

Supporting Information

Light-Driven Enhancement in Pseudocapacitance of Nanosized ZnO Particles and Carbon Nanotube-based Photo-Rechargeable Supercapacitor

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X-ray diffraction:

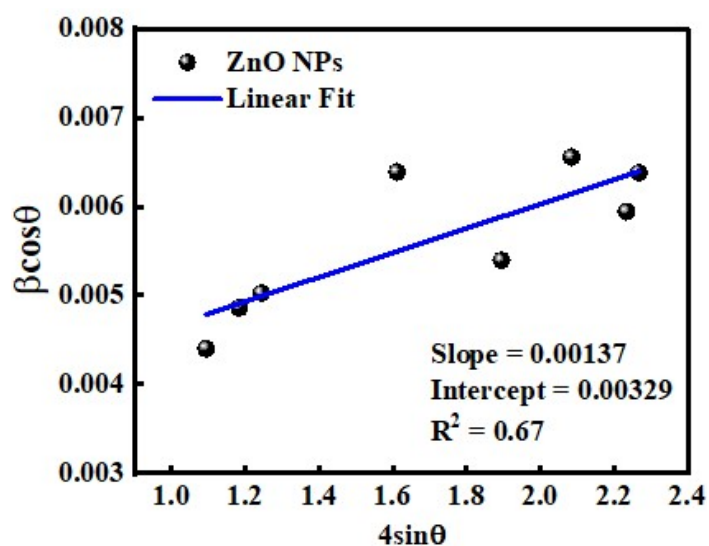


Figure 1. W-H plot between $\beta \cos \theta$ vs. $4 \sin \theta$ for NZPs.

FTIR Spectrum:

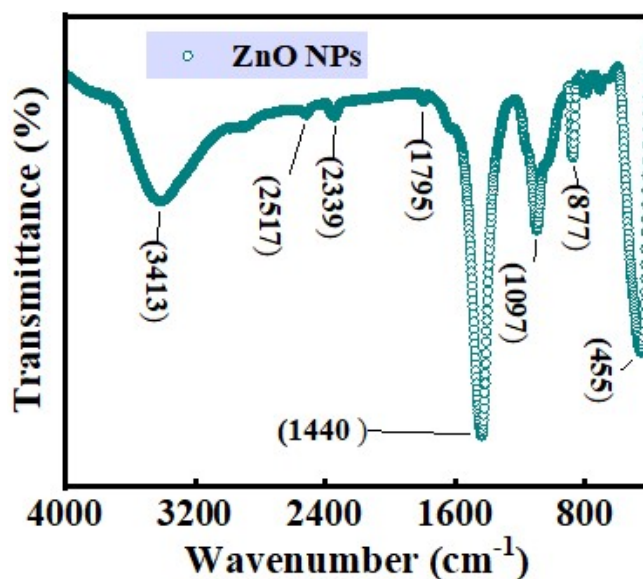


Figure 2. FTIR spectrum of NZPs.

BET Analysis:

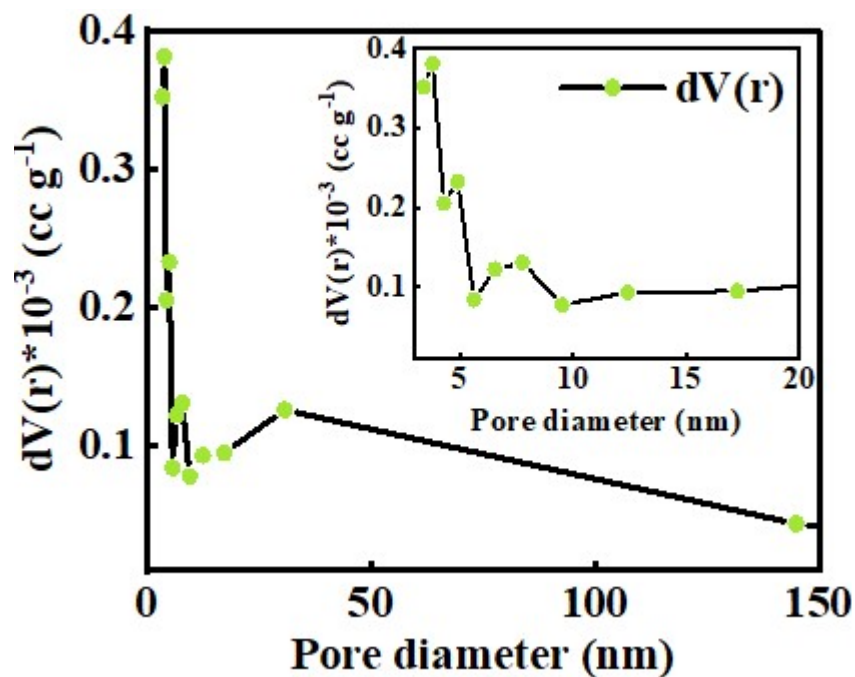


Figure 3. BJH desorption pore size distribution curve and inset plot represent the zoomed area of low pore diameter for NZPs.

LSV Curve:

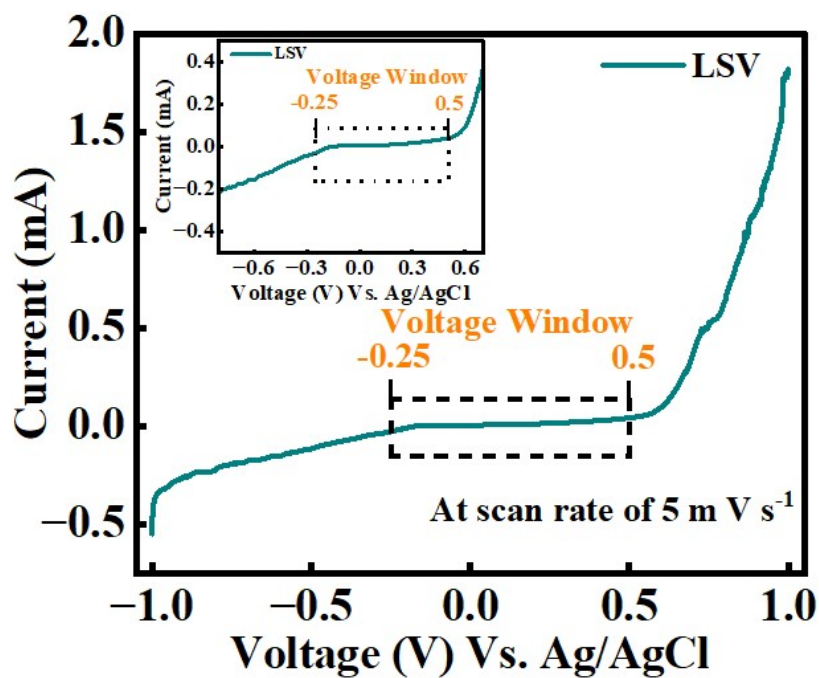


Figure 4. LSV curve for NZPs-based electrode material within a voltage range of -1 to 1 V at a scan rate of 5 mV s⁻¹.

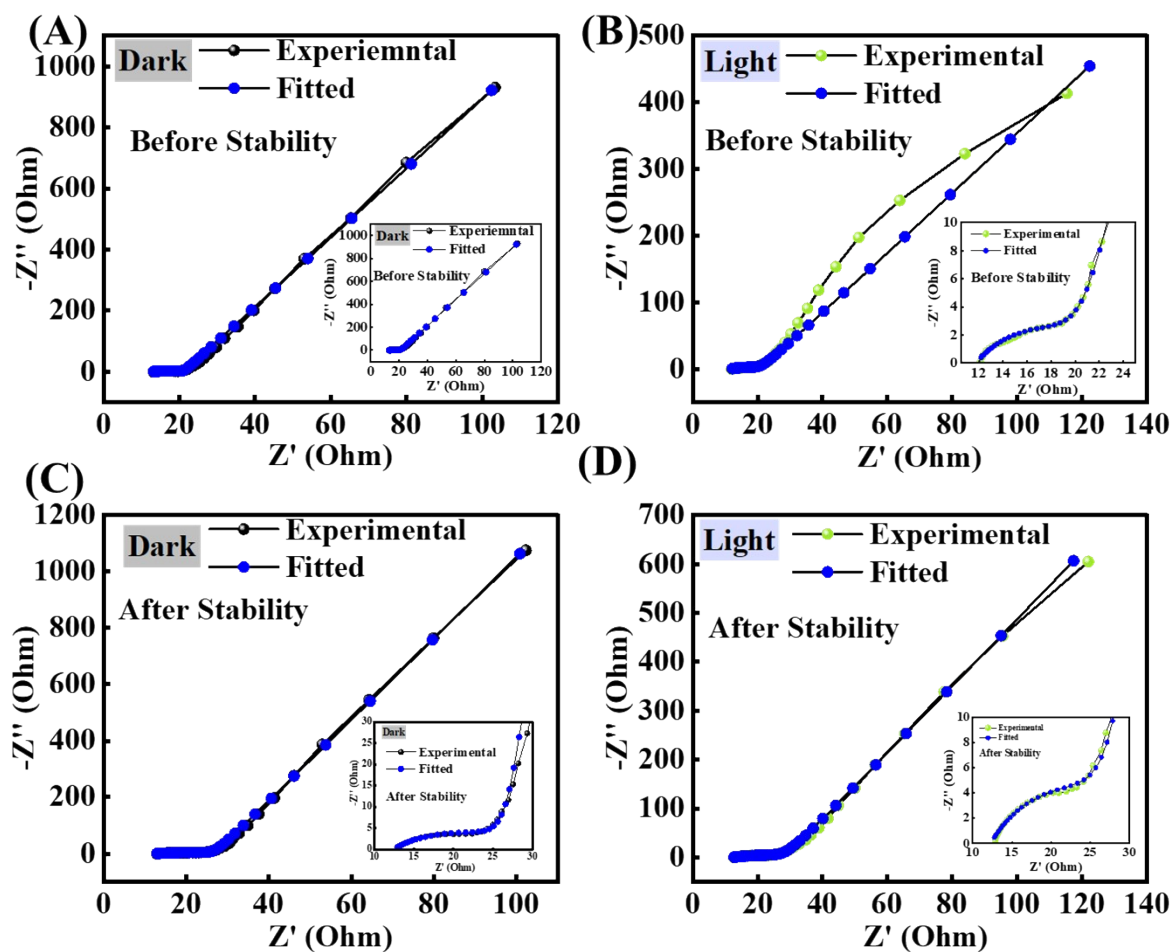


Figure 5. Nyquist plots with the fitting of experimental EIS data of PRSC before stability (A) Dark and (B) Light. After stability (C) Dark (D) Light.

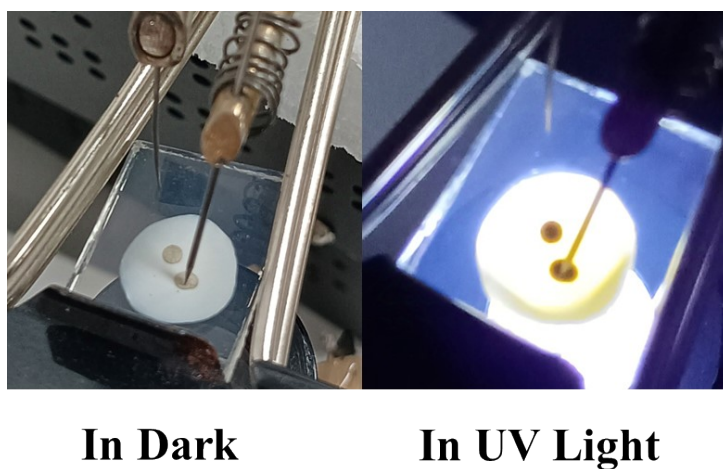


Figure 6. Optical images of photodetector under dark and light conditions during measurement.