

Reclaimed Piezoelectric Catalyst of MoS₂@TNr Composites as High-Performance Anode Materials for Supercapacitor

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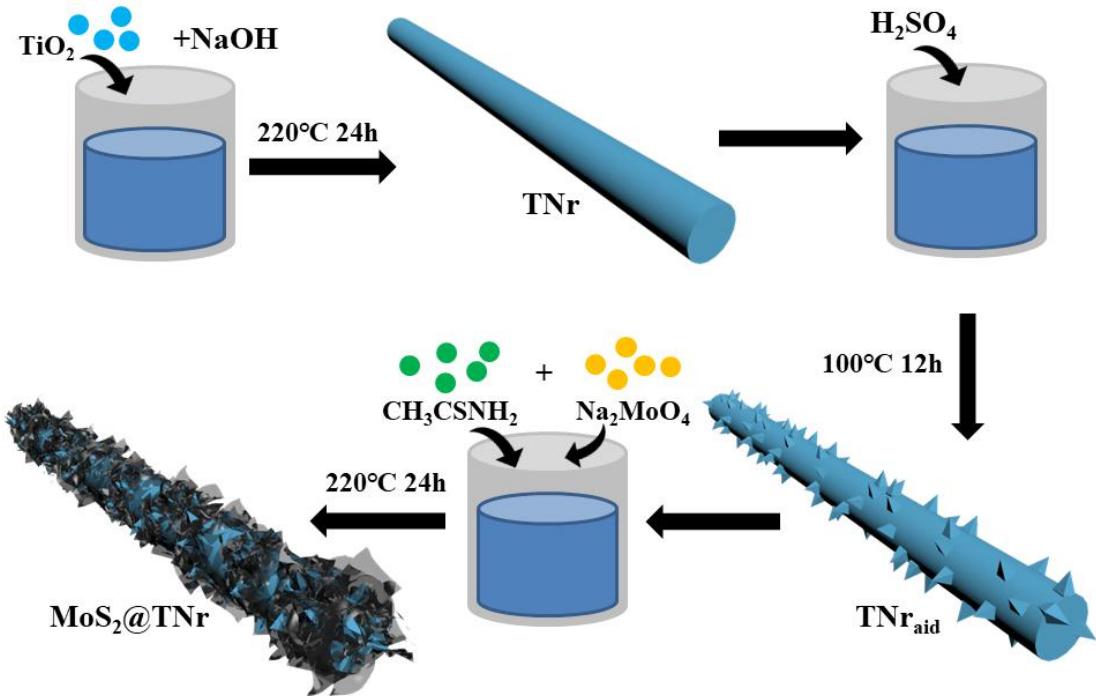


Fig. S1. The synthesis process of the MoS_2 @TNr composites.

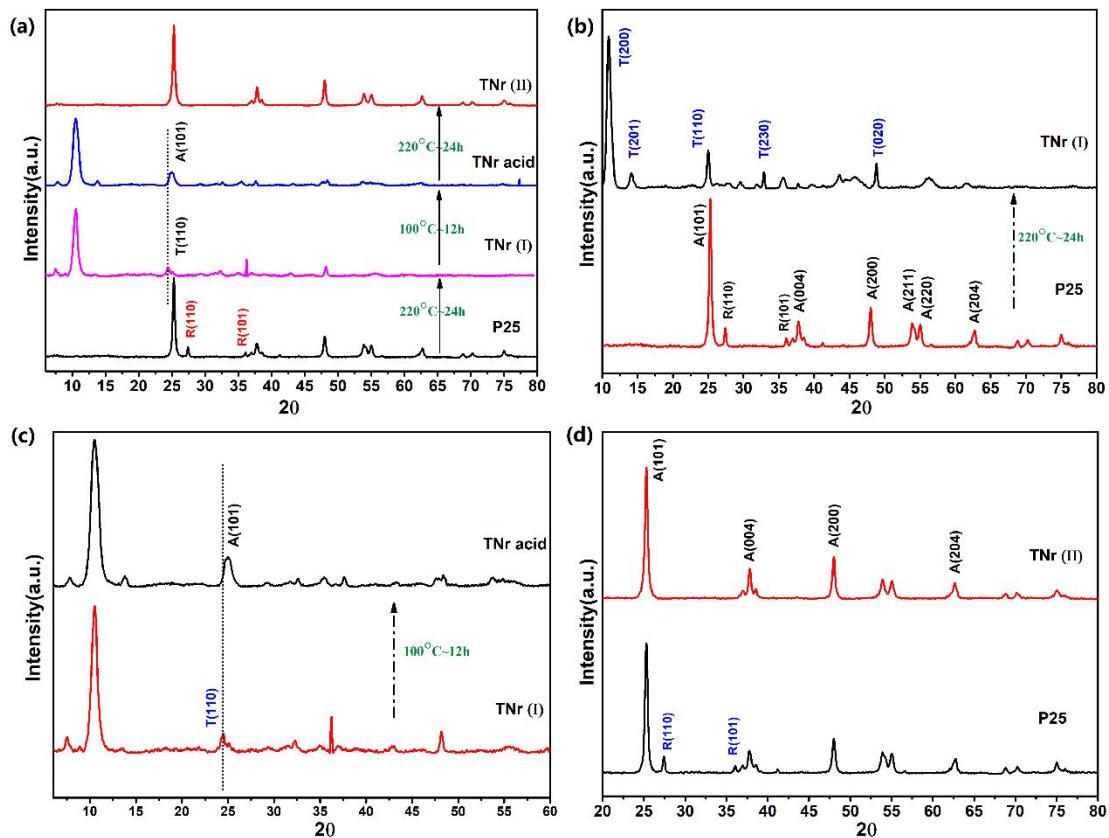


Fig. S2. XRD diffraction pattern of P25, TNr, TNr(I)_{aid}, bare TNr (a); P25 and TNr (b); TNr and TNr(I)_{aid} (c); P25 and bare TNr (d).

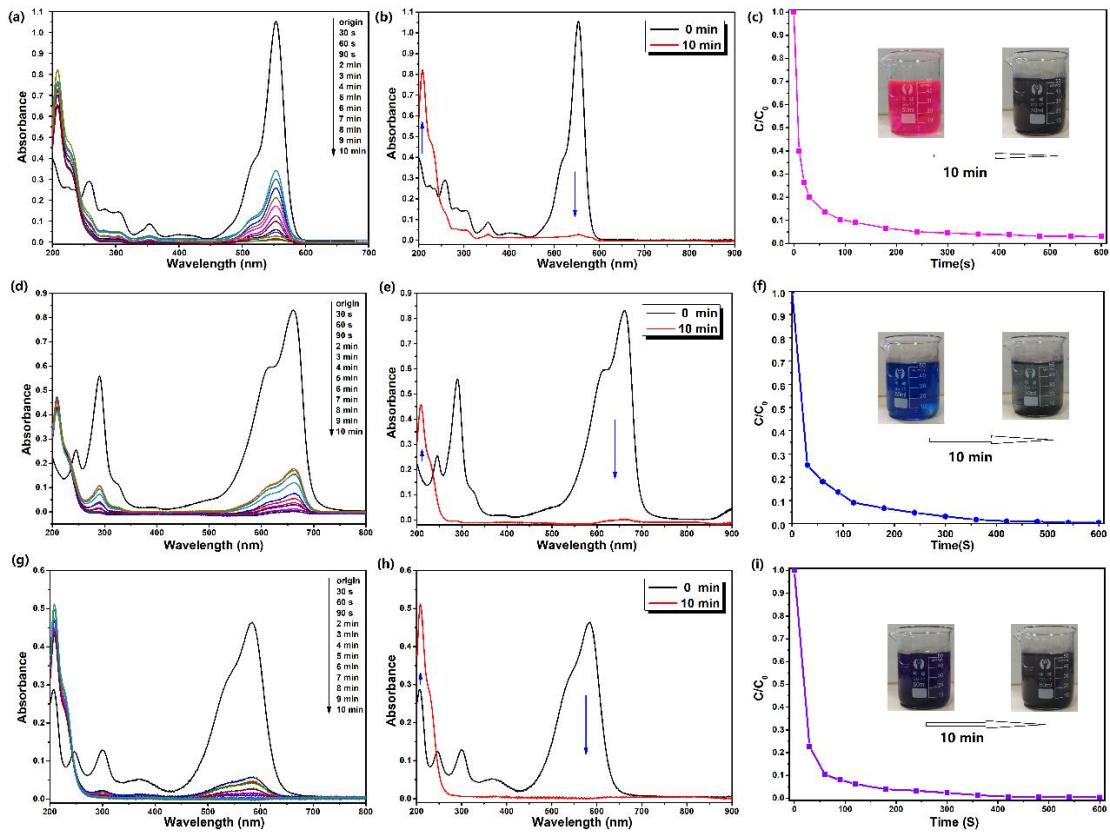


Fig. S3. The piezoelectric catalytic degradation of RhB, MB and CV solution by $\text{MoS}_2@\text{TNR}$ composites, the absorbance spectrum of the supernatant of the catalytic system and the corresponding degradation rate, the insets show the contrast of the solution color. Among them, (a~c) corresponding to RhB, (d~f) corresponding to MB, and (g~i) corresponding to CV.

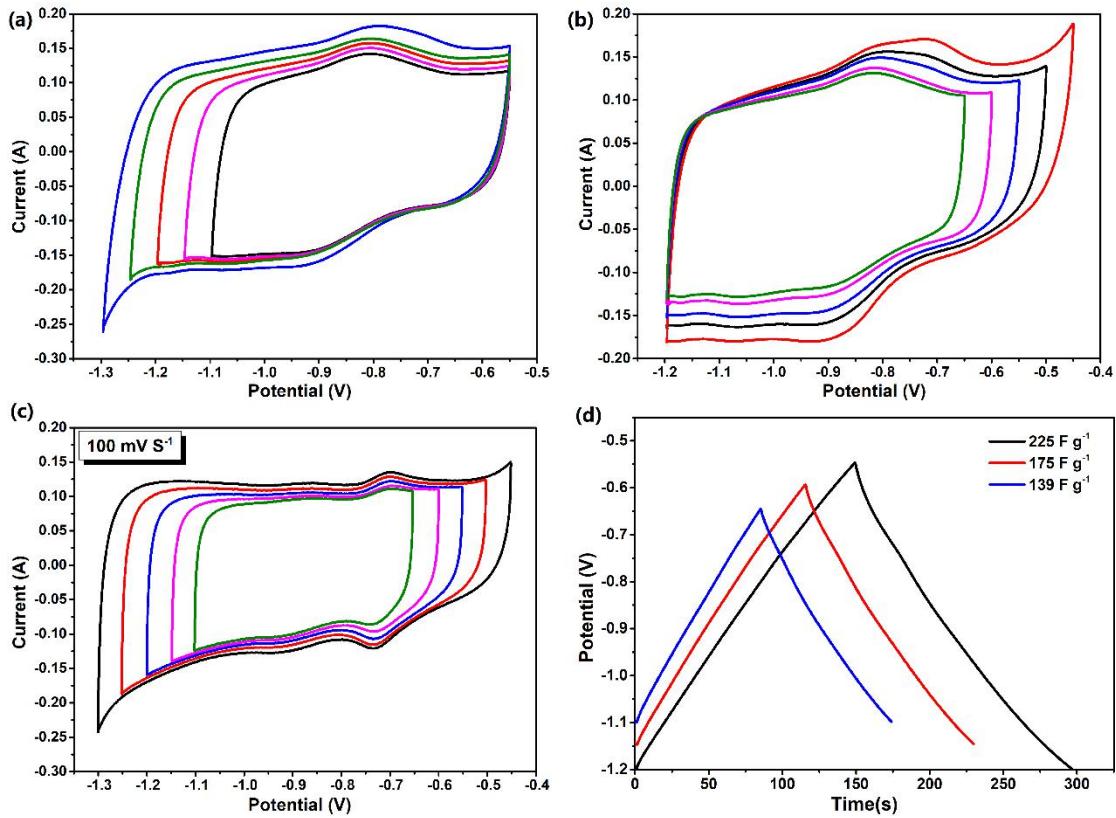


Fig. S4. The CV spectrum of the $\text{MoS}_2@\text{TNr}$ composites under the scan speed of 100 mV S^{-1} with changing the voltage window values (a), (b) and (c); GCD curves at a current density of 1 A g^{-1} for $\text{MoS}_2@\text{TNr}$ composites under different voltage values (d).

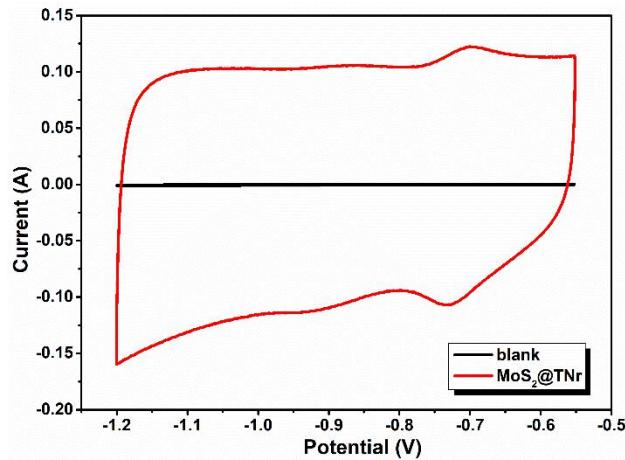


Fig. S5. CV curve of the blank electrode and $\text{MoS}_2@\text{TNr}$ composites electrode at the scanning speed of 100 mV S^{-1} in Na_2SO_4 solution (1 M).

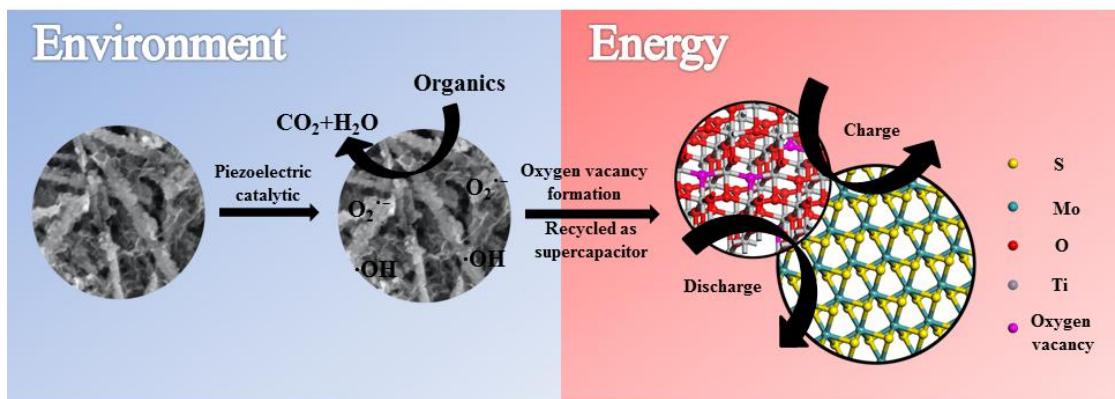


Fig. S6. Schematic diagram of the $\text{MoS}_2@\text{TNr}$ composites catalysts recycled as the electrode active materials for supercapacitors.