

Enhanced Ripening Behaviour of Manganese Doped Cadmium Selenide Quantum Dots (Mn-doped CdSe QDs)

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Abstract : In this research, Mn-doped CdSe QDs is synthesized by using paraffin liquid as the reacting solvent and oleic acid as the ligands for Cd in order to produce Mn-doped CdSe QDs in zinc-blende crystal structure. Characterization studies for synthesized Mn-doped CdSe QDs are carried out using UV-visible and photoluminescence spectroscopy. The absorption wavelengths in UV-vis test and emission wavelengths in PL test were increase with the increases in the ripening temperature and time respectively.

Keywords : semiconductor, chemical synthesis, optical properties, ripening

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