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# **Effect of Sn Dopant on the Properties of ZnO Nanorod Arrays**

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## **Abstract**

Sn-doped ZnO nanorod arrays were synthesized by a novel method combining the aqueous solution process with post-growth rapid photothermal processing (RPP). The post-growth RPP of Sn-doped ZnO nanostructures at 700 degC in vacuum was found to result in a drastic decrease of the near-bandgap photoluminescence intensity. A comparison of the impact of RPP in Sn and Al doped samples is performed and the reasons of near-bandgap photoluminescence intensity decrease in Sn-doped samples are discussed.