

Excited-state absorption spectra of Pr³⁺ ions doped into LiY_{0.3}Lu_{0.7}F₄ mixed crystal

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Abstract

© 2016 Optical Society of America. The UV/visible polarized excited-state absorption (ESA) spectra from the $1D_2$ and $3P_j$ manifolds of $4f^2$ -configuration of Pr³⁺ ions doped into LiY_{0.3}Lu_{0.7}F₄ mixed crystal were studied at room temperature. The data about ESA cross-sections are necessary to estimate an efficiency of stepwise excitation of $4f^5d$ -states of Pr³⁺ ions in these crystals.

<http://dx.doi.org/10.1364/OME.6.001146>
