

Supporting Information

Ultrathin MoS₂ Nanosheets for High-Performance Photoelectrochemical Applications Via Plasmonic Coupling with Au Nanocrystals

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Keywords: MoS₂, Au nanocrystals, Plasmonic, FEM simulation, and PEC Water Splitting

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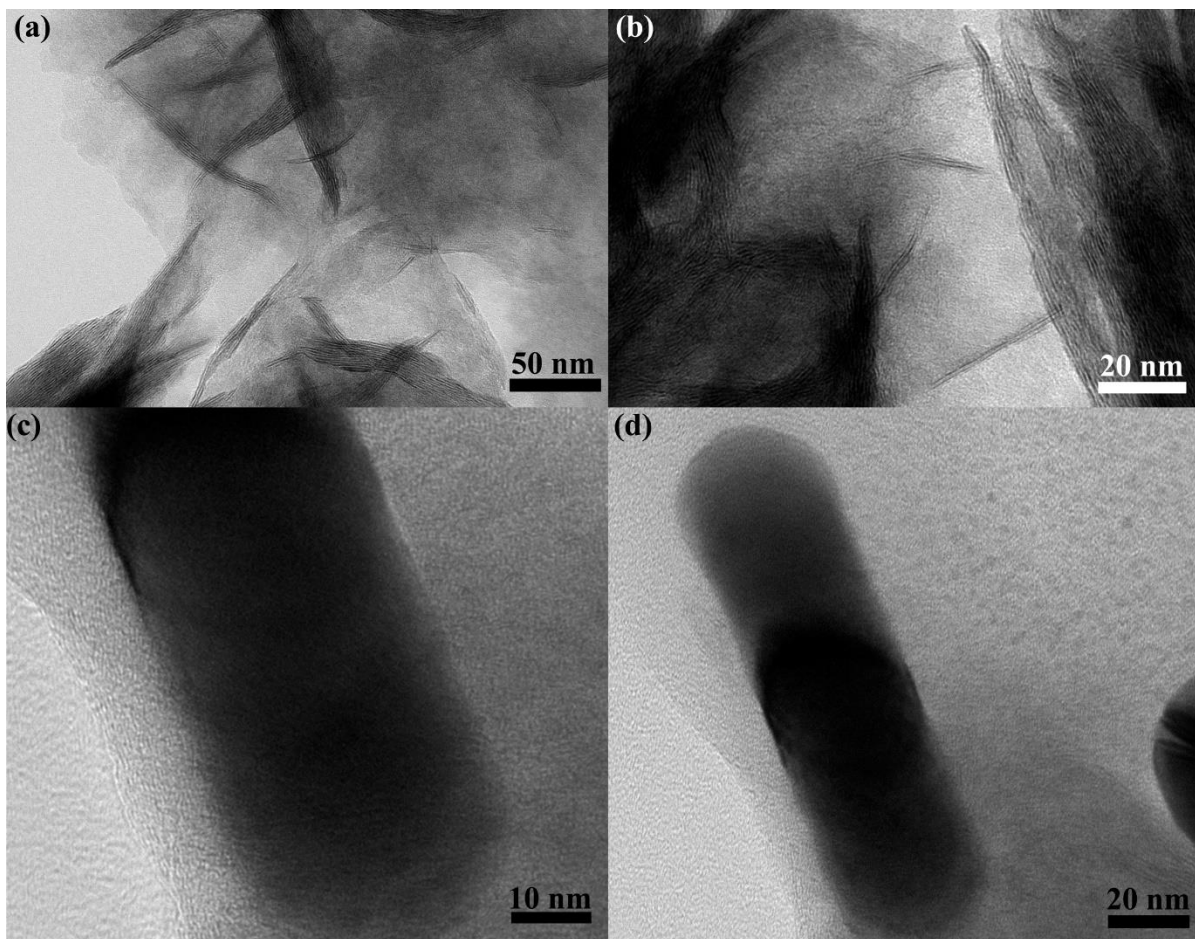


Figure S1. (a & b) The cross-sectional HRTEM images represent ultrathin MoS₂ nanosheets. The AuNRs-MoS₂ hybrid nanostructure with different resolution.

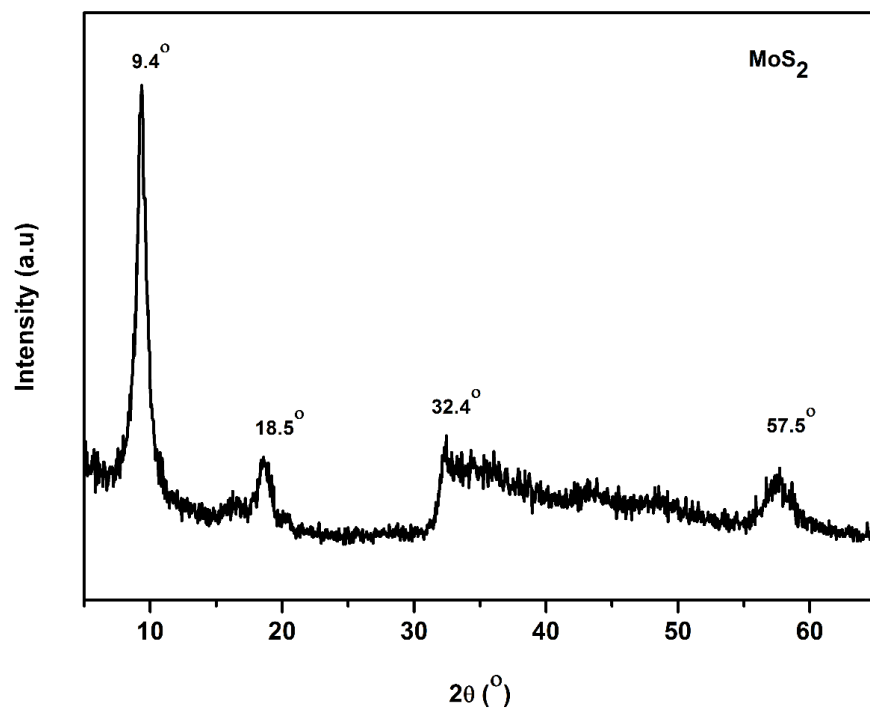


Figure S2. The XRD analysis of the pristine ultrathin MoS₂ nanosheets.

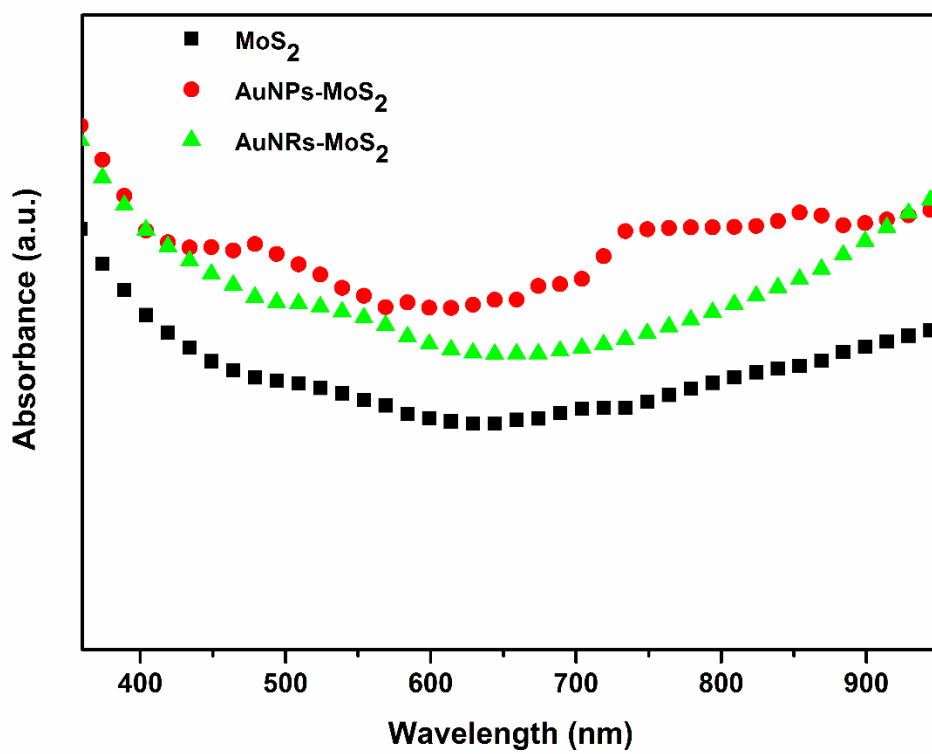


Figure S3. The UV-Vis Diffuse Reflectance Spectra of the pristine ultrathin MoS₂ nanosheets and Au/MoS₂ hybrid heterostructure.

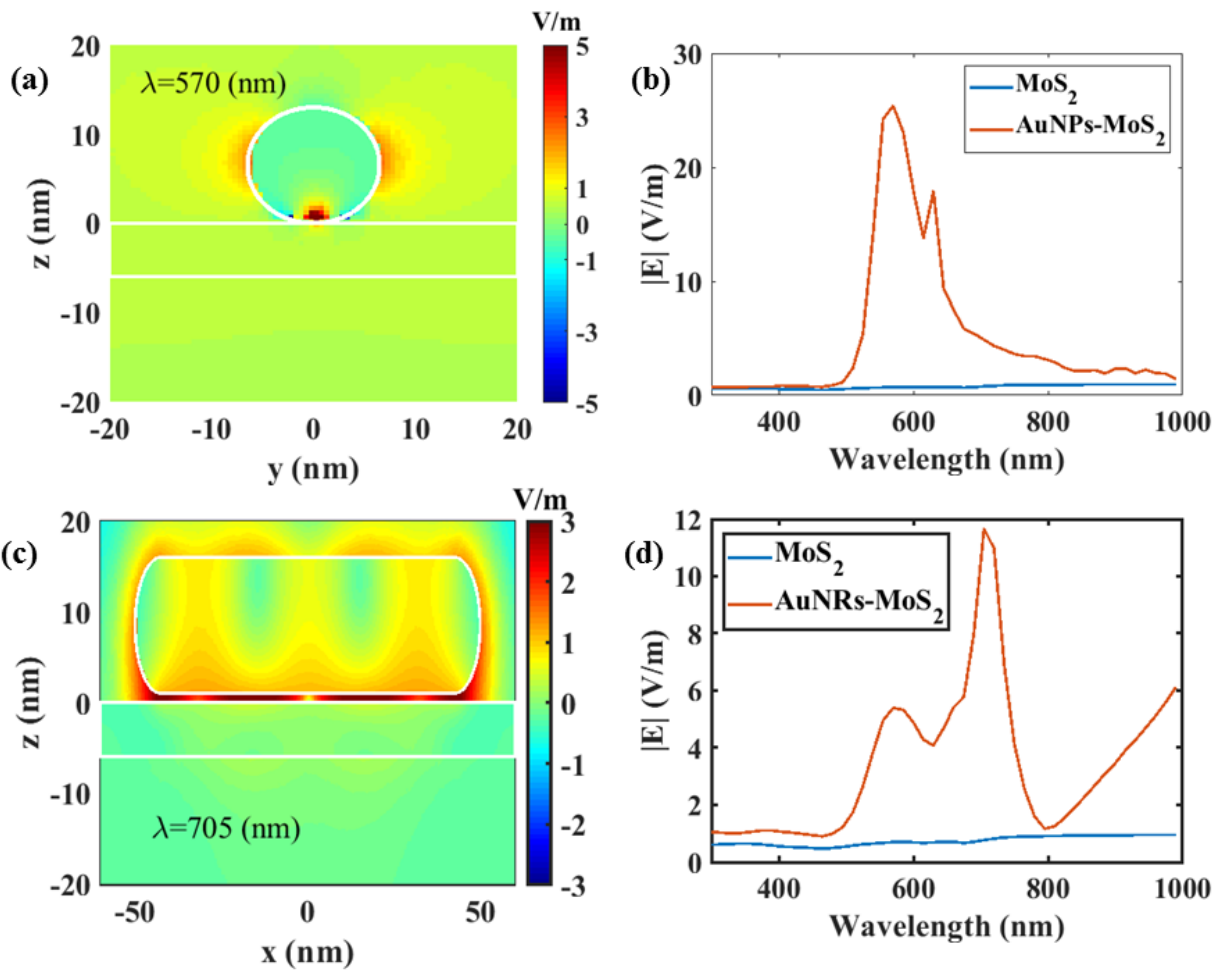


Figure S4. The calculated electric field intensity map as a function of wavelength and spatial distributions of the electric field on the y - z plane (a & b) AuNPs-MoS₂ hybrid, (c & d) AuNRs-MoS₂ hybrid and pristine MoS₂ nanosheets.