

Supporting Information

Enhanced Charge Transport in Al-doped ZnO Nanotubes Designed via Simultaneous Etching and Al
Doping of H₂O-Oxidized ZnO Nanorods for Solar Cell Applications

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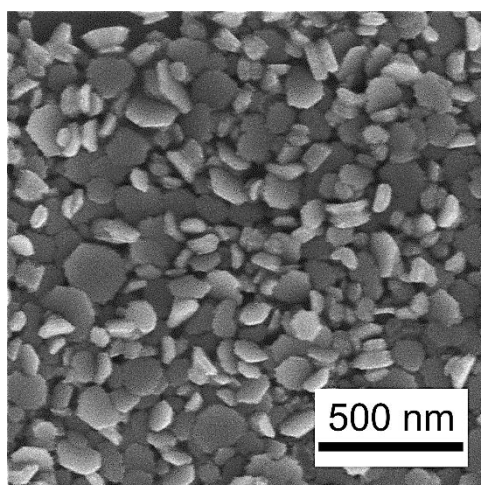


Figure S1. SEM image of a thermally evaporated Zn thin film.

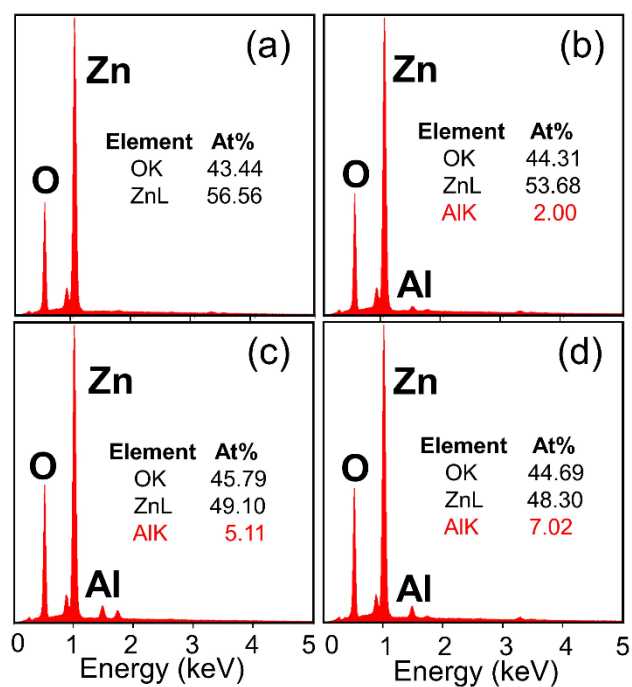


Figure S2. EDX measurements of (a) ZnO NRs formed after H₂O oxidation at 90 °C for 8 h and AZO NTs formed after (b) 1, (c) 2, and (d) 3 AlCl₃ coatings.

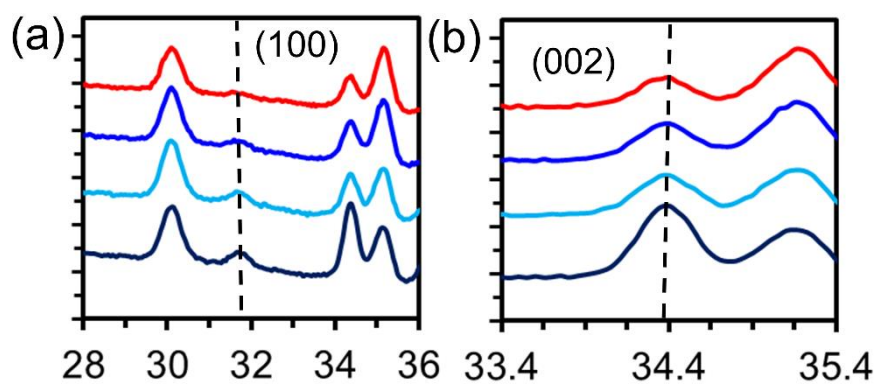


Figure S3. XRD patterns of ZnO NRs and AZO NTs magnified at (100) and (002) diffraction peaks.

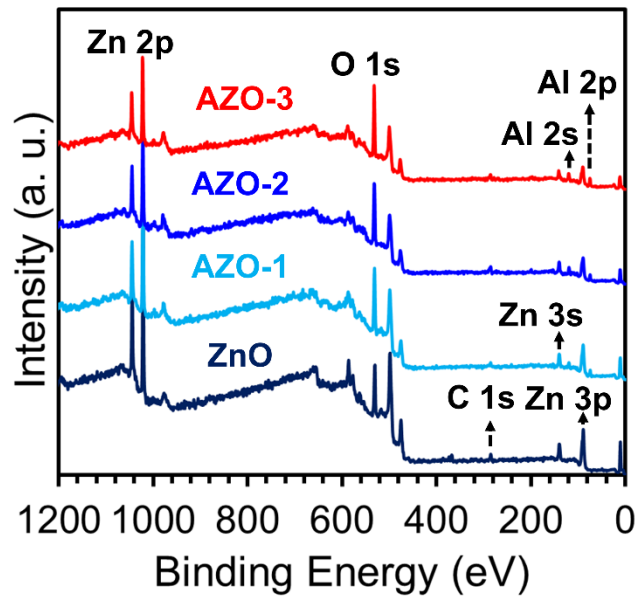


Figure S4. XPS survey spectra of ZnO NRs and AZO NTs.