

Supplementary Information

Controllable synthesis of NiCo₂O₄ nanoparticles supported on MnO₂ nanowires with excellent oxidase-mimicking performance

Yu Chen^{a‡}, Yanchun Xie^{a‡}, Yizhi Gao^a, Ran Ding^a, Xingsheng Ding, Suping Han^{b*}, Min Zhang^{a*}

^aCollege of Chemistry and Chemical Engineering, Shanghai University of Engineering Science, Shanghai 201620, PR China. E-mail: zhangmin@sues.edu.cn

^bDepartment of Pharmacy, Shandong Medical College, No. 5460 Erhuannanlu Road, Jinan 250002, China, supinghan@163.com.

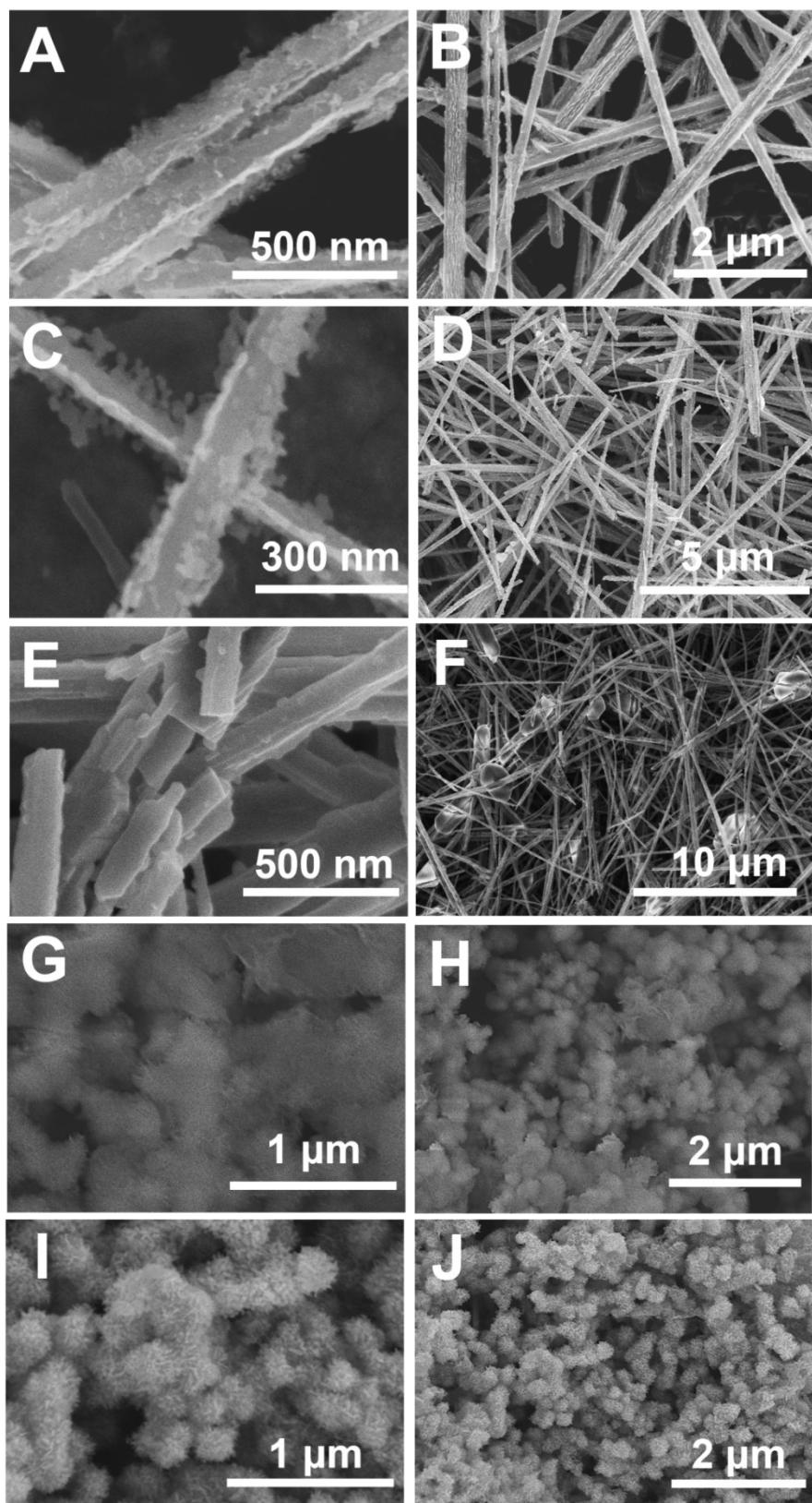


Figure S1 The SEM images of $\text{MnO}_2@\text{NiCo}_2\text{O}_4/300$ (A,B), $\text{MnO}_2@\text{NiCo}_2\text{O}_4/700$ (C,D), $\text{MnO}_2@\text{NiCo}_2\text{O}_4/800$ (E,F), (Ni-Co)LDH (G,H) and NiCo_2O_4 (I,J).

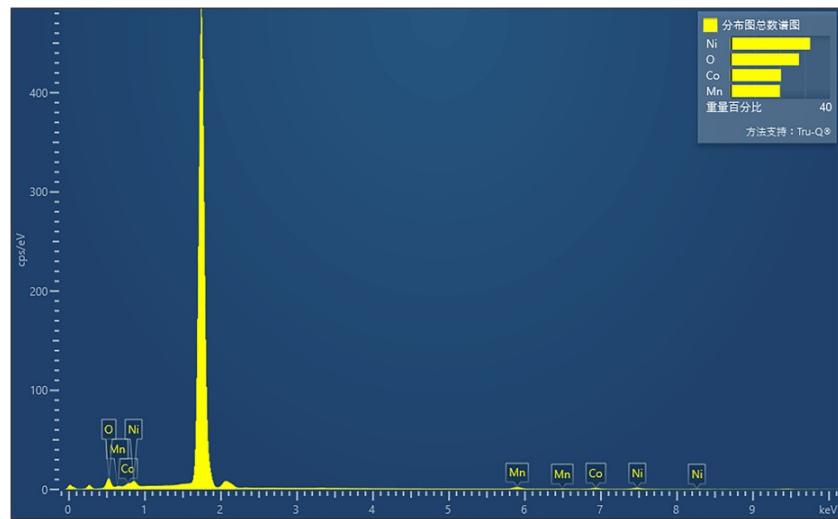


Figure S2 EDX spectrum of $\text{MnO}_2@\text{NiCo}_2\text{O}_4/500$.

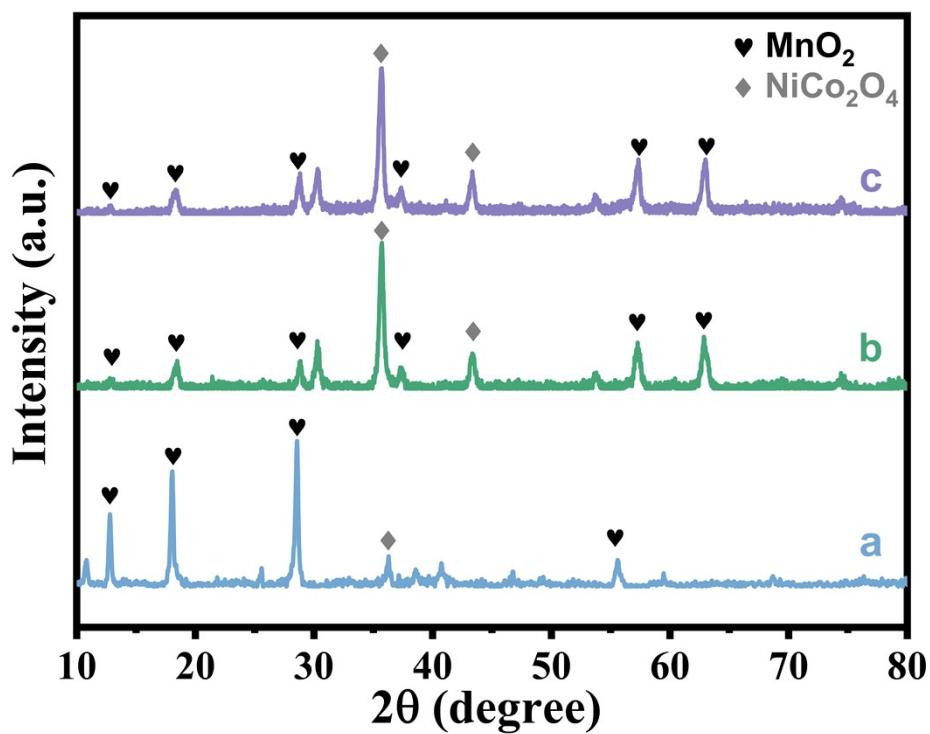


Figure S3 Curve a shows the XRD pattern of $\text{MnO}_2@\text{NiCo}_2\text{O}_4/300$; Curve b shows the XRD pattern of $\text{MnO}_2@\text{NiCo}_2\text{O}_4/700$; Curve c shows the XRD pattern of $\text{MnO}_2@\text{NiCo}_2\text{O}_4/800$.

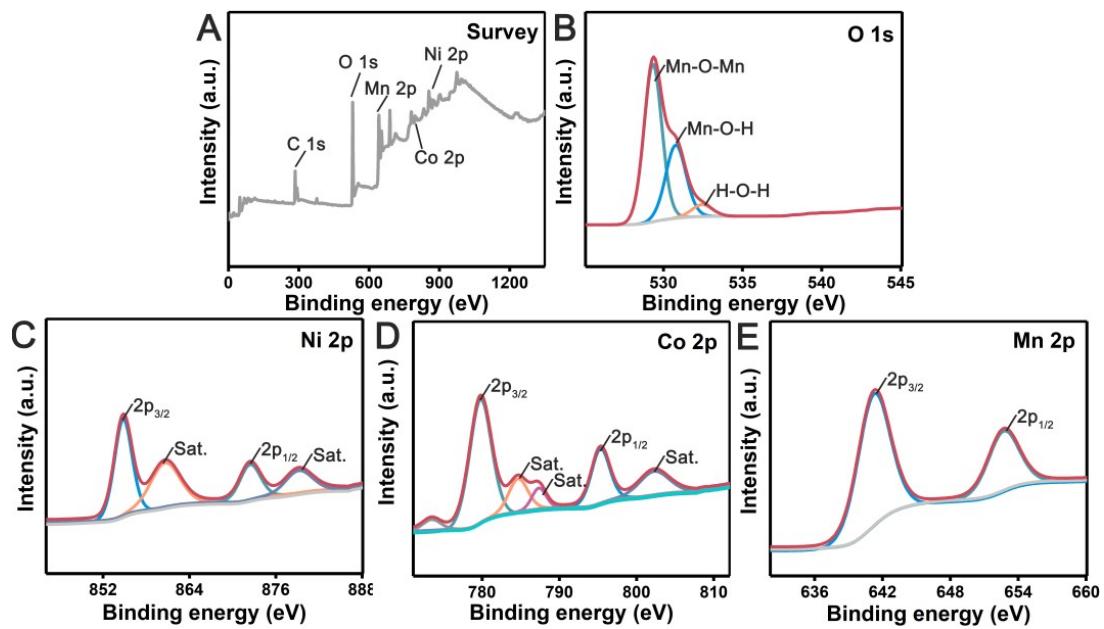


Figure S4 XPS spectra of $\text{MnO}_2@\text{NiCo}_2\text{O}_4$ composites: (A) survey spectra, (B) O 1s, (C) Ni 2p, (D) Co 2p, and (E) Mn 2p.

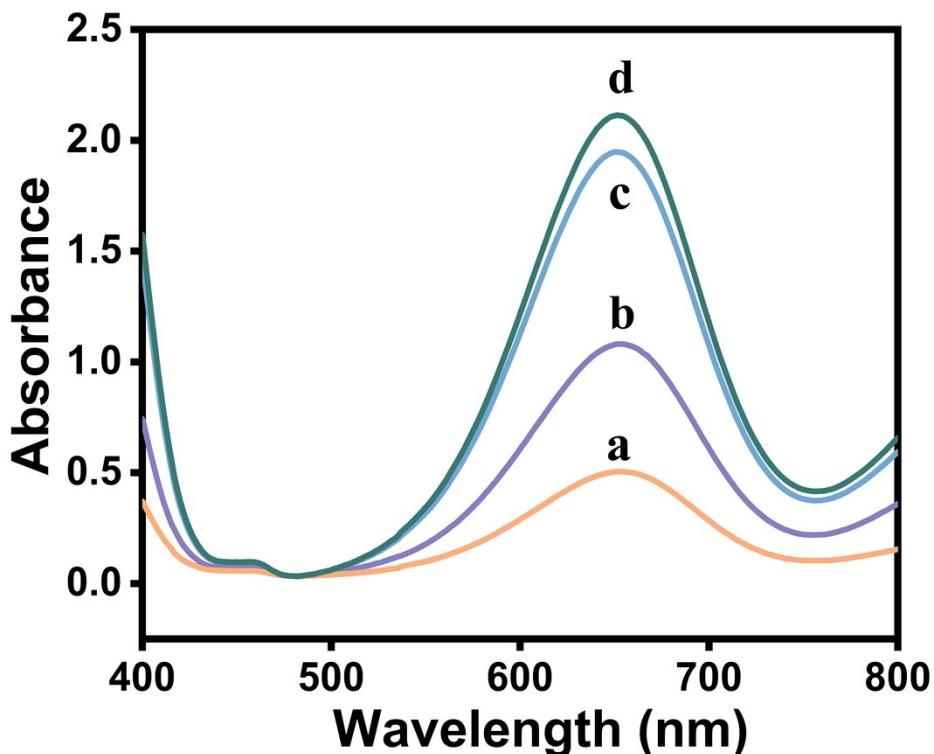


Figure S5 Curve a shows the UV-vis spectra of 0.4 mg/mL of the $\text{MnO}_2@\text{NiCo}_2\text{O}_4/800$; Curve b shows the UV-vis spectra of 0.4 mg/mL of the $\text{MnO}_2@\text{NiCo}_2\text{O}_4/700$; Curve c shows the UV-vis spectra of 0.4 mg/mL of the $\text{MnO}_2@\text{NiCo}_2\text{O}_4/300$; Curve d shows the UV-vis spectra of 0.4

mg/mL of the MnO₂@NiCo₂O₄/500. All experiments were performed by adding 380 μL of HAc-NaAc buffer (0.2 mol/L, pH 4.0) and 10 μL of TMB (10 mmol/L) at 25 °C for 3 min.