

Full text at publisher



Export

Add To Marked List

4 of 5

Characterization of multilayer Al doping in ZnO

By: **Tuzemen, ES** (Tuzemen, Ebru Senadim) [1], [2]; Muglu, GM (Muglu, Gunay Merhan) [3]; Alaydin, BO (Alaydin, B. Ozgur) [1], [2]; Altun, D (Altun, Didem) [4]; Cetin, SK (Cetin, Selda Kiliç) [5]; Gur, E (Gur, Emre) [6]

View Web of Science ResearcherID and ORCID (provided by Clarivate)

JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY

JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY ✕

Journal Impact Factor™

2020	Five Year
1.526	1.254

JCR Category	Category Rank	Category Quartile
MATERIALS SCIENCE, CERAMICS <i>in SCIE edition</i>	17/29	Q3

Source: Journal Citation Reports™ 2020

...e and Si substrates by radio frequency magnetron sputtering (RFMS) using ZnO target. In order ... is of 450 degrees C for 1 h to let diffuse Al atoms into the ZnO. After annealing homogeneous Al, ZnO from the cross-sectional SEM images. The effects of Al diffusion on structural, optical, ... Fraction (XRD), optical transmittance, sheet resistance, and magnetic field dependence of ... mples were higher than 60% in the visible and near-infrared region for all samples. The sheet ... I on sapphire was found to be 2.64×10^{11} (omega)[-1] after annealing. The magnetism ... for the Al/ZnO/Al sample, which is attributed to the interface exchange coupling between the ... layers.

Keywords

Author Keywords: Aluminum diffusion; ZnO; Al doping in ZnO; Magnetron sputtering; Ferromagnetism

Author Information

Corresponding Address: **Tuzemen**, Ebru Senadim (corresponding author)

Sivas Cumhuriyet Univ, Fac Sci, Dept Phys, TR-58140 Sivas, Turkey

Citation Network

In Web of Science Core Collection

0

Citations

Create citation alert

33

Cited References

View Related Records

You may also like...

Meng, LJ; dos Santos, MP; Properties of indium tin oxide films prepared by rf reactive magnetron sputtering at different substrate temperature THIN SOLID FILMS

Kim, SK; Kim, SY; Choi, DY; et al. Influence of ZnO Thickness on the Optical and Electrical Properties of GZO/ZnO Bi-layered Films TRANSACTIONS ON ELECTRICAL AND ELECTRONIC MATERIALS

Zhuang, NF; Wang, RF; Chen, JZ; et al. GROWTH, OPTICAL AND MAGNETIC PROPERTIES OF Co-DOPED TiO2 CRYSTAL FUNCTIONAL MATERIALS LETTERS