

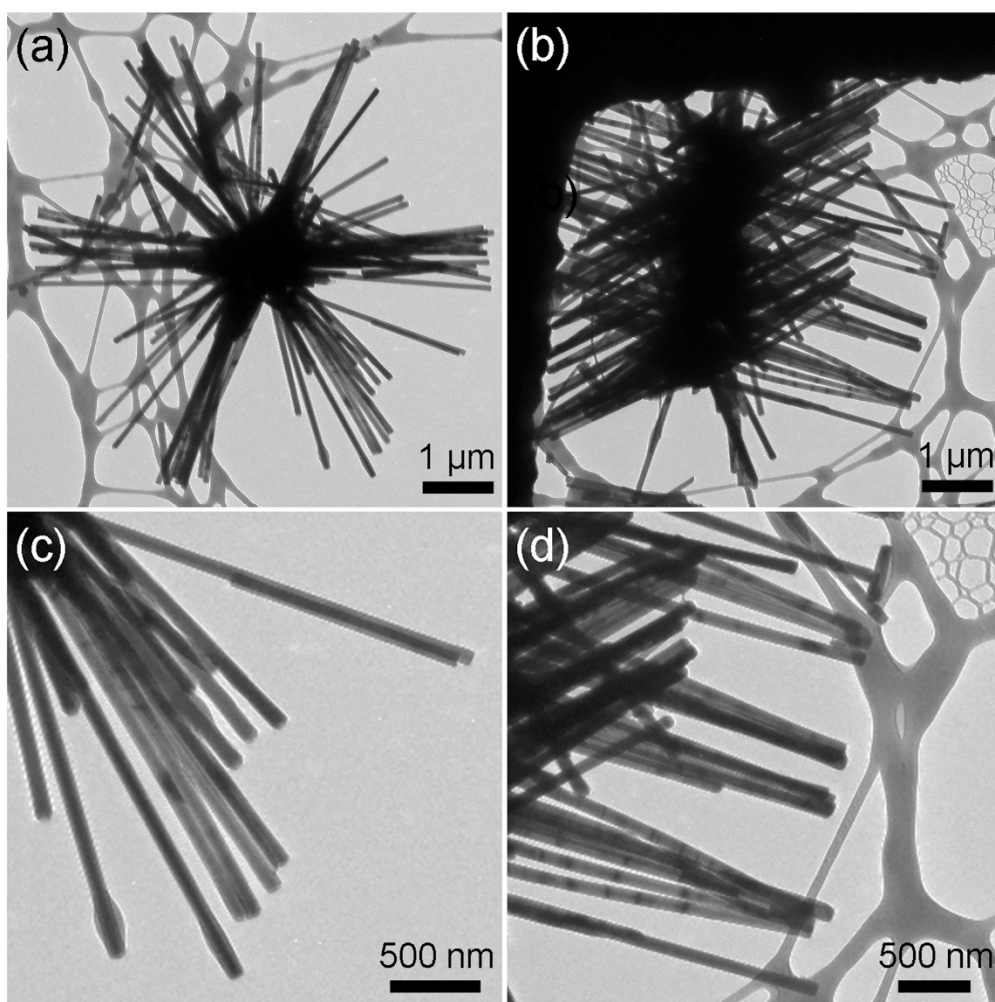
# Epitaxially Integrated Hierarchical ZnO/Au/SrTiO<sub>3</sub> and ZnO/Ag/Al<sub>2</sub>O<sub>3</sub> Heterostructures: Three-Dimensional Plasmo-Photonic Nanoarchitecturing

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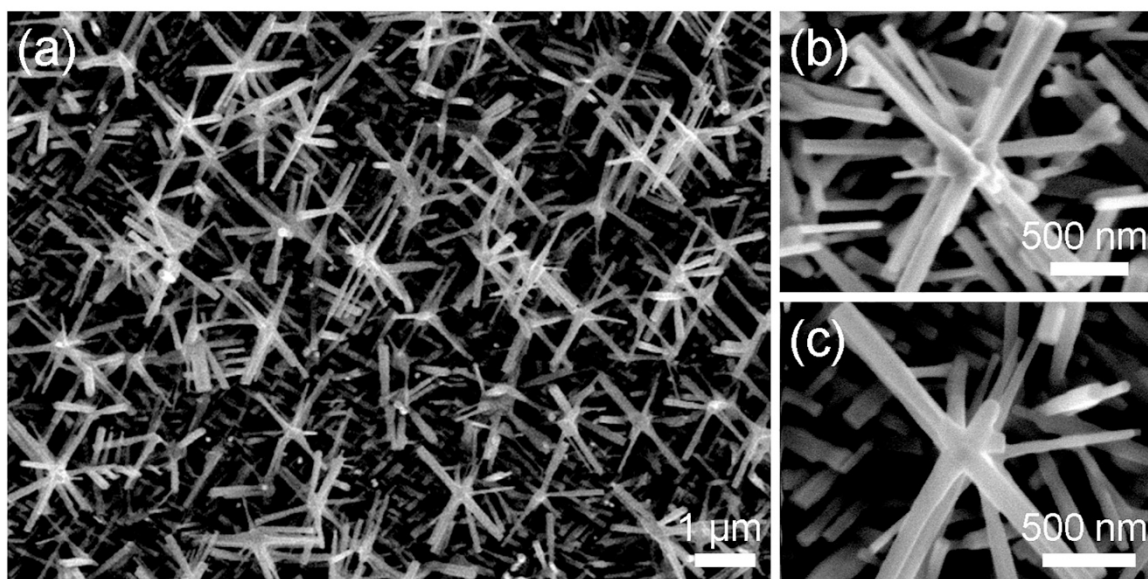
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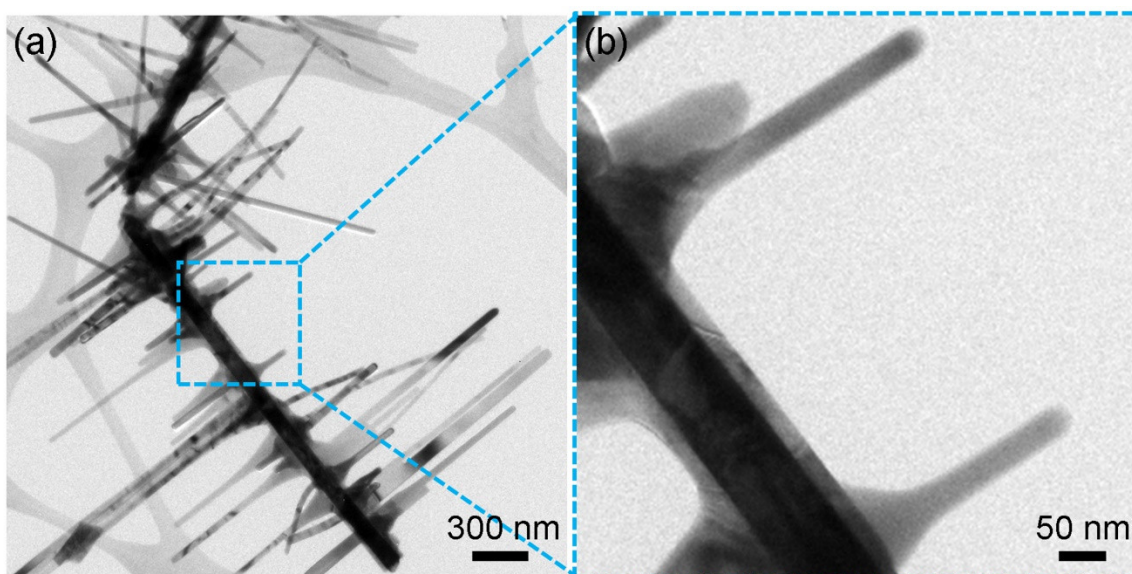
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**Figure S1.** TEM images of 3D hierarchical Au–ZnO nanostructures. (a,b) Low-magnification TEM images of 3D hierarchical Au–ZnO nanostructures. (c,d) High-magnification TEM images of ZnO nanowire branches.



**Figure S2.** SEM images of 3D hierarchical Au-ZnO nanostructures synthesized at a reaction time of 0 min. (a) Low-magnification SEM images of the 3D hierarchical Au-ZnO nanostructures. (b,c) High-magnification SEM images of the 3D hierarchical Au-ZnO nanostructures.



**Figure S3.** TEM images of 3D hierarchical Au-ZnO nanostructures synthesized at a reaction time of 0 min. (a) Low-magnification TEM image of the 3D hierarchical Au-ZnO nanostructures. (b) High-magnification TEM image of the 3D hierarchical Au-ZnO nanostructures.