

# Metallic CoNi nanoparticles anchored on heteroatoms-doped Carbon/MnO nanowires for improved catalytic performance

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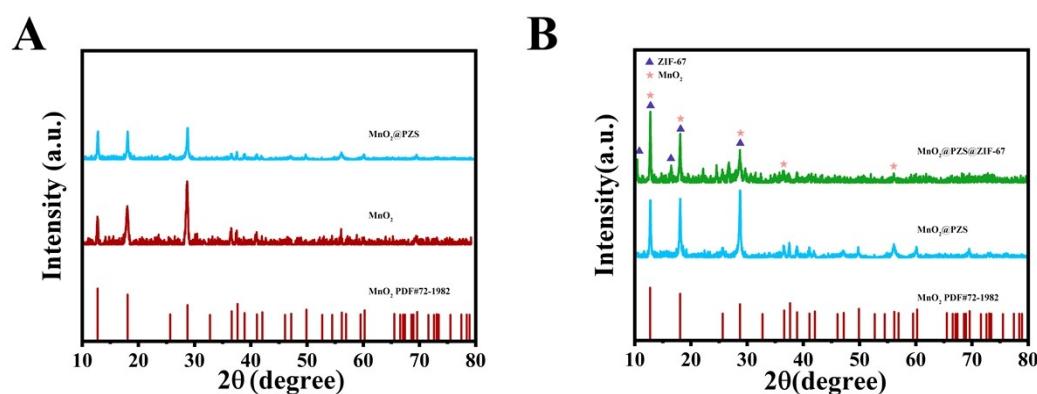


Fig. S1 (A) XRD patterns of MnO<sub>2</sub> and MnO<sub>2</sub>@PZS, (B) XRD patterns of MnO<sub>2</sub>@PZS and MnO<sub>2</sub>@PZS@ZIF-67.

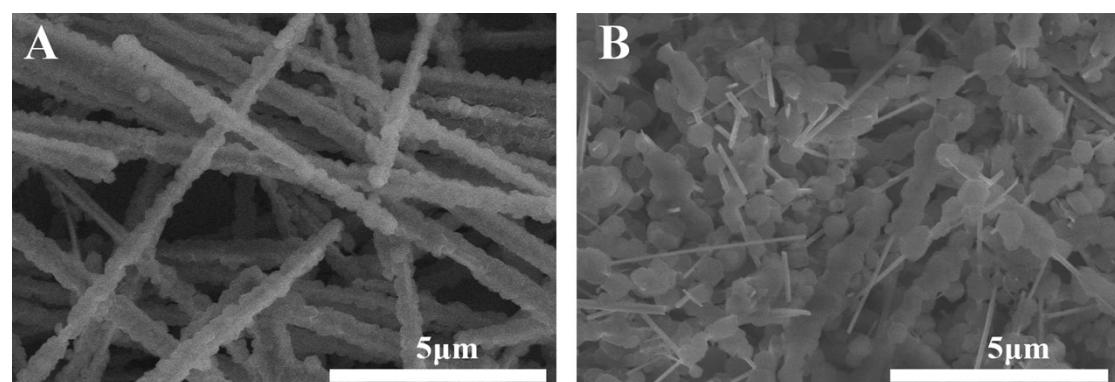


Fig. S2 SEM images of MnO<sub>2</sub>@PZS@ZIF-67 (A) and MnO<sub>2</sub>@ZIF-67 (B).