

Supplementary Data

Title: Ternary nanocomposite ReMIL-CN (ReSe₂@MIL-53(Fe)@g-C₃N₄) for Energy Storage and Electroactive Integrated H₂O₂ Sensor Application

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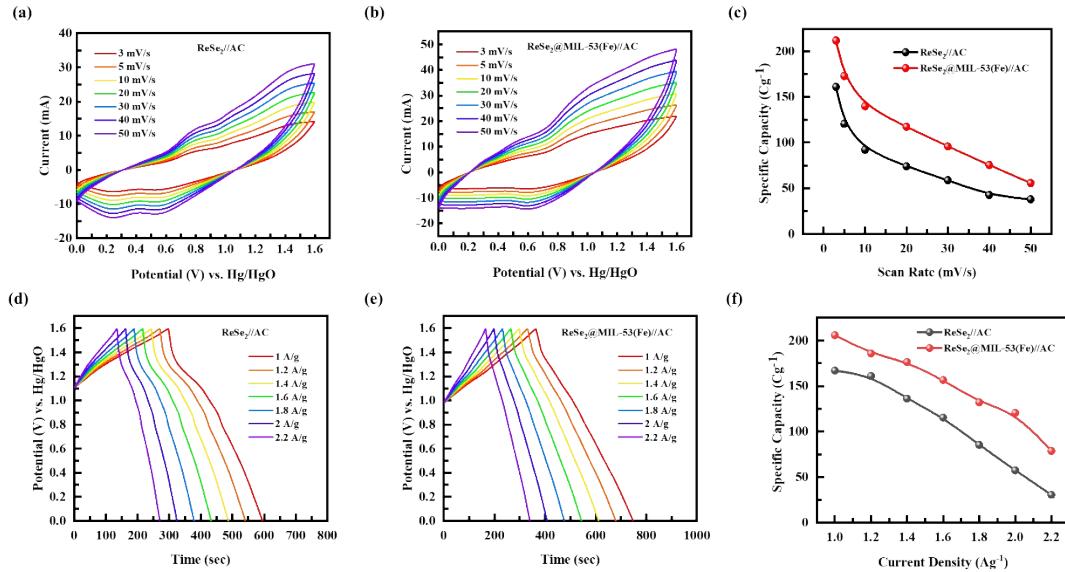


Figure S1: Device level performance of (a-c) ReSe₂//AC, (d-f) ReSe₂@MIL-53//AC.

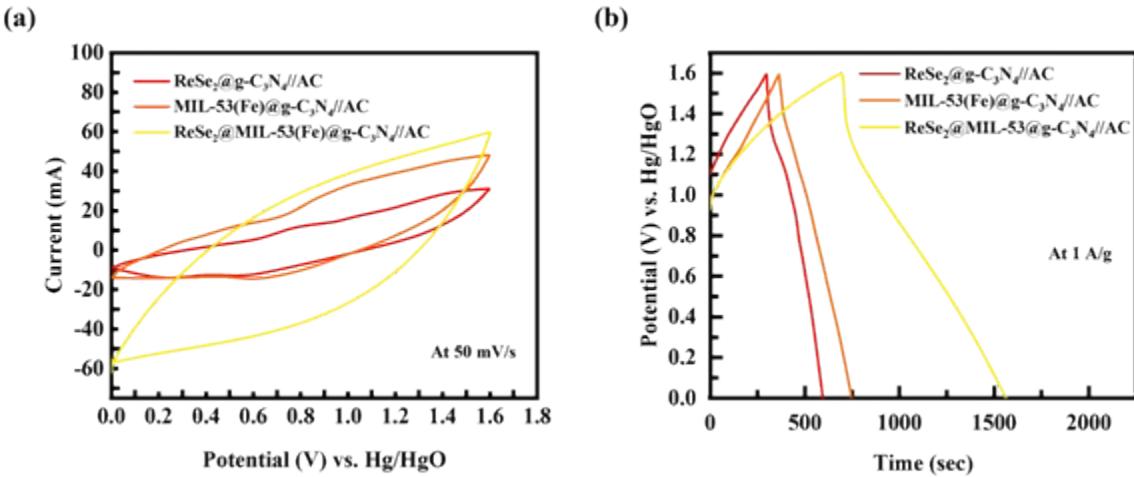


Figure S2: Comparison of device level performance of ReSe₂//AC, ReSe₂@MIL-53//AC, and ReSe₂@g-C₃N₄//AC (ReSe₂@MIL-53@g-C₃N₄//AC) systems.

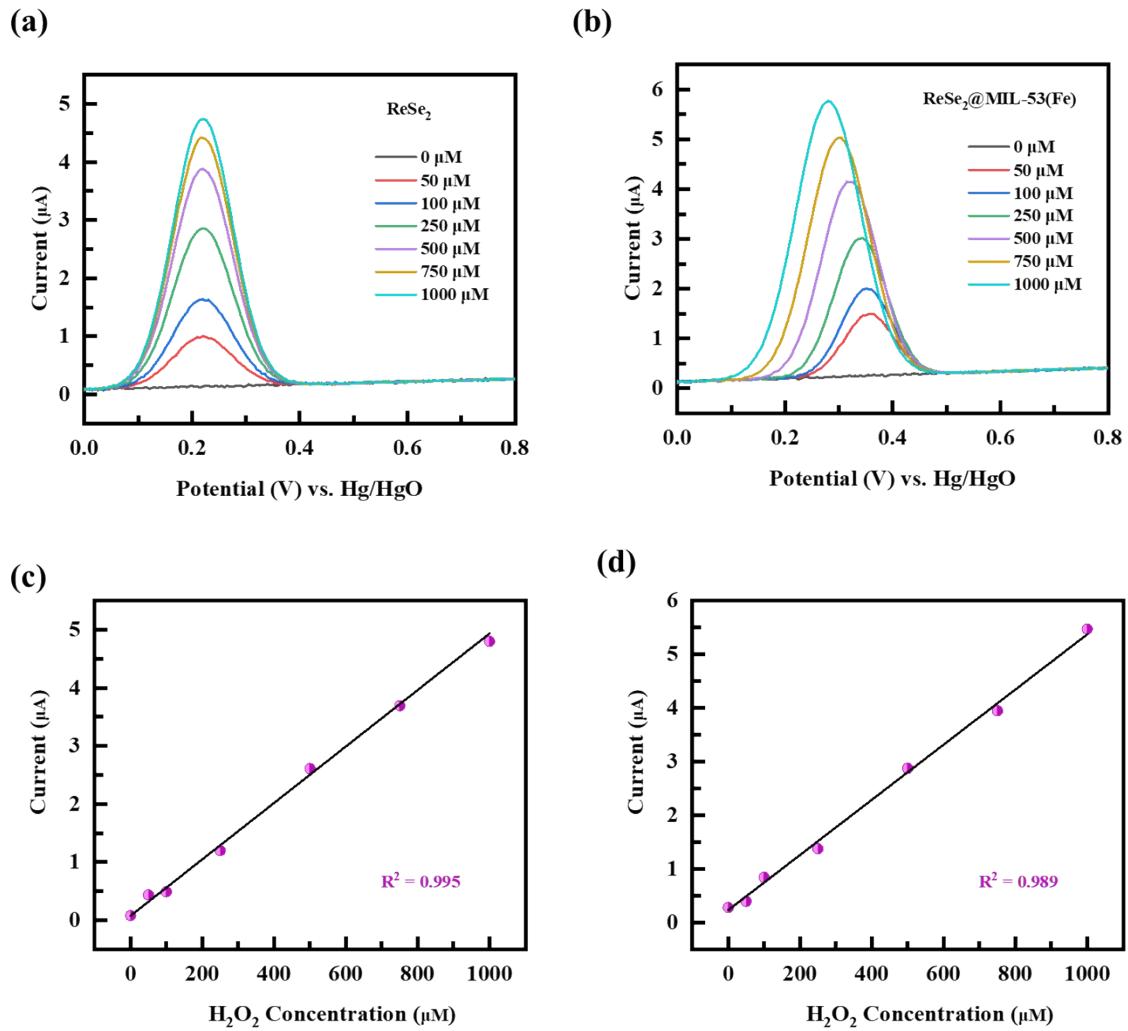


Figure S3: (a-d) DPV curves and calibration plots of ReSe_2 and $\text{ReSe}_2@\text{MIL-53}$ composite

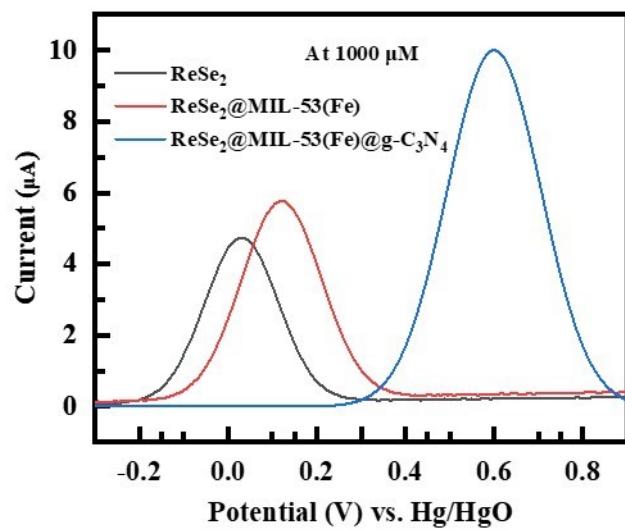


Figure S4: DPV comparison plots of the ReSe_2 , $\text{ReSe}_2@\text{MIL-53}$, and $\text{ReSe}_2@\text{MIL-53}2\text{g-C}_3\text{N}_4$ -electrodes for H_2O_2 detection system.