

Supporting Information

**Homojunction and Defects Synergy-Mediated Electron-Hole
Separation for Solar-Driven Mesoporous Rutile/Anatase TiO₂
Microsphere Photocatalysts**

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Table S1. Ratio of rutile to anatase of the mesoporous rutile/anatase TiO₂ microspheres after being calcined at different temperatures under hydrogen atmosphere.

	Air	H400	H500	H600
Anatase (%)	27.5	22.9	16.2	15.2
Rutile (%)	72.5	77.1	83.8	84.8

Table S2. The textual properties of the mesoporous rutile/anatase TiO₂ microspheres after being calcined at different temperatures under hydrogen atmosphere.

	Air	H400	H500	H600
Surface Area (m ² g ⁻¹)	52.6	44.1	39.2	20.3
Pore Size (nm)	13.8	12.5	12.2	16.5
Pore Volume (cm ³ g ⁻¹)	0.14	0.14	0.13	0.11

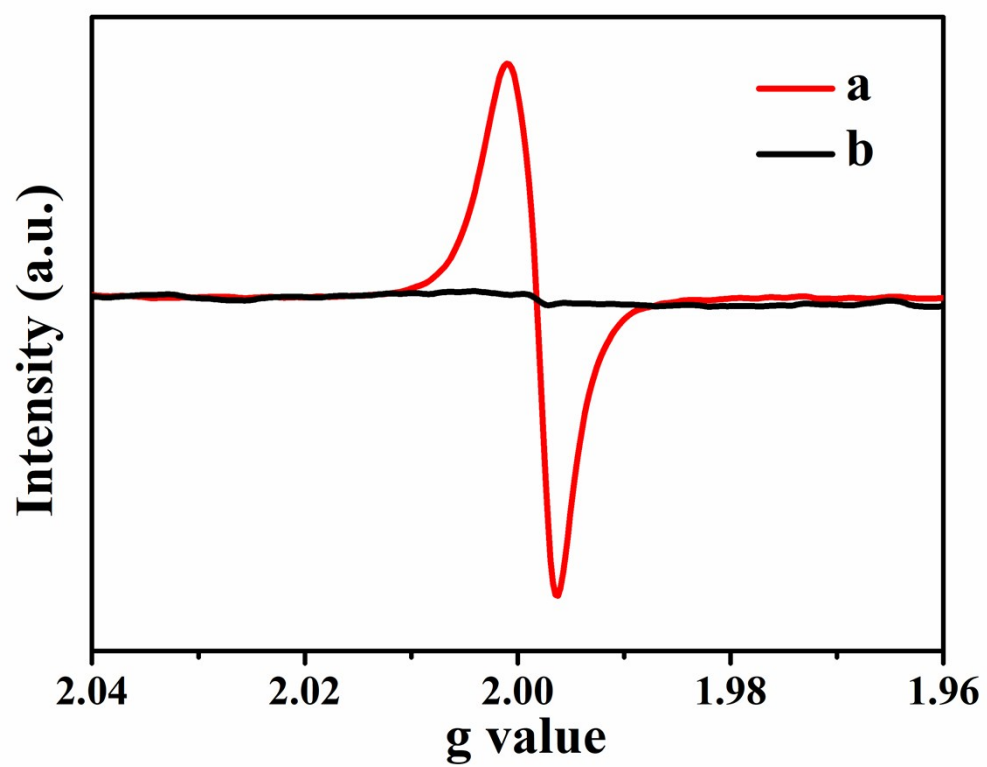


Figure S1. The electron paramagnetic resonance (EPR) spectra of MR/ATM (b) and H500-BMR/ATM (a).