

Temperature and Pressure Dependent Luminescence Mechanism of Cubic Structured ZnS:Mn Nanophosphor under UV Excitation

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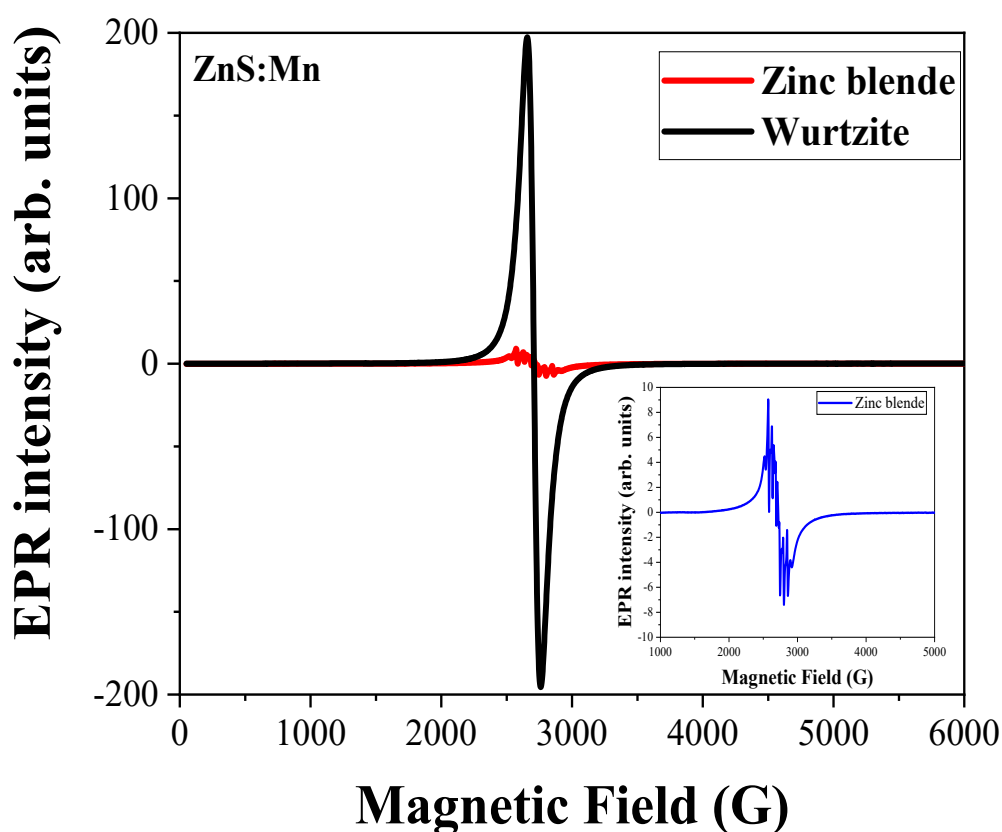
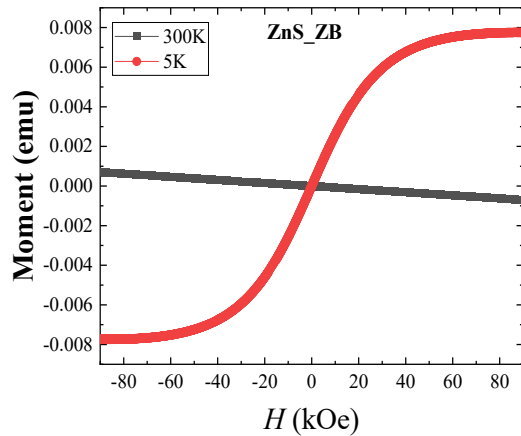
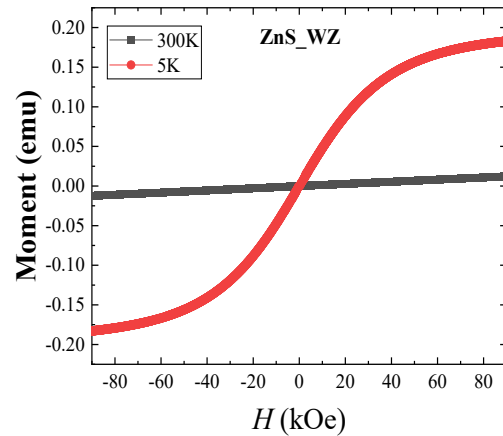


Figure S1. Comparison of room temperature EPR spectra of the zinc blende and wurtzite ZnS samples doped with Mn^{2+} used in the I-ML experiment. The inset shows an enlarged view of the EPR spectrum of the zinc blende sample. The hyperfine splitting in the wurtzite sample is smeared

out due to considerable spin-spin interaction.



(a)



(b)

Figure S2. Comparison of room temperature (RT) and low-temperature SQUID magnetometry measurements of (a) zinc blende and (b) wurtzite ZnS:Mn²⁺ samples. The RT paramagnetic behaviour in (a) is obscured by the dominant diamagnetic contribution of the host.