ERRATA

Erratum: "Thermionic emission diffusion model of current conduction in polycrystalline silicon and temperature dependence of mobility" [J. Appl. Phys. 57, 2793 (1985)]

S. N. Singh, R. Kishore, and P. K. Singh

Division of Materials, National Physical Laboratory, New Delhi 110012 India

Equations (42) and (43) should read

$$n_i = 4.9 \times 10^{15} \; T^{3/2} \left(\frac{m_e m_h}{m_0^2} \right)^{3/4} \exp\left(-\frac{E_g}{2kT} \right) \tag{42}$$

and

$$(|8q\epsilon\epsilon_0 N_D V_B|)^{1/2} = qN_T \left(\frac{1}{1 + \exp\left(\dfrac{E_T - E_{fg} + qV_B}{kT} \right)} - \frac{1}{1 + \exp\left(\dfrac{E_T - E_{fb}}{kT} \right)} \right), \tag{43}$$

respectively.

Erratum: "Variation of refractive index in strained $In_x Ga_{1-x}As$-GaAs heterostructures" [J. Appl. Phys. 58, 341 (1985)]

Uptal Das and Pallab K. Bhattacharya

Solid State Electronics Laboratory, Department of Electrical Engineering and Computer Science, The University of Michigan, Ann Arbor, Michigan 48109

On page 341, Sec. II, the first section is not correct. In fact, strain increases the band gap of the lower band-gap material and decreases the band gap of the higher band-gap material for the heterostructure system considered by us. This will change the calculated data slightly.

The strain, therefore, causes a decrease of the refractive index in $In_x Ga_{1-x}As$. In Fig. 2 curve (b) should be below curve (a) by almost the same amount. In Fig. 4, the corrected caption should read:

FIG. 4. Refractive index step between $In_x Ga_{1-x}As$ and GaAs for different values of x as indicated by the representative symbols: ($\blacktriangle$) $In_x Ga_{1-x}As = 70$ Å, GaAs $= 25$ Å; ($\blacklozenge$) $In_x Ga_{1-x}As = 100$ Å, GaAs $= 50$ Å; ($*$)$In_x Ga_{1-x}As = 70$ Å, GaAs $= 70$ Å; ($\blacktriangledown$) $In_x Ga_{1-x}As = 50$ Å, GaAs $= 100$ Å; ($\blacksquare$) $In_x Ga_{1-x}As = 25$ Å, GaAs $= 70$ Å; and ($\circledcirc$) $In_x Ga_{1-x}As = 30$ Å, GaAs $= 45$ Å. The inset shows an enlarged view of the characteristics around $x = 0.2$.