

EPR Studies of Mn^{2+} -Doped Diammonium Hexaaqua Magnesium(II) Sulfate

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Electron paramagnetic resonance (EPR) studies of Mn^{2+} impurity in single crystals of diammonium hexaaqua magnesium(II) sulfate have been carried out at 9.3 GHz (X-band) at room temperature. The EPR spectra exhibit a group of five fine structure transitions. The spin-Hamiltonian parameters were determined. Mn^{2+} enters the lattice interstitially. The EPR spectrum of a powder sample supports the data obtained by single crystal studies. – PACS number: 76.30

Key words: Electron Paramagnetic Resonance; Spin-Hamiltonian; Fine Structure.