

13. Surface Plasmon Resonance Study In CeO₂ Quantum Dots

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ABSTRACT

This study was designed to examine the ability of a semiconducting metal oxide to act as a material capable of supporting surface plasmon resonance (SPR). Here we have reported the synthesis of CeO₂ quantum dots (QDs) by chemical route. The CeO₂QDs so formed were characterized by using FTIR, TEM and UV-Visible spectroscopy. The surface plasmon resonance of CeO₂ QDs was studied in range 200-1100 nm using UV-VIS analysis.

Keywords: Surface plasmon resonance, CeO₂, Quantum dots