

Supporting Information

Robust Transparent and Conductive Gas Diffusion Multi-Barrier Based on Mg- and Al-Doped ZnO as ITO-Free Electrodes for Organic Electronics

Jeong Hyun Kwon^{†,‡}, Yongmin Jeon[†], and Kyung Cheol Choi^{,†}*

[†] School of Electrical Engineering, KAIST, Daejeon 34141, Republic of Korea

[‡] Advanced Nano-Surface Department, Korea Institute of Materials Science, Changwon, Gyeongnam 51508, Republic of Korea

* E-mail : kyungcc@kaist.ac.kr

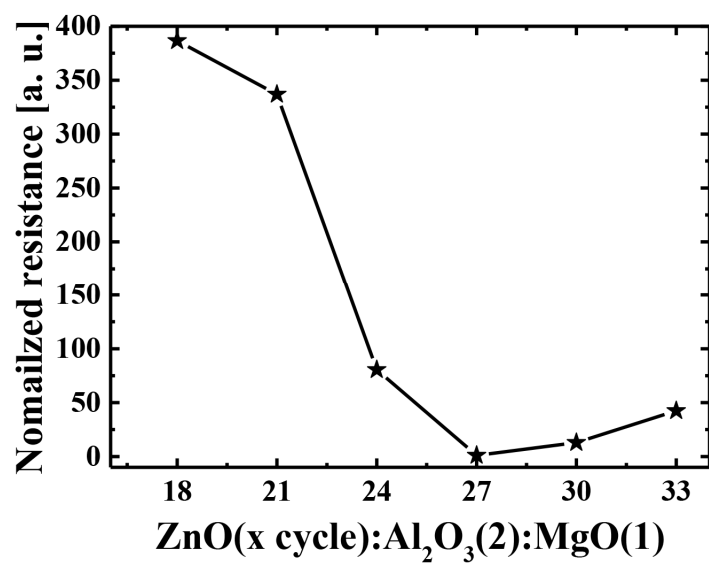


Figure S1. Electrical conductivity of the MAZO thin film as a function of the ZnO deposition cycle when the cyclic ratio of Al₂O₃:MgO was fixed as 2:1.

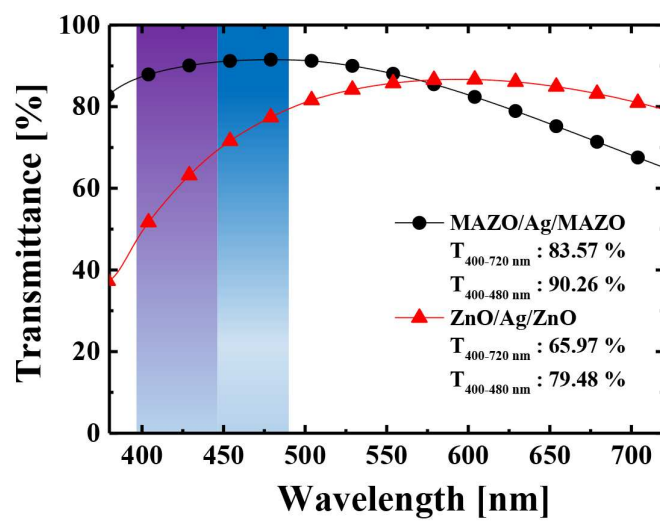


Figure S2. Calculated transmittances of the ZnO/Ag/ZnO and MAZO/Ag/MAZO structures in the visible wavelength.

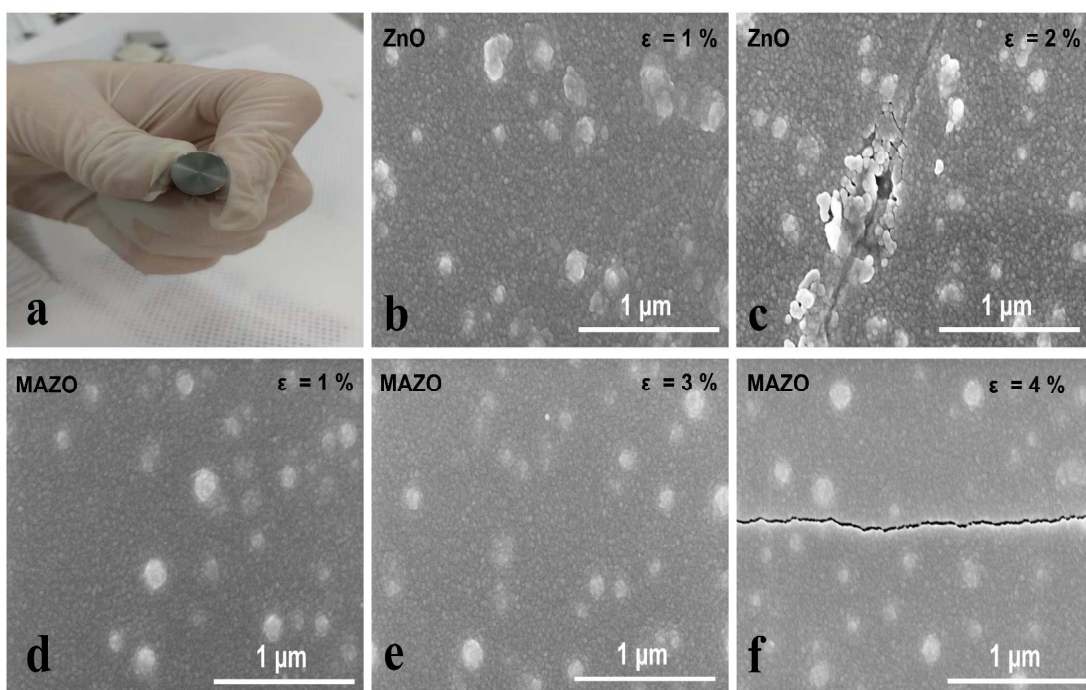


Figure S3. a) Photographs showing the tested samples fabricated on PET substrates under tensile bending tests. b) ~ f) Surface SEM images of ZnO and MAZO thin films on PET substrates as a function of bending strain.

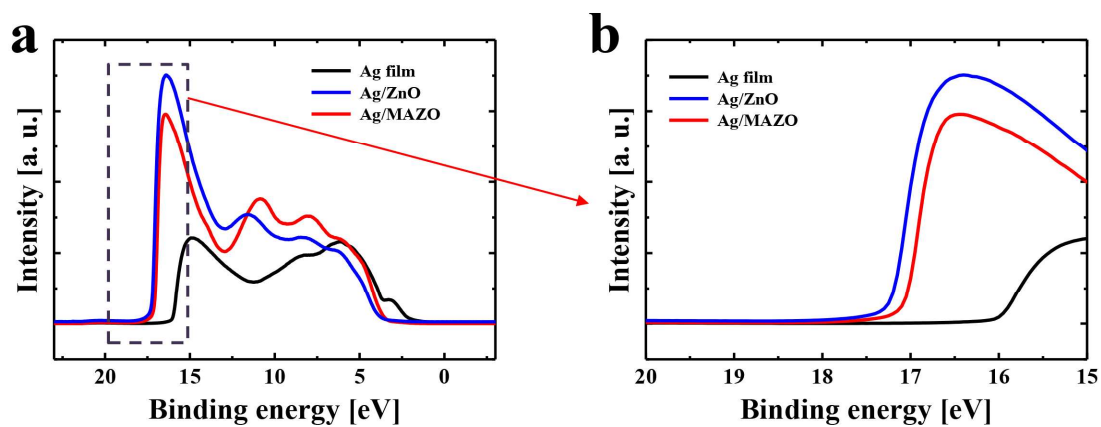


Figure S4. a) He(I) UPS spectra of Ag, Ag/ZnO, Ag/MAZO. b) Enlarged view of secondary electron cut-off regions.