## Photovoltage Reversal in Organic Optoelectronic Devices with Insulator-Semiconductor Interfaces

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Figure S1: Photocurrent-action spectrum of the MISM device (red line). It matches well with the absorption spectrum of the ZnPc:C<sub>60</sub> blend films (black line), suggesting that charge separation process mainly occurs in the blend films. Monochromated light from a halogen lamp was utilized as the light source. Photocurrent was collected by a Keithley source meter. The inset exhibits the charge separation process in the blend film upon an illumination of green light.



Figure S2: Photocurrent transients from a thick BDTDA film (the data was from Reference [26]) which can be regarded as a double-layer system. Both the "ON" and "OFF" transients can be simulated based on Equations (1) and (7).