

Energy exchange between ions of Ce³⁺ and Tb³⁺ in crystals of fluoride

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Abstract

Spectroscopic study of fluoride crystals with various concentrations of terbium and cerium is performed. Analysis of these spectra shows that change of nature of rare-earth centers takes place under the variation of concentration of rare-earth ions. It leads to modification of energy transfer at various concentrations of rare-earth ions and, as consequence, to modification of observed spectra.

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Keywords

Energy transfer, Fluorite crystals, Luminofors, Rare-earth ions, Sensibilization