

Solution-Processed High-Haze ZnO Pyramidal Textures Directly Grown on a TCO substrate and Light-Trapping Effect in Cu₂O Solar Cells

Tsutomu Shinagawa,^{*a} Kosuke Shibata,^b Osamu Shimomura,^b Masaya Chigane,^a Ryôki Nomura^b
and Masanobu Izaki^c

^aElectronic Materials Research Division, Osaka Municipal Technical Research Institute, Osaka 536-8553, Japan.

^bDepartment of Applied Chemistry, Osaka Institute of Technology, Osaka 535-8585, Japan.

^cDepartment of Mechanical Engineering, Toyohashi University of Technology, Toyohashi, Aichi 441-8580, Japan.

*E-mail: tshina@omtri.or.jp

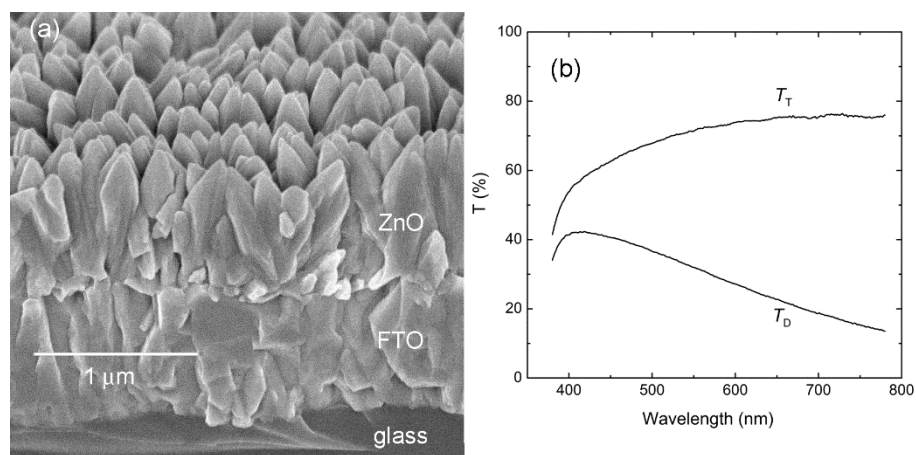


Figure S1. (a) FESEM image and (b) T_T and T_D spectra of a ZnO film electrodeposited from a 15 mM Zn(NO₃)₂·6H₂O–15 mM NaCl aqueous solution at a current density of 2.0 mA cm⁻² for 450 s.

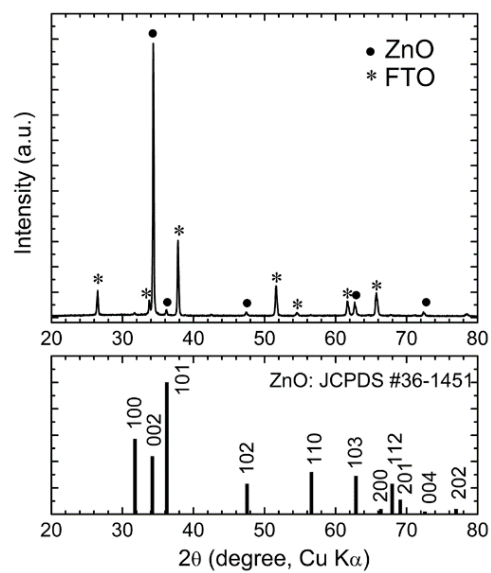


Figure S2. XRD pattern of a pyramidal-textured ZnO film. JCPDS data (no. 36-1451) for ZnO is also presented.