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- <sup>19</sup>M. Beyeler and D. Lazarus, *Europhysics Conference on Atomic Transport in Solids and Liquids*, Marstrand, Sweden, 1970 (unpublished).
- <sup>20</sup>L. W. Barr and J. N. Mundy, *Diffusion in Body-Centered Cubic Metals* (American Society for Metals, Metals Parks, Ohio, 1965), p. 171; J. N. Mundy, L. W. Barr, and F. A. Smith, *Phil. Mag.* **14**, 785 (1966).
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## ERRATA

**F-Center Gap Mode in Alkali Halides. A Molecular Model.** R. S. Singh and S. S. Mitra [*Phys. Rev. B* **2**, 1070 (1970)]. Dr. D. Bäuerle has brought to our attention certain misinterpretations of his results. The sentences starting from line 3 and ending in line 16 of the second paragraph of p. 1072 should accordingly be changed to "... For the *F* center in KI, a sharp band at 83 cm<sup>-1</sup> has been observed<sup>1</sup> in the far-infrared absorption. Clearly this should be compared with the calculated frequency of 81.2 cm<sup>-1</sup> (*F*<sub>1u</sub><sup>''</sup>). More recently Bäuerle and Hübner [*Phys. Rev. B* **2**, 4252 (1970)] have reported the observation of a gap mode due to an *F* center in KBr at 99.6 cm<sup>-1</sup> (1.2 °K). This compares well with our calculated value of 92.6 cm<sup>-1</sup> (300 °K) for this center. A resonant-band mode peaking around 62 cm<sup>-1</sup> has been reported<sup>6,14</sup> for the KI:H<sup>-</sup> system."

**Nonresonant Interband Faraday Rotation in Silicon.** Cedric J. Gabriel [*Phys. Rev. B* **2**, 1812 (1970)]. A printer's error was made in Eq. (3). The correct form of the equation is

$$2\gamma = [\xi(-) - \xi(+)] \left( \frac{d\xi(\pm)}{d\alpha} \right)^{-1}.$$

**High-Temperature Measurements of the Electron Hall Mobility in the Alkali Halides.** C. H. Seager and David Emin [*Phys. Rev. B* **2**, 3421 (1970)]. To correct for an error which has been discovered in the calibration procedure of the apparatus, the quoted Hall mobilities for all samples measured should be multiplied by a factor of 1.24 to obtain the proper values. This correction in no way affects the conclusion drawn by the authors that con-

tinuum polaron theories are inadequate in their predictions of the temperature dependence of the data.

**Lattice-Dynamical Theory of the Diffusion Process. I. Isotope Effect in Cubic Metals.** B. N. Narahari Achar [*Phys. Rev. B* **2**, 3848 (1970)]. The 3*N* normal modes of the lattice perturbed by an isotopic impurity should be labeled by a single index *f*, rather than the symbols (*q*, *λ*). Accordingly, the symbols (*q*, *λ*) should be replaced by *f* in the following: (i) Line above Eq. (10), p. 3850. (ii) Equations (10) and (11), p. 3850. (iii) Line 3 from top of the right-hand column, p. 3850.

**Ionic Raman Effect. I. Scattering by Localized Vibration Modes.** A. A. Maradudin and R. F. Wallis [*Phys. Rev. B* **2**, 4294 (1970)]. An unfortunate numerical error occurred in plotting Figs. 1 and 2 on the basis of Eqs. (17) and (29), respectively. The scattering efficiencies shown in these figures are consequently too large by factors of 10<sup>3</sup>–10<sup>4</sup>. The corrected results, together with a demonstration that the ionic Raman effect for the system CaF<sub>2</sub>:H<sup>-</sup> dominates the electronic Raman effect when the incident light is in the infrared, are presented in a paper by L. B. Humphreys, A. A. Maradudin, and R. F. Wallis to appear in *Physics of Impurity Centres in Crystals* (Academy of Sciences of the Estonian S.S.R., Tartu, 1971).

**Electromodulation of the Optical Properties of Thallium-Activated Potassium Bromide.** U. Giorgianni, V. Grasso, and G. Saitta [*Phys. Rev. B* **2**, 5007 (1970)]. Figures 1 and 2 should be interchanged,

however, the figure captions are correctly numbered.

**Intrinsic Diffusion of Boron and Phosphorus in Silicon Free from Surface Effects,** R. N. Ghosh-tagore [Phys. Rev. B **3**, 389 (1971)]. Typesetting errors occurred in the third and fourth sentences of the abstract during the galley-correcting process. The correct abstract is as follows.

Boron and phosphorus were diffused in either hydrogen or pure-argon atmosphere into float-zoned, epitaxial, and oxygen-doped (111) silicon from a 4-12- $\mu$ -thick epitaxial-doped silicon surface layer. Under intrinsic conditions, the concentration profiles obtained show Fickian behavior at

all surface and bulk concentration conditions. Between 1130 and 1405 °C, the intrinsic diffusivities can be described by  $D_P = 7.4 \times 10^{-2} \exp[(-3.30 \pm 0.03 \text{ eV})/kT] \text{ cm}^2/\text{sec}$  and  $D_B = 2.1 \times 10^{-3} \exp[(-2.85 \pm 0.05 \text{ eV})/kT] \text{ cm}^2/\text{sec}$ . Compared with earlier studies using oxide diffusion sources, the diffusion coefficients of both boron and phosphorus are found to be considerably smaller. Moreover, above 1130 °C they are independent of surface concentration ( $\leq 3 \times 10^{19} \text{ cm}^{-3}$ ), bulk conductivity type ( $n$  or  $p$ ) and level ( $6 \times 10^{13}$ – $8 \times 10^{18} \text{ cm}^{-3}$ ), surface-to-bulk concentration ratio ( $\sim 1$ – $3.3 \times 10^5$ ), and oxygen concentration (to  $10^{18} \text{ cm}^{-3}$ ). In the light of some related work, the present results are shown to indicate the true bulk-diffusion process in silicon.