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## Optical, structural and electrical properties of Zr doped CoSe for photovoltaic application.

CoSe and Zr doped CoSe thin film materials were successfully synthesized via spray pyrolysis technique. The optical, structural and electrical characterization were carried out using UV-visible spectrophotometer, XRD and four point probe at ambient temperature. The materials showed good optical, structural and electrical properties. The energy band gap of the material prepared at different Zr dopant concentration at 1200C substrate temperature displayed energy band gaps ranging from 1.2 -1.5 eV. The Zr dopant material improved the absorbance value of the as-prepared undoped CoSe thin materials indicating a good potential for photovoltaic applications

**Apply to be considered for a student ; award (Yes / No)?**

NO

**Level for award;(Hons, MSc, PhD, N/A)?**

N/A

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