## Characterization of Fe Doped ZnO Synthesised by Sol-Gel and Combustion Routes

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**Abstract :** This paper deals with the comparison of two synthesis methods, namely, sol-gel, and combustion to prepare Fe doped ZnO nano material. Characterization results for structural, optical and magnetic properties were analyzed for the sol gel and combustion synthesis derived materials. Magnetic studies of the prepared compounds reveal that the combustion synthesis derived material has good magnetization of 50 emu/gm with a better hysteresis loop curve.

1

Keywords : DMS, combustion, ferromagnetic, synthesis methods

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