

Enhanced Responsivity and Optoelectronic Properties of Self-Powered Solar-Blind $\text{Ag}_2\text{O}/\beta\text{-Ga}_2\text{O}_3$ Heterojunction-Based Photodetector with Ag:AZO Co-Sputtered Electrode

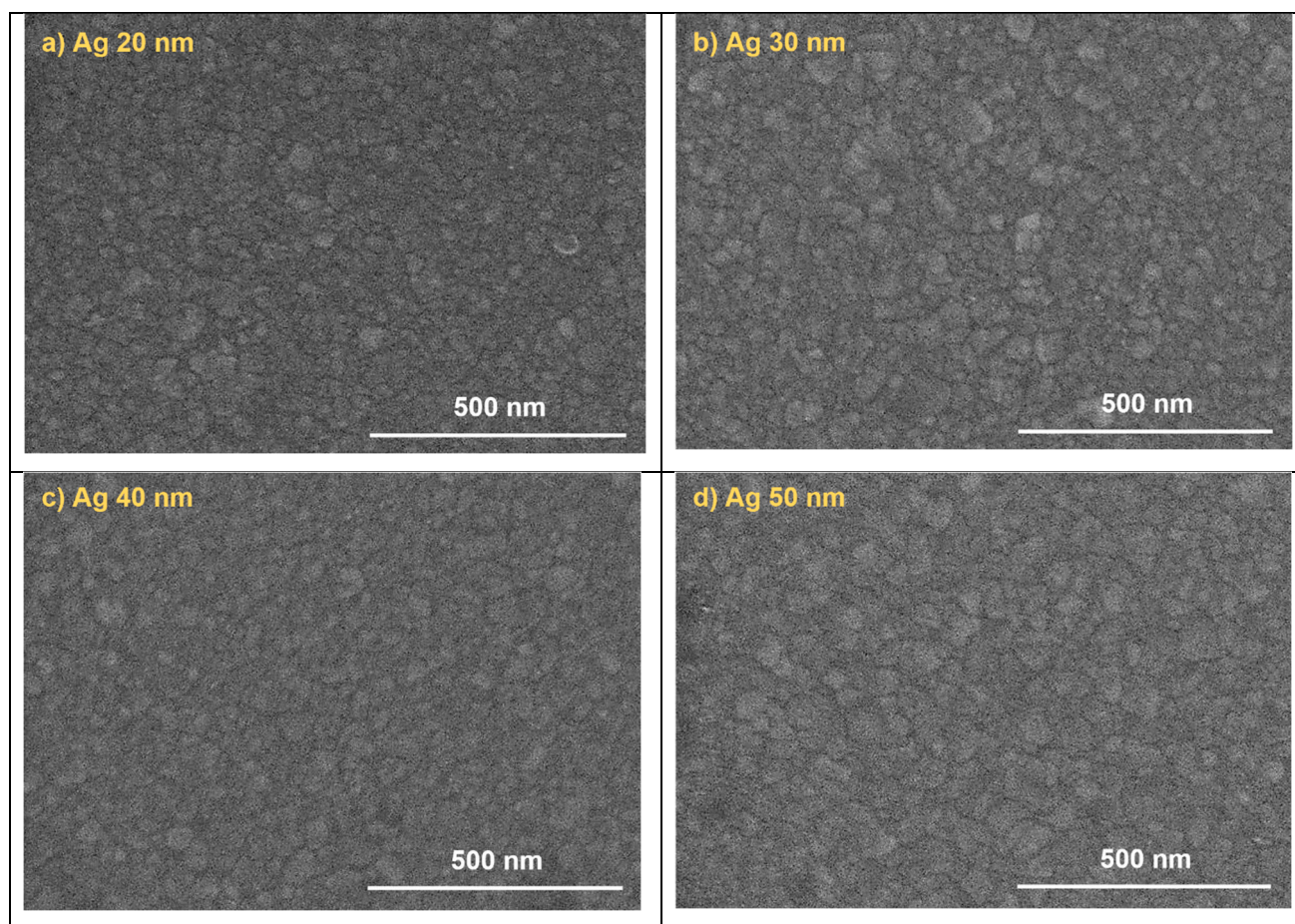


Figure S1 Thickness-dependent SEM images of Ag thin films

a) 20 nm b) 30 nm c) 40 nm d) 50 nm

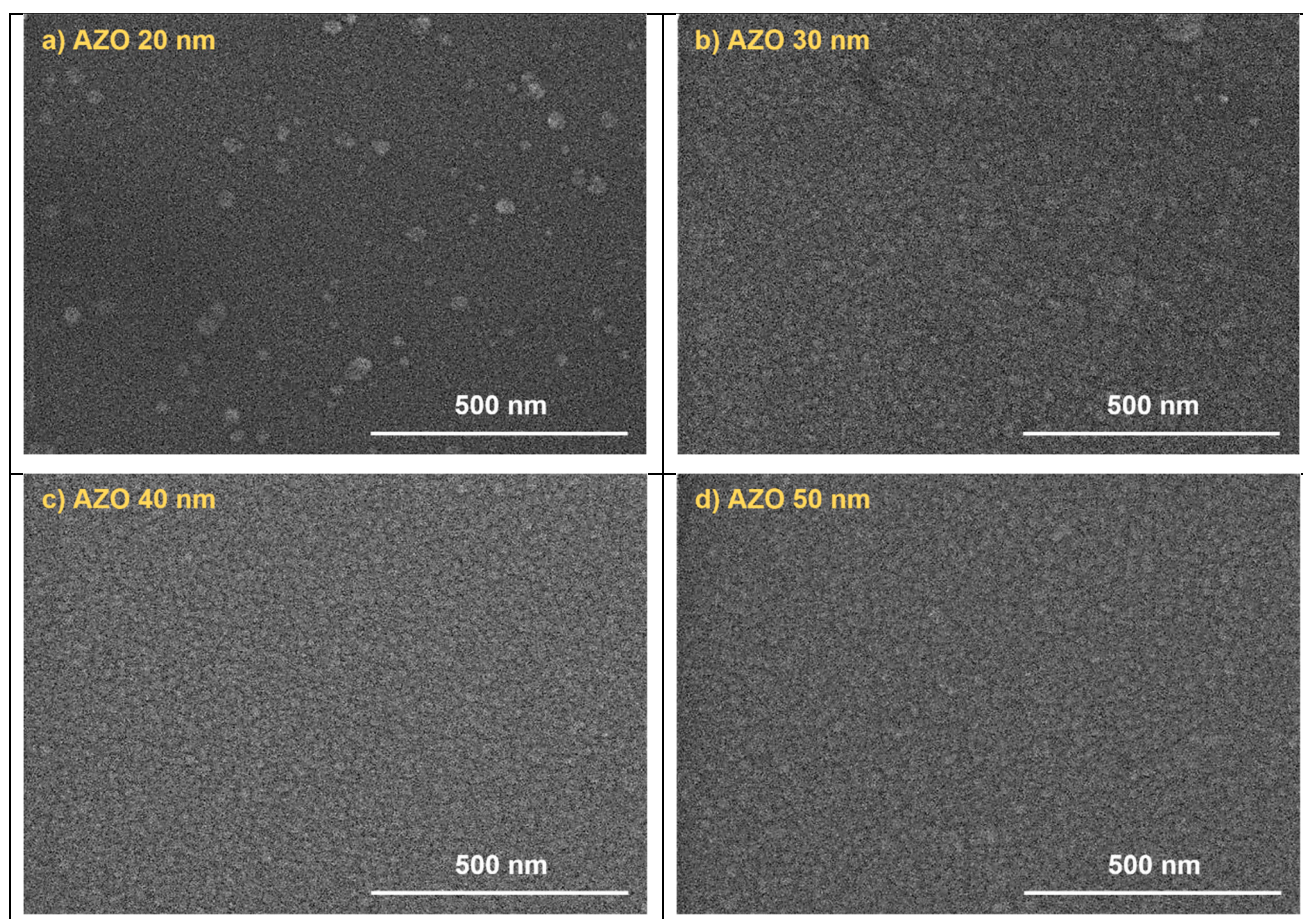


Figure S2 Thickness-dependent SEM images of AZO thin films

a) 20 nm b) 30 nm c) 40 nm d) 50 nm

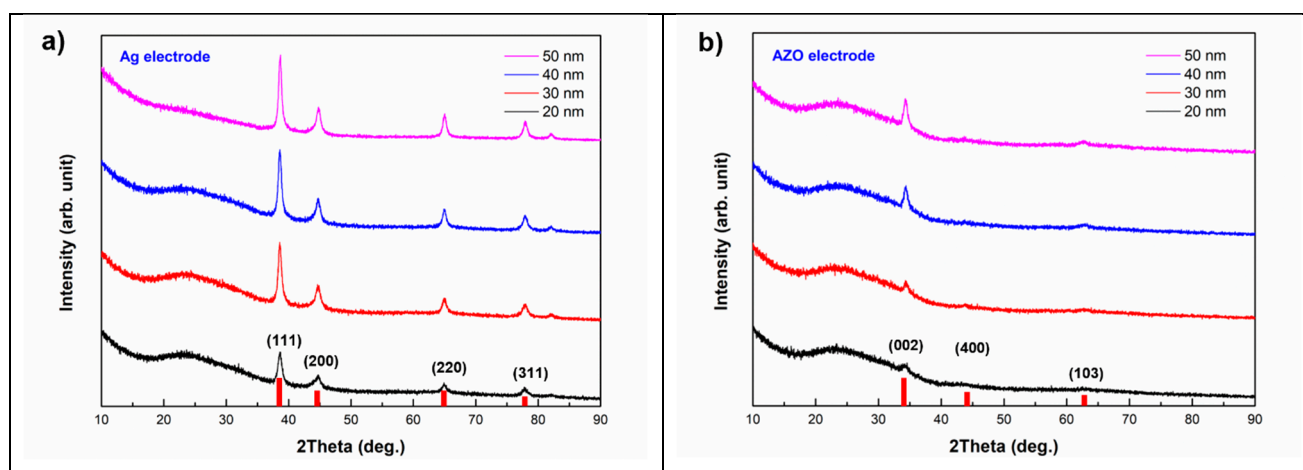
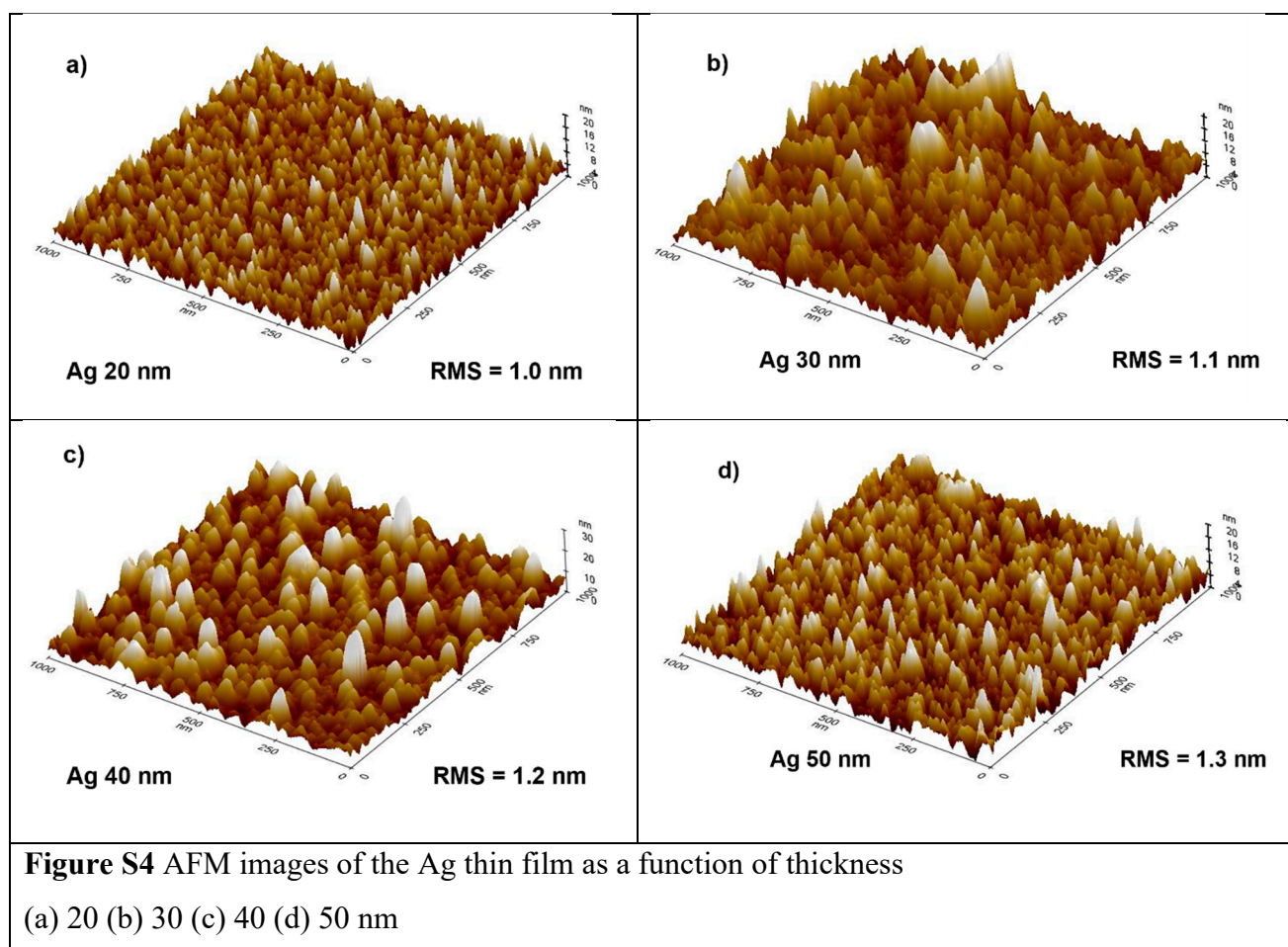


Figure S3 Structural characteristics of Ag:AZO thin film depending on thickness

a) XRD patterns of Ag b) XRD patterns of AZO



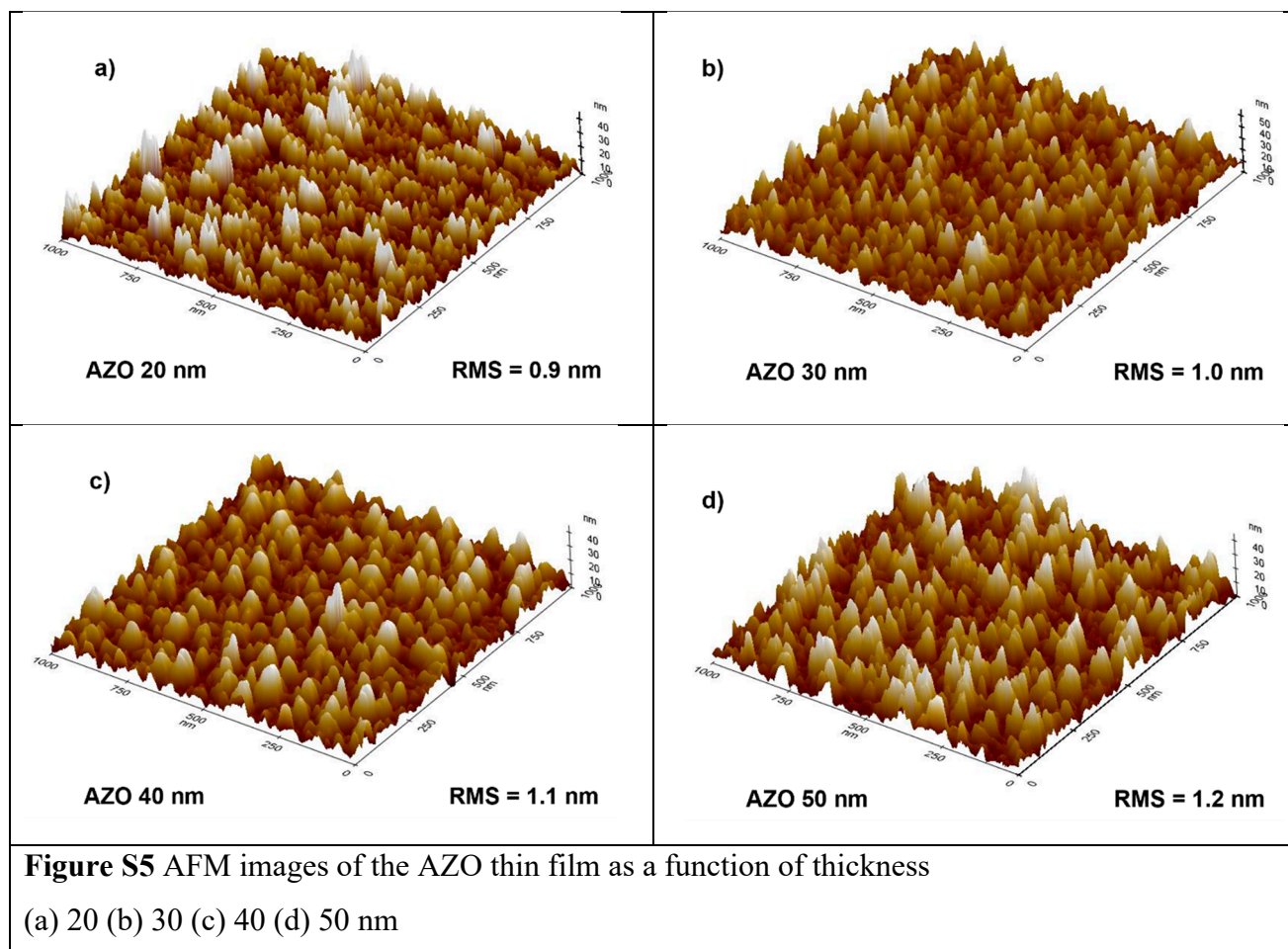


Figure S5 AFM images of the AZO thin film as a function of thickness

(a) 20 (b) 30 (c) 40 (d) 50 nm

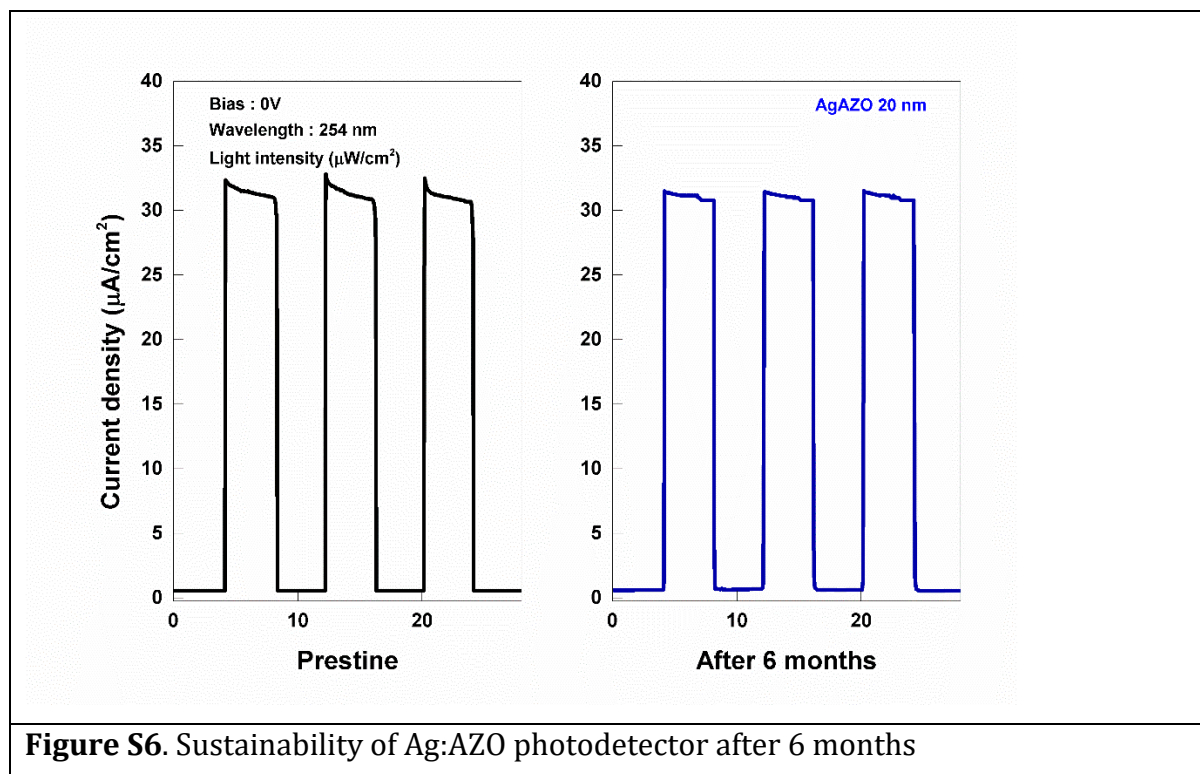


Figure S6. Sustainability of Ag:AZO photodetector after 6 months