Supporting Information

MEA Surface Passivation of AgNWs:SnO₂ Composite Transparent Electrode Enables Efficient Flexible ITO-Free Polymer Solar Cells

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Figure S1. Solution-processed procedure of the transparent AgNWs:SnO₂ composite film with MEA surface modification via doctor-blade coating.



Figure S2. The survey XPS spectra of the AgNWs:SnO₂ composite and MEAmodified AgNWs:SnO₂ composite films.



Figure S3. (a) The EDS map scanning image and (b) corresponding elements analysis result for the AgNWs-SnO₂ composite film. (c) The EDS map scanning image and (d) corresponding elements analysis result for the MEA-modified AgNWs-SnO₂ composite film.



Figure S4. (a) Sheet resistance changes as a function of the number of peeling tests for the pure AgNWs and MEA-modified AgNWs:SnO₂ composite films. (b) Sheet resistance changes as a function of ultrasonication time in deionized water with 50W power for the pure AgNWs and MEA-modified AgNWs:SnO₂ composite films.



Figure S5. SEM images of (a) pure AgNWs film and (b) MEA-modified AgNWs: SnO₂ composite film after ultrasonication treatment. Optical images of (c) pure AgNWs film and (d) MEA-modified AgNWs: SnO₂ composite film after ultrasonication treatment.