Correction to "InP Bipolar ICs: Scaling Roadmaps, Frequency Limits, Manufacturable Technologies"

By Mark J. W. Rodwell, Minh Le, and Berinder Brar

In the above paper [1], we wish to call the attention of the readership to errors that appear in Section II-C, p. 276. The values of the semiconductor dielectric relaxation ω_d frequencies were not printed. The values are as follows: for N-type InGaAs at $\sim 3.5 \cdot 10^{19}/\mathrm{cm}^3$ doping, $\omega_d/2\pi = 800$ THz, while for P-type InGaAs at $\sim 7 \cdot 10^{19}\mathrm{cm}^3$ doping, $\omega_d/2\pi = 80$ THz.

The expression giving the variation with frequency of the semiconductor bulk resistivity $\rho(j\omega)$ was also misprinted. The text should read "Because ω_d and ω_p far exceed anticipated HBT bandwidths, the emitter, base and subcollector bulk resistivities all can be approximated as $\rho(j\omega) \sim \rho_{\mathrm{DC}}(1 + j\omega/\omega_s)$." ■

REFERENCES

[1] M. J. W. Rodwell, M. Le, and B. Brar, "InP bipolar ICs: Scaling roadmaps, frequency limits, manufacturable technologies," *Proc. IEEE*, vol. 96, no. 2, pp. 271–286, Feb. 2008.

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M. J. W. Rodwell is with the Electrical and Computer Engineering Department, University of California, Santa Barbara, CA 93106 USA (e-mail: rodwell@ece.ucsb.edu).
M. Le was with Vitesse Semiconductor, Camarillo, CA 93102 USA. He is now with Evergreen Solar, Marlboro, MA 01752 USA (e-mail: minhsyle@gmail.com).
B. Brar is with Teledyne Scientific (formerly Rockwell Scientific), Thousand Oaks, CA 91360 USA (e-mail: bbrar@teledyne.com).

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