

Electron paramagnetic resonance of Ce³⁺ and Nd³⁺ impurity ions in YBa₂Cu₃O_{6.13}

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Abstract

The electron paramagnetic resonance (EPR) spectra of Ce³⁺ and Nd³⁺ impurity ions in unoriented powders of the YBa₂Cu₃O_{6.13} compound are observed and interpreted for the first time. It is demonstrated that, upon long-term storage of the samples at room temperature, the EPR signals of these ions are masked by the spectral line (with the g factor of approximately 2) associated with the intrinsic magnetic centers due to the significant increase in its intensity. © 2009 Pleiades Publishing, Ltd.

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