

EPR and optical spectroscopy of neodymium ions in KMgF₃ and KZnF₃ crystals

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Abstract

KMgF₃ and KZnF₃ crystals doped with Nd³⁺ ions were studied using EPR and optical spectroscopy methods. Several types of paramagnetic centers of Nd³⁺: KMgF₃ - two of tetragonal and one of rhombic symmetry; KZnF₃ - one of tetragonal and one of trigonal symmetry were found. Parameters of the corresponding spin Hamiltonians were determined. Using optical spectroscopy paramagnetic centers Nd²⁺ and Nd⁴⁺ in KMgF₃ were found. © 1993 Springer.

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