Erratum: Many-electron effects on the dielectric function of cubic In_2O_3: Effective electron mass, band nonparabolicity, band gap renormalization, and Burstein-Moss shift [Phys. Rev. B 93, 045203 (2016)]

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There are several errors in the equations used for the derivation of the band gap renormalization ΔE_{BGR} in our paper. Specifically, Eqs. (21) to (24) should read

$$a^*(n) = \frac{4\pi\varepsilon_0\varepsilon_S\hbar^2}{e^2 m_0^* \sqrt{1 + 2C\frac{\hbar^2}{m_0^*}(3\pi^2 n)^{2/3}}} \tag{21}$$

and

$$k_F(n) = \sqrt{2m^*(n)\Delta E_{\mathrm{BMS}}(n)}/\hbar \tag{22}$$

$$= \left[\frac{m_0^*}{\hbar^2 C}\sqrt{1 + 2C\frac{\hbar^2}{m_0^*}(3\pi^2 n)^{2/3}}\right. \tag{23}$$

$$\left. \times \left(\sqrt{1 + 2C\frac{\hbar^2}{m_0^*}(3\pi^2 n)^{2/3}} - 1\right)\right]^{1/2}. \tag{24}$$

These errors have no impact on the results presented because in the data analysis the correct versions of these equations have been used.

A reference to Ref. [1] was unintentionally omitted in our paper. It should be added twice, first in Sec. I after "the lowest energy direct transition is dipole forbidden, while the onset of strong absorption due to dipole-allowed direct transitions is at about 3.8 eV [1,2]" and in Sec. III D after the sentence "no unambiguous value for $E_{b,X}$ can be found in the literature [1]."

Furthermore, the affiliation of authors Oliver Bierwagen and James S. Speck was given incorrectly. The correct affiliation is as follows: Materials Department, University of California, Santa Barbara, USA. We regret these mistakes.

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