Electronic Supplementary Information
for

Laser-induced fabrication of highly branched Au@TiO$_2$

nano-dendrites with excellent near-infrared absorption

properties

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Fig. S1 The PH value of the TiO$_2$ solution versus the UV-laser irradiation time.
Fig. S2 The typical TEM images of the Au@TiO$_2$ nano-dendrites by using 100μL HAuCl$_4$. The precursors were modified by UV-laser irradiation for 120 min. The below pictures show the elemental mapping images of the representative Au@TiO$_2$ nano-dendrites.
Fig. S3 The structure-evolutions of Au@TiO$_2$ nan-dendrites obtained by using 100μL HAuCl$_4$ in each experiment versus UV-laser irradiation time: (a) the average Au branch length and (b) the Au content in the Au@TiO$_2$ nan-dendrites.