Optoelectronic properties of Doped ZnO nanostructures synthesized via a green process for renewable energy applications.

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Abstract:

Recently, ZnO Nanostructures have attracted considerable attention due to their various morphology, easy synthesis and excellent physical properties for fabricating Optoelectronic devices. In this study, we report the synthesis of Doped-ZnO nanostructures via a green process using plant extracts. Their morphology, structural, electrical and optical properties were characterized by different techniques. The obtained materials shows promising properties and remarkable effects of the dopant. Our investigations and discussions were conducted to reveal their ability for Optoelectronic applications such as solar cell, lasers and light emitting diode devices.

Contribution: Oral