Solution-Processed Mg-substituted ZnO Thin Films for Metal-Semiconductor-Metal Visible-Blind Photodetectors

Chien-Yie Tsay *, Shih-Ting Chen and Man-Ting Fan

Department of Materials Science and Engineering, Feng Chia University, Taichung 40724, Taiwan; sarah15937@gmail.com (S.-T.C); wendy5252065@gmail.com (M.-T.F)
* Correspondence: cytsay@mail.fcu.edu.tw; Tel.: +886-4-2451-7250 (ext. 5312)

Figure S1. Top-view optical microscope (OM) image of the Au interdigitated electrodes (IDEs) of the fabricated photodetector device.

Figure S2. Plane-view field-emission scanning electron microscope (FE-SEM) micrographs of Mg,Zn_{1-x}O thin films on glass substrates: (a) x = 0, (b) x = 0.1, (c) x = 0.2, and (d) x = 0.3.
Figure S3. Surface scanning probe microscope (SPM) images of Mg$_x$Zn$_{1-x}$O thin films: (a) $x = 0$ and (b) $x = 0.2$.

Figure S4. Optical reflection spectra of glass/Mg$_x$Zn$_{1-x}$O thin films.

Figure S5. Current-voltage ($I$-$V$) characteristics of Mg$_{0.3}$Zn$_{0.7}$O photodetectors showing dark current and photoilluminated currents under irradiation with visible, UVA and UVC light.

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