

Abstract Submitted
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Selection rules for optical transitions in lead salts semiconductor nanocrystals: Drastic effect of structure inversion asymmetry SERGUEI GOUPALOV¹, Jackson State University — We resolve a paradox according to which some of the optical transitions in PbSe and PbS semiconductor nanocrystals seemingly forbidden by the parity selection rule exhibit a large oscillator strength in optical absorption. We calculate oscillator strengths for various optical transitions in the framework of the effective mass approximation.

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