95* 916-923
Resonance; cf. Optical resonance
Resonators; cf. Laser resonators
Ridge waveguides
 AlGaAs ridge waveguide LD, 0.78- and 0.98-μm, chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109
 Ga(In)As(P)-GaInAsP-GaInP quantum well laser, strain influence on las-ing perform. *Guodong Zhang*, *J-STQE Jun 95* 183-188
 InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M.*, +, *J-STQE Jun 95* 110-116
 InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
 semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
- Ring lasers**
 semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
- S**
- Semiconductor optical amplifiers**
 large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C.*, +, *J-STQE Dec 95* 1017-1029
- Semiconductor defects**
 eval. of defect related diffusion in semiconds. by electrooptical sampling. *Biernacki, P.D.*, +, *J-STQE Dec 95* 1037-1046
- Semiconductor device doping**
 HBT opt. charactn. *Smith, P.B.*, +, *J-STQE Dec 95* 1011-1016
- Semiconductor device doping; cf. Semiconductor device ion implantation**
- Semiconductor device fabrication**
 real-time opt. thermometry during semicond. proc. *Herman, I.P.*, *J-STQE Dec 95* 1047-1053
 reson-tunneling diode growth, opt. diagnostic monitoring. *Celii, F.G.*, +, *J-STQE Dec 95* 1064-1072
 semicond. alloy comp. determ. during epitaxy, opt. methods. *Aspnes, D.E.*, *J-STQE Dec 95* 1054-1063
- Semiconductor device fabrication; cf. Integrated circuit fabrication; Semiconductor device doping; Semiconductor device measurements**
- Semiconductor device ion implantation**
 InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623
 ZnMgSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748
- Semiconductor device manufacture; cf. Semiconductor device fabrication; Semiconductor device measurements**
- Semiconductor device measurements**
 AlGaAs-based p-i-n nanostruct. semicond., nonequilibr. electron distribs. and high-field transport, picosecond Raman probe. *Grann, E.D.*, +, *J-STQE Dec 95* 1093-1099
 ASE spectrosc. in strained quantum-well lasers. *Chang, C.-S.*, +, *J-STQE Dec 95* 1100-1107
 double AC photoreflectance spectrosc. *Ghosh, S.*, +, *J-STQE Dec 95* 1108-1112
 eval. of defect related diffusion in semiconds. by electrooptical sampling. *Biernacki, P.D.*, +, *J-STQE Dec 95* 1037-1046
 HBT opt. charactn. *Smith, P.B.*, +, *J-STQE Dec 95* 1011-1016
 high-perf. n-p-n AlGaAs-GaAs HBTs, comprehensive opt. charactn. *Lu, Z.H.*, +, *J-STQE Dec 95* 1030-1036
 large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C.*, +, *J-STQE Dec 95* 1017-1029
 LEDs, III-V epitaxial layers, high-speed photolum. mapping. *Imler, W.R.*, *J-STQE Dec 95* 987-992
 optical diagnostics of semiconductors (special issue). *J-STQE Dec 95* 977-1155
 real-time opt. thermometry during semicond. proc. *Herman, I.P.*, *J-STQE Dec 95* 1047-1053
 semicond. heterostructs. and laser diodes, near-field opt. studies. *Goldberg, B.B.*, +, *J-STQE Dec 95* 1073-1081
 thin-film transistor arrays testing/charactn., opt. charge-sensing method. *Kido, T.*, +, *J-STQE Dec 95* 993-1001
 wafer-sized semicond. device structures, nondestructive, room-temp. anal. *Pollak, F.H.*, +, *J-STQE Dec 95* 1002-1010

Semiconductor device measurements; cf. Optical spectroscopy**Semiconductor device mechanical factors**

- 1.3- μm strained MQW gain-coupled DFB lasers, high-power/high-speed perform. *Hanh Lu*, +, *J-STQE Jun 95* 375-381
 AlGaInP VCSEL, threshold current minimization. *Chow, W.W.*, +, *J-STQE Jun 95* 649-653
 AlGaInP vis. laser, H effect, high temp. operation. *Won-Jin Choi*, +, *J-STQE Jun 95* 717-722
 ASE spectrosc. in strained quantum-well lasers. *Chang, C.-S.*, +, *J-STQE Dec 95* 1100-1107
 GaAsP-InGaAsP long wavelength strained QW lasers, orient. depend. of opt. props. *Niwa, A.*, +, *J-STQE Jun 95* 211-217
 GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
 GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292
 Ga(In)As(P)-GaInAsP-GaInP quantum well laser, strain influence on las. perform. *Guodong Zhang*, *J-STQE Jun 95* 183-188
 GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, *J-STQE Jun 95* 293-300
 GaInP-AlGaInP quantum well vis. laser, band struct. determ. *Maney, A.T.*, +, *J-STQE Jun 95* 697-706
 GaInP-AlGaInP vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182
 GaInP quantum well laser, threshold current strain depend. *Blood, P.*, +, *J-STQE Jun 95* 707-711
 InGaAlP tensile-strained MQW laser, high temp. and reliable operation. *Watanabe, M.*, +, *J-STQE Jun 95* 712-716
 InGaAs-GaAs quantum well VCSEL, anisotropic gain distrib., polaris. control. *Sun, D.*, +, *J-STQE Jun 95* 674-680
 InGaAs-InGaAsP-InGaP LD temp. depend. efficiency and modulation charact. *Nabiev, R.F.*, +, *J-STQE Jun 95* 234-243
 InGaAs-InGaP 0.98- μm strained quantum-well lasers, superlattice opt. confine. layer. *Usami, M.*, +, *J-STQE Jun 95* 244-249
 InGaAs-InGaP quantum well laser, tensile strained InGaAsP barriers, high-power operation. *Sagawa, M.*, +, *J-STQE Jun 95* 189-194
 InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, *J-STQE Jun 95* 203-210
 InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666
 InP-based 1.3- μm QW laser high-temp. charact. *Seki, S.*, +, *J-STQE Jun 95* 264-274
 MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D.*, +, *J-STQE Jun 95* 275-284
 strained quantum-well lasers with spin-orbit coupling, modeling. *Chihsing Chang*, +, *J-STQE Jun 95* 218-229

Semiconductor device modeling

- GaAs-AlGaAs MQW GRINSCH laser temp. sensitivity. *Dion, M.*, +, *J-STQE Jun 95* 230-233
 InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450
 quantum well lasers, electro-opto-thermal interact., equiv. cct. modeling. *Bewtra, N.*, +, *J-STQE Jun 95* 331-340
 strained quantum-well lasers with spin-orbit coupling, modeling. *Chihsing Chang*, +, *J-STQE Jun 95* 218-229

Semiconductor device reliability

- InGaAlP tensile-strained MQW laser, high temp. and reliable operation. *Watanabe, M.*, +, *J-STQE Jun 95* 712-716
 InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, *J-STQE Jun 95* 203-210

Semiconductor device testing

- eval. of defect related diffusion in semiconds. by electrooptical sampling. *Bieracki, P.D.*, +, *J-STQE Dec 95* 1037-1046
 HBT opt. charactn. *Smith, P.B.*, +, *J-STQE Dec 95* 1011-1016
 high-perform. n-p-n AlGaAs-GaAs HBTs, comprehensive opt. charactn. *Lu, Z.H.*, +, *J-STQE Dec 95* 1030-1036
 large-area planar-waveguide OE devices, phase/refr. index profiling. *Hall, D.C.*, +, *J-STQE Dec 95* 1017-1029
 LEDs, III-V epitaxial layers, high-speed photolum. mapping. *Imler, W.R.*, *J-STQE Dec 95* 987-992
 optical diagnostics of semiconductors (special issue). *J-STQE Dec 95* 977-1155
 thin-film transistor arrays testing/charactn., opt. charge-sensing method. *Kido, T.*, +, *J-STQE Dec 95* 993-1001
 wafer level testing for semicond. laser manufacture, spatially resolved photolum. *Carver, G.E.*, +, *J-STQE Dec 95* 980-986
 wafer-sized semicond. device structures, nondestructive, room-temp. anal. *Pollak, F.H.*, +, *J-STQE Dec 95* 1002-1010

Semiconductor device thermal factors

- AlGaAs ridge waveguide LD, 0.78- and 0.98- μm , chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109

GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wave-length. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628

GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Osinski, M.*, +, *J-STQE Jun 95* 681-696

GaInAsP-InP strained-layer quantum well laser, temp. depend. reflectivity mirror. *Kasukawa, A.*, +, *J-STQE Jun 95* 293-300

high-power semicond. lasers, long. spatial inhomogeneities. *Fang, W.-C.W.*, +, *J-STQE Jun 95* 117-128

InGaAs-GaAs-InGaP high-power lasers with Ga_2O_3 facet coatings, IR microscopy. *Passlack, M.*, +, *J-STQE Jun 95* 110-116

InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, *J-STQE Jun 95* 638-648

InGaAs VCSEL with broad-gain bandwidth, temp. charact. *Kajita, M.*, +, *J-STQE Jun 95* 654-660

quantum well lasers, electro-opto-thermal interact., equiv. cct. modeling. *Bewtra, N.*, +, *J-STQE Jun 95* 331-340

Semiconductor diodes; cf. Light-emitting diodes; p-i-n diodes; Tunnel diodes**Semiconductor films**

CdTe-doped PTFE thin films, laser deposition. *Inoue, S.*, +, *J-STQE Sep 95* 908-915

Semiconductor growth

AlGaAs ridge waveguide LD, 0.78- and 0.98- μm , chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109

GaInAs-AlInAs MQW strained laser electroluminescent spectra. *Irikawa, M.*, +, *J-STQE Jun 95* 285-292

InGaAs-GaAs 0.48- μm circ.-grating surface-emitting DBR lasers. *Falih, M.*, +, *J-STQE Jun 95* 382-386

rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A.*, +, *J-STQE Apr 95* 82-91

Semiconductor growth ; cf. Epitaxial growth**Semiconductor heterojunctions**

GaInP-AlGaInP quantum well vis. laser, band struct. determ. *Maney, A.T.*, +, *J-STQE Jun 95* 697-706

InGaAsP/InP heterostructs., inhomog. exciton broadening and mean free path. *Jaeger, A.*, +, *J-STQE Dec 95* 1113-1118

semicond. heterostructs. and laser diodes, near-field opt. studies. *Goldberg, B.B.*, +, *J-STQE Dec 95* 1073-1081

Semiconductor-insulator interfaces

SHG, unamplified high-repetition-rate, ultrashort laser pulses at Si(001) interfaces. *Dadap, J.I.*, +, *J-STQE Dec 95* 1145-1155

Semiconductor-insulator-semiconductor devices; cf. p-i-n diodes**Semiconductor junctions; cf. p-n junctions; Semiconductor heterojunctions****Semiconductor laser arrays**

AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. *van Exter, M.P.*, +, *J-STQE Jun 95* 601-605

AlGaInP vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740

antiguide diode laser arrays, above-threshold anal. *Nabiev, R.F.*, +, *J-STQE Jun 95* 138-149

feedback stabilization, complex coupling coeffs. *Hill, D.E.*, +, *J-STQE Jun 95* 150-164

GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wave-length. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628

GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Osinski, M.*, +, *J-STQE Jun 95* 681-696

InGaAs-GaAs-AlGaAs quantum well lasers and laser arrays, threshold current. *Hammin Zhao*, +, *J-STQE Jun 95* 196-202

InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623

InGaAsP-InP MQW monolithic laser array. *Uomi, K.*, +, *J-STQE Jun 95* 203-210

Semiconductor lasers

1.3 μm semicond. lasers, gain anal. in To determination. *Ackerman, D.A.*, +, *J-STQE Jun 95* 250-263

AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emission power. *Zhang, T.*, +, *J-STQE Jun 95* 606-615

AlGaAs narrow-stripe lasers, self-sustained pulsation. *Yuri, M.*, +, *J-STQE Jun 95* 473-479

AlGaAs single-stripe mode-locked LD, nonlin. chirp compensation. *Azouz, A.*, +, *J-STQE Jun 95* 577-582

AlGaInP fund.-transverse-mode high-power LD, window-on-facet struct. *Watandbe, M.*, +, *J-STQE Jun 95* 728-733

AlGaInP index-guided high power vis. laser, HCL-assisted MOVPE. *Kobayashi, R.*, +, *J-STQE Jun 95* 723-727

AlGaInP vis. LD and arrays, fab., high-power charact. *Shima, A.*, +, *J-STQE Jun 95* 734-740

DBR short-cavity laser, electrooptic tuning, wide-band AM. *Tessler, N.*, +, *J-STQE Jun 95* 490-493

DFB/DBR lasers with second-order gratings, above-threshold anal. *Liew, S.C.*, +, *J-STQE Jun 95* 363-370

+ Check author entry for coauthors

† Check author entry for subsequent corrections/comments

- DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
- DFB laser, current-induced gain gratings. *Kazmierski, C.*, +, *J-STQE Jun 95* 371-374
- DFB lasers, complex-coupled $\lambda/4$ -shifted, flat FM response. *Okai, M.*, +, *J-STQE Jun 95* 461-465
- DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A.*, +, *J-STQE Jun 95* 592-600
- DFB semicond. laser with absorptive grating, gain-switching operation. *Sudo, T.K.*, +, *J-STQE Jun 95* 583-591
- direct push-pull modulated enhanced-reson. freq. DFB laser in receiver expt. *Nowell, M.C.*, +, *J-STQE Jun 95* 433-441
- external opt. feedback phenom. *Petermann, K.*, *J-STQE Jun 95* 480-489
- Fabry-Perot semicond. laser, gain-switched, coherence and noise props. *Griffin, R.A.*, +, *J-STQE Jun 95* 569-576
- GaInP-AlGaInP vis. compressively strained multiple quantum-wire lasers, CW operation. *Yoshida, J.*, +, *J-STQE Jun 95* 173-182
- grating-terminated external cavity lasers, small-sig. intens. modulation response. *Ahmed, Z.*, +, *J-STQE Jun 95* 505-515
- high-power semicond. lasers, long. spatial inhomogeneities. *Fang, W.-C.W.*, +, *J-STQE Jun 95* 117-128
- InGaAs-GaAs 0.48- μm circ.-grating surface-emitting DBR lasers. *Falahi, M.*, +, *J-STQE Jun 95* 382-386
- InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T.*, +, *J-STQE Jun 95* 667-673
- InGaAs-InGaAlAs-InP DFB lasers superstructure gratings, coupling coeffs. var. *Hansmann, S.*, +, *J-STQE Jun 95* 341-345
- InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C.*, +, *J-STQE Jun 95* 387-395
- mode-locked laser, sync., external pulse stream. *Khalpin, V.B.*, +, *J-STQE Jun 95* 523-527
- non-Markovian gain theory. *Doyeol Ahn, J-STQE Jun 95* 301-307
- opt. feedback, Sisyphus effect. *Van Tartwijk, G.H.M.*, +, *J-STQE Jun 95* 466-472
- self-seeded Fabry-Perot LD, time jitter/switch-on dyn. *Schell, M.*, +, *J-STQE Jun 95* 528-534
- semicond. heterostructs. and laser diodes, near-field opt. studies. *Goldberg, B.B.*, +, *J-STQE Dec 95* 1073-1081
- semiconductor lasers (special issue). *J-STQE Jun 95* 100-761
- three-electrode DFB lasers, wavelength tuning and FM mechanism. *Tohyama, M.*, +, *J-STQE Jun 95* 416-426
- wafer level testing for semicond. laser manufacture, spatially resolved photolum. *Carver, G.E.*, +, *J-STQE Dec 95* 980-986
- ZnMgSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748
- Semiconductor lasers; cf.** Quantum well lasers; Semiconductor optical amplifiers; Surface-emitting lasers
- Semiconductor materials**
- AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H.*, +, *J-STQE Apr 95* 44-49
- Semiconductor materials; cf.** Semiconductor films; Semiconductor superlattices
- Semiconductor materials measurements**
- semicond. alloy comp. determ. during epitaxy, opt. methods. *Aspnes, D.E.*, *J-STQE Dec 95* 1054-1063
- Semiconductor optical amplifiers**
- antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, *J-STQE Jun 95* 129-137
- InGaAs-GaAs high-power tapered amp., integrated output focusing lens. *Kang-Yih Liou*, +, *J-STQE Jun 95* 165-172
- InGaAs-InGaAsP MQW laser, carrier-phonon interact. *Nido, M.*, +, *J-STQE Jun 95* 308-315
- semicond. laser, optoelectronic microwave-range freq. mixing. *Portnoi, E.L.*, +, *J-STQE Jun 95* 451-460
- Semiconductor plasmas**
- lasers, non-Markovian gain theory. *Doyeol Ahn, J-STQE Jun 95* 301-307
- rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, *J-STQE Jun 95* 427-432
- Semiconductor superlattices**
- GaAs-AlGaAs superlattices for intersubband infrared detect., photolum. Raman, and infrared diagnosis. *Feng, Z.C.*, +, *J-STQE Dec 95* 1119-1125
- InAs-InAs_xSb_{1-x} type-II superlattice midwave IR lasers. *Yong-Hang Zhang*, +, *J-STQE Jun 95* 749-756
- InGaAs-InGaP 0.98- μm strained quantum-well lasers, superlattice opt. confine. layer. *Usami, M.*, +, *J-STQE Jun 95* 244-249
- Sensitivity**
- GaAs-AlGaAs MQW GRINSCH laser temp. sensitivity. *Dion, M.*, +, *J-STQE Jun 95* 230-233
- InP-based 1.3- μm QW laser high-temp. charact. *Seki, S.*, +, *J-STQE Jun 95* 264-274
- MQW strained/unstrained laser max. operating temp. theory. *Evans, J.D.*, +, *J-STQE Jun 95* 275-284
- Silicon materials/devices**
- light-emitting porous Si materials sci., props., and device appls. *Fauchet, P.M.*, +, *J-STQE Dec 95* 1126-1139
- spectrosc. study of red light emission in porous Si. *Prokes, S.M.*, *J-STQE Dec 95* 1140-1144
- Silver materials/devices**
- AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H.*, +, *J-STQE Apr 95* 44-49
- Sodium materials/devices**
- ZBLAN:Nd fiber laser in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791
- Solid lasers**
- Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804
- Cr:LiSrAlF₆ Q-switched laser freq. tripling, UV region. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61
- Cr⁴⁺:doped laser host lattices, tunable output. *Pollock, C.R.*, +, *J-STQE Apr 95* 62-66
- LiF:F₂ color center laser progress. *Mirov, S.B.*, +, *J-STQE Apr 95* 22-30
- rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A.*, +, *J-STQE Apr 95* 82-91
- Ti:sapphire laser wavelengths, nonlin. conversion. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57
- Tm:YAlO₃ 1.94- μm laser, biomedical appls. *Stoneman, R.C.*, +, *J-STQE Apr 95* 78-81
- tunable solid-state lasers (special issue). *J-STQE Apr 95* 1-91
- Yb:Sr(PO₄)₂F 1.047- μm energy storage opt. amp. *Marshall, C.D.*, +, *J-STQE Apr 95* 67-77
- Solid lasers; cf.** Optical fiber lasers; Semiconductor lasers
- Solid state plasmas; cf.** Semiconductor plasmas
- Solitons; cf.** Optical solitons
- Space charge**
- GaAs-GaAlAs waveguide saturable absorbers, carrier heating/sweepout dyn. *Uskov, A.V.*, +, *J-STQE Jun 95* 552-561
- Sparks**
- Ar discharge-driven 46.9-nm amp., gain-length approaching saturation. *Rocca, J.J.*, +, *J-STQE Sep 95* 945-948
- Spatial filters**
- AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. *van Exter, M.P.*, +, *J-STQE Jun 95* 601-605
- Special issues/sections**
- optical diagnostics of semiconductors (special issue). *J-STQE Dec 95* 977-1155
- semiconductor lasers (special issue). *J-STQE Jun 95* 100-761
- short wavelength lasers and applications (special issue). *J-STQE Sep 95* 765-975
- tunable solid-state lasers (special issue). *J-STQE Apr 95* 1-91
- Spectroscopy**
- KTiOPO₄ broadly tunable fs opt. parametric oscillators. *Spence, D.E.*, +, *J-STQE Apr 95* 31-43
- Spectroscopy; cf.** Electron spectroscopy; Fourier spectroscopy; Infrared spectroscopy; Mass spectroscopy; Optical spectroscopy
- Spontaneous emission**
- AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emission power. *Zhang, T.*, +, *J-STQE Jun 95* 606-615
- AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. *van Exter, M.P.*, +, *J-STQE Jun 95* 601-605
- Ar discharge-driven 46.9-nm amp., gain-length approaching saturation. *Rocca, J.J.*, +, *J-STQE Sep 95* 945-948
- Ar excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930
- ASE spectrosc. in strained quantum-well lasers. *Chang, C.-S.*, +, *J-STQE Dec 95* 1100-1107
- corrections to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957). *Healy, S.B.*, +, *J-STQE Dec 95* 1156
- Ge, Ne-like collisionally-pumped laser, prepulses effect, computer model. *Healy, S.B.*, +, *J-STQE Sep 95* 949-957
- semicond. laser, high-power, long. spatial inhomogeneities. *Fang, W.-C.W.*, +, *J-STQE Jun 95* 117-128
- Stability; cf.** Laser stability
- Stimulated emission**
- InAs-InAs_xSb_{1-x} type-II superlattice midwave IR lasers. *Yong-Hang Zhang*, +, *J-STQE Jun 95* 749-756
- InGaAs-InGaAsP-InGaP LD temp. depend. efficiency and modulation charact. *Nabiev, R.F.*, +, *J-STQE Jun 95* 234-243
- Tm:YAlO₃ 1.94- μm laser, biomedical appls. *Stoneman, R.C.*, +, *J-STQE Apr 95* 78-81
- Yb:Sr(PO₄)₂F 1.047- μm energy storage opt. amp. *Marshall, C.D.*, +, *J-STQE Apr 95* 67-77

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Stimulated emission; cf. Lasers**Strain**

ASE spectrosc. in strained quantum-well lasers. *Chang, C.-S.*, +, *J-STQE Dec 95* 1100-1107

Superlattices; cf. Semiconductor superlattices**Surface discharges; cf. Corona****Surface-emitting lasers**

AlGaAs DBR VCSEL, microcavity vac.-field config., spontaneous emission power. *Zhang, T.*, +, *J-STQE Jun 95* 606-615

AlGaAs VCSEL array, spatial filtering effect on spontaneous emission spectrum. *van Exter, M.P.*, +, *J-STQE Jun 95* 601-605

AlGaN_x VCSEL, threshold current minimization. *Chow, W.W.*, +, *J-STQE Jun 95* 649-653

GaAs-AlAs Fabry-Perot vert. cavity arrays, spatially chirped reson. wavelength. *Eng, L.E.*, +, *J-STQE Jun 95* 624-628

GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Osinski, M.*, +, *J-STQE Jun 95* 681-696

GaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666

InGaAs-GaAs MQW VCSEL and 2D arrays, fab. and fiber coupling. *Zeeb, E.*, +, *J-STQE Jun 95* 616-623

InGaAs-GaAs quantum well VCSEL, anisotropic gain distrib., polaris. control. *Sun, D.*, +, *J-STQE Jun 95* 674-680

InGaAs-GaAs VCSEL, polaris. control, birefr. metal/dielec. polarizer. *Mukaihara, T.*, +, *J-STQE Jun 95* 667-673

InGaAs quantum well VCSEL design for single-mode operation. *Scott, J.W.*, +, *J-STQE Jun 95* 638-648

InGaAs QW external cavity laser act. mode-locking/data transm. *Fiedler, U.*, +, *J-STQE Jun 95* 442-450

InGaAs VCSEL, gain depend. polaris. props. *Choquette, K.D.*, +, *J-STQE Jun 95* 661-666

InGaAs VCSEL with broad-gain bandwidth, temp. charact. *Kajita, M.*, +, *J-STQE Jun 95* 654-660

pass. antiguide VCSEL, single-mode operation. *Wu, Y.A.*, +, *J-STQE Jun 95* 629-637

Synchronization

semicond. laser, mode-locked, synchronization with external pulse stream. *Khalpin, V.B.*, +, *J-STQE Jun 95* 523-527

T**Technological innovation**

EUV lithog. at 13 nm, current status. *Stulen, R.H.*, *J-STQE Sep 95* 970-975

Technology forecasting

EUV lithog. at 13 nm, current status. *Stulen, R.H.*, *J-STQE Sep 95* 970-975

Temperature measurement

real-time opt. thermometry during semicond. proc. *Herman, I.P.*, *J-STQE Dec 95* 1047-1053

Testing; cf. Manufacturing testing; Semiconductor device testing**Thermal factors; cf. Ablation; Laser thermal factors; Semiconductor device thermal factors****Thermal variables measurement; cf. Temperature measurement****Thin film transistors**

thin-film transistor arrays testing/charactn., opt. charge-sensing method. *Kido, T.*, +, *J-STQE Dec 95* 993-1001

Thulium materials/devices

Tm:YAlO₃ 1.94-μm laser, biomedical appls. *Stoneman, R.C.*, +, *J-STQE Apr 95* 78-81

Time domain analysis

monolithic multiple colliding pulse mode-locked QW laser. *Martins-Filho, J.F.*, +, *J-STQE Jun 95* 539-551

quantum well high-speed lasers, carrier transport effects, time-domain model. *Nguyen, L.V.T.*, +, *J-STQE Jun 95* 494-504

Timing jitter

LD, self-seeded Fabry-Perot, time jitter/dyn. *Schell, M.*, +, *J-STQE Jun 95* 528-534

Titanium materials/devices

Ti:sapphire laser wavelengths, nonlin. conversion. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57

Transistors; cf. Thin film transistors**Transition metal materials/devices; cf. Chromium materials/devices; Copper materials/devices; Gold materials/devices; Silver materials/devices; Titanium materials/devices; Yttrium materials/devices; Zirconium materials/devices****Traveling wave amplifiers; cf. Semiconductor optical amplifiers****Tunable circuits/devices**

Ti:sapphire laser wavelengths, nonlin. conversion. *Rines, G.A.*, +, *J-STQE Apr 95* 50-57

Tunable circuits/devices; cf. Laser tuning; Tunable oscillators**Tunable lasers; cf. Laser tuning****Tunable oscillators**

AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H.*, +, *J-STQE Apr 95* 44-49

KTiOPO₄ broadly tunable fs opt. parametric oscillators. *Spence, D.E.*, +, *J-STQE Apr 95* 31-43

Tuning

AgGaSe₂ noncritically phase matched mid-IR generation by opt. parametric oscillator. *Komine, H.*, +, *J-STQE Apr 95* 44-49

KTiOPO₄ broadly tunable fs opt. parametric oscillators. *Spence, D.E.*, +, *J-STQE Apr 95* 31-43

Tunnel diodes

reson.-tunneling diode growth, opt. diagnostic monitoring. *Celii, F.G.*, +, *J-STQE Dec 95* 1064-1072

U**Ultrafast optics**

AlGaAs-based p-i-n nanostruct. semicond., nonequilibr. electron distribs. and high-field transport, picosecond Raman probe. *Grann, E.D.*, +, *J-STQE Dec 95* 1093-1099

AlGaAs single-strip mode-locked LD, nonlin. chirp compensation. *Azouz, A.*, +, *J-STQE Jun 95* 577-582

Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804

DFB semicond. laser, femtosecond pulse generation, soliton effect compression. *Ahmed, K.A.*, +, *J-STQE Jun 95* 592-600

DFB semicond. laser with absorptive grating, gain-switching operation. *Sudoh, T.K.*, +, *J-STQE Jun 95* 583-591

InGaAs subns tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400

KTiOPO₄ broadly tunable fs opt. parametric oscillators. *Spence, D.E.*, +, *J-STQE Apr 95* 31-43

monolithic multiple colliding pulse mode-locked QW laser. *Martins-Filho, J.F.*, +, *J-STQE Jun 95* 539-551

N₂ laser, ultra-fast mag. pulse compression cct. *Seki, H.*, +, *J-STQE Sep 95* 825-829

polymers, high-speed UV micro-machining, freq.-doubled Cu vap. lasers. *Glover, A.C.J.*, +, *J-STQE Sep 95* 830-836

quantum well high-speed lasers, carrier transport effects, time-domain model. *Nguyen, L.V.T.*, +, *J-STQE Jun 95* 494-504

semicond. quantum well laser, carrier transport, nonlin. gain coeffs. *Chin-Yi Tsai*, +, *J-STQE Jun 95* 316-330

SHG, unamplified high-repetition-rate, ultrashort laser pulses at Si(001) interfaces. *Dadap, J.I.*, +, *J-STQE Dec 95* 1145-1155

Xe, UUV subpicosecond pulse compression, induced-PM. *Yamada, T.*, +, *J-STQE Sep 95* 891-899

Ultraviolet generation

Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930

Ar²⁺F⁻ ionic excimers, VUV spectra. *Chi Zhou*, +, *J-STQE Sep 95* 872-876

Ce³⁺ activated materials, tunable UV ultrafast lasing, 10 ns pumping. *Sarukura, N.*, +, *J-STQE Sep 95* 792-804

Cr:LiSrAlF₆ Q-switched laser freq. tripling, UV region. *Pinto, J.F.*, +, *J-STQE Apr 95* 58-61

Cu freq.-doubled lasers for polymer high-speed UV micro-machining. *Glover, A.C.J.*, +, *J-STQE Sep 95* 830-836

Cu vap. laser, second-harmonic and sum-freq. high av. power UV generation. *Coutts, D.W.*, +, *J-STQE Sep 95* 768-778

Cu vap. laser, UV SHG. *Withford, M.J.*, +, *J-STQE Sep 95* 779-783

(HeAr)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H.*, +, *J-STQE Sep 95* 877-885

He-Au⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810

He-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810

Hg vap., intense VUV coherent light generation, nonlin. effects. *Museur, L.*, +, *J-STQE Sep 95* 900-907

(KrCs)⁺ ionic excimer, electron-beam excitation, VUV emission. *Tischler, H.*, +, *J-STQE Sep 95* 877-885

Kr³⁺F⁻ ionic excimers, VUV spectra. *Chi Zhou*, +, *J-STQE Sep 95* 872-876

Nd:YAG, solid-state CW freq.-quadrupled laser. *Oka, M.*, +, *J-STQE Sep 95* 859-866

Nd:ZBLAN fiber lasers in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791

Ne-Cu⁺ high-gain hollow-cathode lasers for UV and VUV. *Tobin, R.C.*, +, *J-STQE Sep 95* 805-810

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Ne-Xe-Cs gas mixtures, discharge excitation, excimer VUV emission study. *Tischler, H.*, +, *J-STQE Sep 95* 886-890
 N₂ laser, ultra-fast mag. pulse compression cct. *Seki, H.*, +, *J-STQE Sep 95* 825-829
 short wavelength lasers and applications (special issue). *J-STQE Sep 95* 765-975
 SW capillary lasers, tunable spatial coherence. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944
 XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824
 Xe excimer lamp excitation by quasi-CW jet discharges. *Kawanaka, J.*, +, *J-STQE Sep 95* 852-858
 Xe²⁺ Auger laser, pumping by laser-prod. target materials. *Dennis, T.*, +, *J-STQE Sep 95* 867-871
 Xe, VUV subpicosecond pulse compression, induced-PM. *Yamada, T.*, +, *J-STQE Sep 95* 891-899

V

Vapor deposition
 CdTe-doped PTFE thin films, laser deposition. *Inoue, S.*, +, *J-STQE Sep 95* 908-915
Vapor deposition; cf. CVD

W

Waveguide lasers
 AlGaAs ridge waveguide LD, 0.78- and 0.98-μm, chloride-assisted MOCVD. *Shima, A.*, +, *J-STQE Jun 95* 102-109
 antiquidged diode laser arrays, above-threshold anal. *Nabiev, R.F.*, +, *J-STQE Jun 95* 138-149
 antiresonant-reflective-opt. waveguide laser for MOPA. *Zmudzinski, C.*, +, *J-STQE Jun 95* 129-137
 DFB laser, bent waveguides and chirped gratings. *Hillmer, H.*, +, *J-STQE Jun 95* 356-362
 DFB laser with S-bent waveguide, high-power single-mode operation. *Salzman, J.*, +, *J-STQE Jun 95* 346-355
 GaAlAs LD, 800 mW peak-power self-sustained pulsation. *Takayama, T.*, +, *J-STQE Jun 95* 562-568
 GaAs-AlGaAs etched-well VCSEL arrays, thermal anal. *Olsinski, M.*, +, *J-STQE Jun 95* 681-696
 Ga(In)As(P)-GaNAsP-GaInP quantum well laser, strain influence on las-ing perform. *Guodong Zhang, J-STQE Jun 95* 183-188
 InGaAs-GaAs-InGaP high-power lasers with Ga₂O₃ facet coatings, IR microscopy. *Passlack, M.*, +, *J-STQE Jun 95* 110-116
 InGaAsP-InGaAsP MQW waveguide laser current injection, refr. index/loss changes. *Jong-In Shim, +, J-STQE Jun 95* 408-415
 InGaAsP-InP distributed forward coupled waveguide laser. *Amann, M.-C.*, +, *J-STQE Jun 95* 387-395
 InGaAs submu tunable DBR lasers, integrated InGaAsP electrooptical Bragg sect. *Delorme, F.*, +, *J-STQE Jun 95* 396-400
 rare earth doped fluoride planar waveguide laser oscillator, MBE fab. *McFarlane, R.A.*, +, *J-STQE Apr 95* 82-91
 semicond. laser, mode-locked, synchronization with external pulse stream. *Khalfin, V.B.*, +, *J-STQE Jun 95* 523-527
 semicond. ring resonator laser, self-aligned fab. proc. *Krauss, T.F.*, +, *J-STQE Jun 95* 757-761
 SW capillary lasers, tunable spatial coherence. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944
Waveguides; cf. Optical waveguides; Ridge waveguides
Wavelength division multiplexing
 rapidly-tunable QW DFB laser, carrier-transport effects. *Morinaga, M.*, +, *J-STQE Jun 95* 427-432

WDM; cf. Wavelength division multiplexing

X**Xenon materials/devices**

excimer lamps excitaia by quasi-CW jet discharges. *Kawanaka, J.*, +, *J-STQE Sep 95* 852-858
 Ne-Xe-Cs gas mixtures, discharge excitation, excimer VUV emission study. *Tischler, H.*, +, *J-STQE Sep 95* 886-890
 VUV subpicosecond pulse compression, induced-PM. *Yamada, T.*, +, *J-STQE Sep 95* 891-899
 XeCl excimer 2-kW laser, surface corona preionization scheme, spiker-sustainer cct. *Sato, Y.*, +, *J-STQE Sep 95* 811-824
 Xe²⁺ Auger laser, pumping by laser-prod. target materials. *Dennis, T.*, +, *J-STQE Sep 95* 867-871

X-ray lasers

Ar discharge-driven 46.9-nm amp., gain-length approaching saturation. *Rocca, J.J.*, +, *J-STQE Sep 95* 943-948
 Ar₂ excimer lasers, electron beam pumped, unstable resonator, VUV spectral region. *Katto, M.*, +, *J-STQE Sep 95* 924-930
 corrections to "A computational investigation of the neon-like germanium collisionally-pumped laser considering the effect of prepulses" (Sept 95 949-957). *Healy, S.B.*, +, *J-STQE Dec 95* 1156
 Ga, Ne-like lasing, prepulse effect. *Filk, E.E.*, +, *J-STQE Sep 95* 958-961
 Ge, Ne-like collisionally-pumped laser, prepulses effect, computer model. *Healy, S.B.*, +, *J-STQE Sep 95* 949-957
 Li⁺ opt. field-induced ionization X-ray laser, preformed plasma. *Midorikawa, K.*, +, *J-STQE Sep 95* 931-940
 short wavelength lasers and applications (special issue). *J-STQE Sep 95* 765-975
 SW capillary lasers, tunable spatial coherence. *Kukhlevsky, S.V.*, +, *J-STQE Sep 95* 941-944
 Ta laser double-pass, CrB₂-C multilayer mirror damage, computer simul. *Balakinreva, L.L.*, +, *J-STQE Sep 95* 962-969
 Xe, VUV subpicosecond pulse compression, induced-PM. *Yamada, T.*, +, *J-STQE Sep 95* 891-899
X-ray lithography
 EUV lithog. at 13 nm, current status. *Stulen, R.H.*, *J-STQE Sep 95* 970-975

Y

YAG lasers; cf. Neodymium:YAG lasers
Ytterbium materials/devices

Yb:Sr₂(PO₄)₂F 1.047-μm energy storage opt. amp. *Marshall, C.D.*, +, *J-STQE Apr 95* 67-77
 Yb³⁺:SiO₂ fiber lasers, sources 1, 1.2 μm. *Pask, H.M.*, +, *J-STQE Apr 95* 2-13

Yttrium materials/devices

YAlO₃:Tm laser, med. appls. *Stoneman, R.C.*, +, *J-STQE Apr 95* 78-81

Z

Zinc materials/devices
 laser-prod. plasma target materials for Xe²⁺ Auger laser pumping. *Dennis, T.*, +, *J-STQE Sep 95* 867-871
 ZnMgSSe blue-green LD operation. *Ishibashi, A.*, *J-STQE Jun 95* 741-748

Zirconium materials/devices

ZBLAN:Nd fiber laser in UV and vis., upconversion pumping. *Funk, D.S.*, +, *J-STQE Sep 95* 784-791