Supporting Information

TiO2 Nanosheet-Anchoring Au nanoplates: High-energy Facet and Wide Spectra Surface Plasmon-Promoting Photocatalytic Efficiency and Selectivity of CO2 Reduction

Meng Wang, a,b,c,d,† Qiu tong Han, a,b,c,d,† Yong Zhou, a,c,d Ping Li, a,b,c,d Wenguang Tu, a,b,c,d Lanqin Tang, a,b,c,d,e Zhigang Zou, a,c,d

a Jiangsu Key Laboratory for Nano Technology, Nanjing University, Nanjing 210093, P. R. China
b Key Laboratory of Modern Acoustics, MOE, Institute of Acoustics, School of Physics, Nanjing University, Nanjing 210093, P. R. China
c Ecomaterials and Renewable Energy Research Center (ERERC), Nanjing University, Nanjing, Jiangsu 210093, P. R. China
d National Laboratory of Solid State Microstructures, Collaborative Innovation Center of Advanced Microstructures, Nanjing University, Nanjing 210093, P. R. China
e College of Chemistry and Chemical Engineering, Yangcheng Institute of Technology, Yancheng 22401, P. R. China

† W. M. and H. Q. contribute equally to this work.
Figure S1. AFM image of a single Au nanoplate.
Figure S2. XRD pattern of TiO$_2$ nanosheets and Au-TiO$_2$ nanocomposites.
Figure S3 XPS spectrum of Au-TiO$_2$ composites.