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Abstract

In this work high density, well-aligned Al doped ZnO (AZO) nanowires are hydrothermally synthesized on glass substrate at 99°C. The Al content is ~1.57 atomic %. The PL spectrum shows that Al impurities caused an increase in the number of oxygen vacancies. The spectral response results show that the maximum responsivity and quantum efficiencies η of AZO NWs are 3.61 A/W and 84.9%, at an incident

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