Support Information

Non-centrosymmetric Au/SnO₂ Hybrid Nanostructures with Strong Localization

of Plasmonic for Enhanced Photocatalysis Application

Wei Wu^{1,2}*, Lei Liao^{2, 3}, Shaofeng Zhang^{2, 3}, Juan Zhou^{2, 3}, Xiangheng Xiao^{2, 3}, Feng Ren^{2, 3}, Lingling Sun^{2, 3} Zhigao Dai^{2, 3}, and Changzhong Jiang^{2, 3}

¹School of Printing and Packaging and School of Chemistry and Molecular Science, ²Key Laboratory of Artificial Micro- and Nano-structures of Ministry of Education, ³Center for Electronic Microscopy and School of Physics and Technology, Wuhan University, Wuhan 430072, P. R. China



Figure S1 EDX pattern of the as-prepared Au/SnO₂ NPs, the elements of Cu and C come from the carbon covered copper grid.

^{*}To whom correspondence should be addressed. Tel: +86-27-68778527. Fax: +86-27-68778433. E-mail: <u>weiwu@whu.edu.cn</u> (W. Wu).



Figure S2 Plasmonic near-field maps (cross-section view at y = 0) simulated using 3D-FDTD for Au seeds. The maps show the electric near-field intensity enhancements $\log(|E(r)/E_0|)^2$ of the nanostructures at their LSPR wavelengths (indicated on each map) with the incident polarization along the x-axis.