

## Three-photon absorption spectra of zinc blende semiconductors: theory and experiment: erratum

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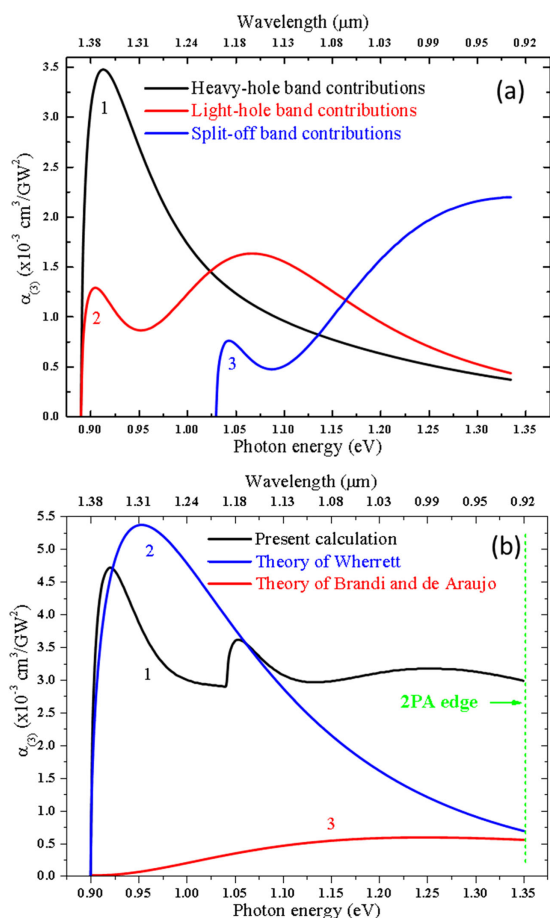
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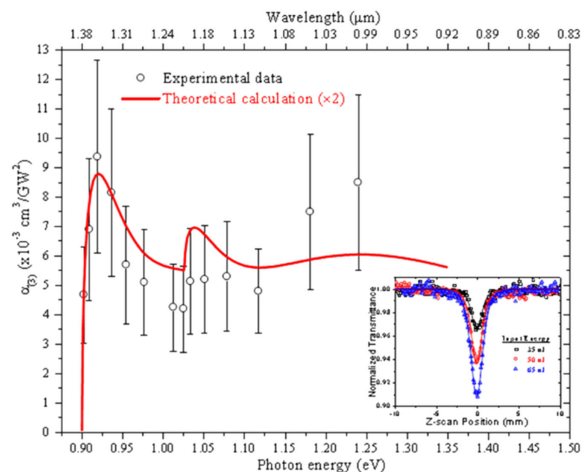
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We provide a correction to the spectral dependence of the three-photon absorption in zinc-blende semiconductors using Kane's 4-band model in *Opt. Lett.* **33**, 2626 (2008). © 2020 Optical Society of America

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**Fig. 1.** (a) Contributions to the degenerate 3PA coefficient due to transitions from the (1) heavy-hole, (2) light-hole, and (3) split-off bands as a function of photon energy. (b) (1) Calculated degenerate 3PA spectrum compared to previous theories of (2) Wherrett [3] and (3) Brandi and de Araujo [4].



**Fig. 2.** Experimentally obtained spectrum of 3PA coefficient compared to our calculation scaled by a factor of 2. Inset shows typical experimental Z scans performed at  $\lambda = 1200 \text{ nm}$ .

We have identified an error in one of the matrix elements used in the Kane 4-band model in calculating the spectral dependence of the 3PA in ZnSe [1], where a cosine was erroneously replaced by a sine in the  $c\alpha - c\alpha$  momentum matrix element [2]. That error quantitatively changes the spectral dependence. The corrected dependence is shown in the revised Figs. 1 and 2 from that publication. This correction does not change the conclusions.

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