

EPR Study of Cu^{2+} and VO^{2+} Ions in $[\text{NH}_4\text{H}_3(\text{C}_2\text{O}_4)_2] \cdot 2\text{H}_2\text{O}$ Single Crystals

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The EPR spectra of Cu^{2+} and VO^{2+} ions in $[\text{NH}_4\text{H}_3(\text{C}_2\text{O}_4)_2] \cdot 2\text{H}_2\text{O}$ single crystals were recorded at room temperature in three orthogonal planes. The spectra indicate that the Cu^{2+} and VO^{2+} ions substitute NH_4^+ ions. The principal values of the **g** and **A** tensors were determined. The ground state wave function of the Cu^{2+} ion in the lattice has been calculated and the covalancy and Fermi contact terms of the VO^{2+} ions were evaluated.

Key words: EPR; Ammonium Tetraoxalate; Vanadyl Ion; Cupper Ion.