

SUPPORTING INFORMATION

Bacitracin assisted synthesis of spherical BiVO₄ nanoparticles with C doping for remarkable photocatalytic performance under visible light

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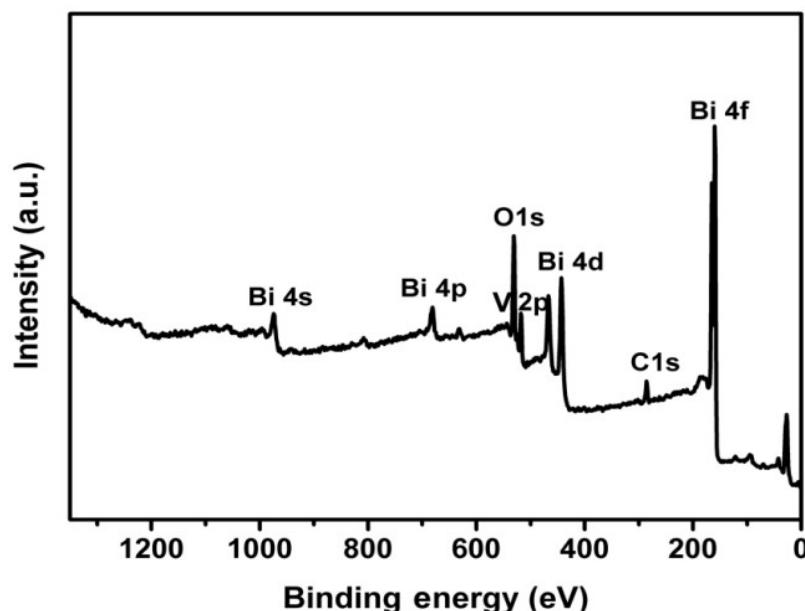


Fig. S1 XPS survey spectrum of T-300 sample

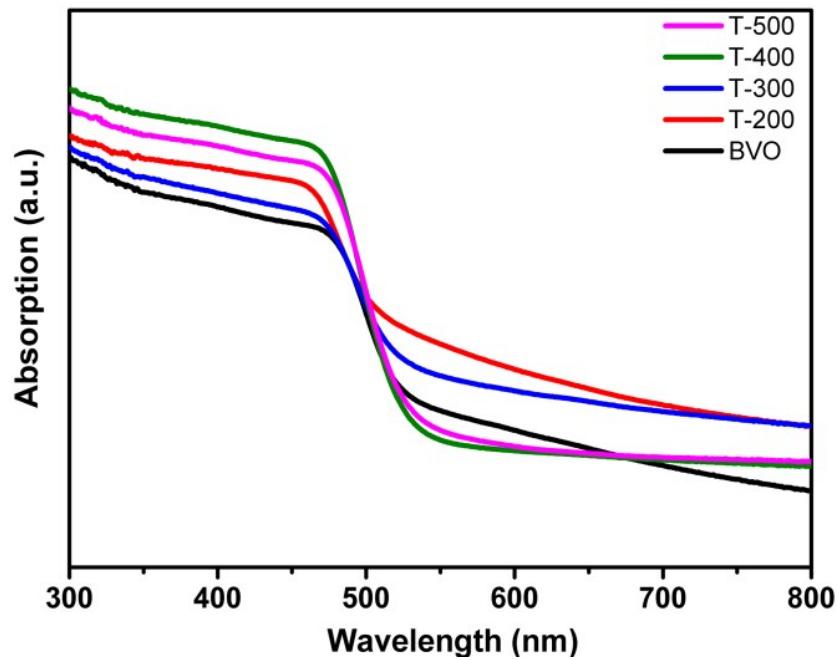


Fig. S2 UV-vis diffuse reflectance spectra of BVO and as-prepared BiVO_4 using bacitracin as template with different calcination temperatures (T-200, T-300, T-400 and T-500, respectively)

Table S1 Surface area, pore volume, and pore diameter distributions of BVO, T-25, T-200, T-300, T-400 and T-500

Material	Surface area ($\text{m}^2 \cdot \text{g}^{-1}$)	Pore volume ($\text{cm}^3 \cdot \text{g}^{-1}$)	Pore diameter (nm)
BVO	2.23	0.01	7.23
T-25	1.23	-	-
T-200	13.86	0.04	8.04
T-300	13.75	0.05	9.31
T-400	5.74	0.03	14.49
T-500	5.57	0.03	18.99

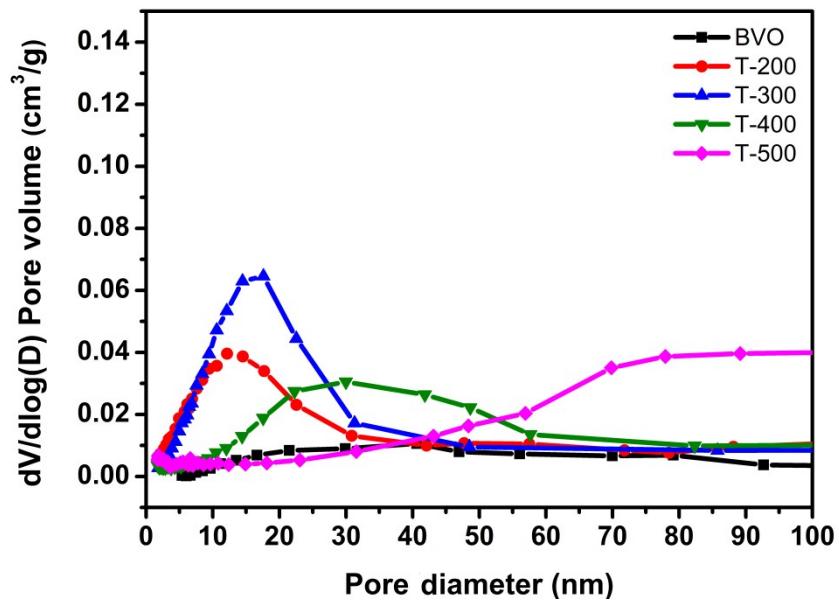


Fig. S3 Pore diameter distributions of BVO and as-prepared BiVO_4 using bacitracin as template with different calcination temperatures (T-200, T-300, T-400 and T-500, respectively)

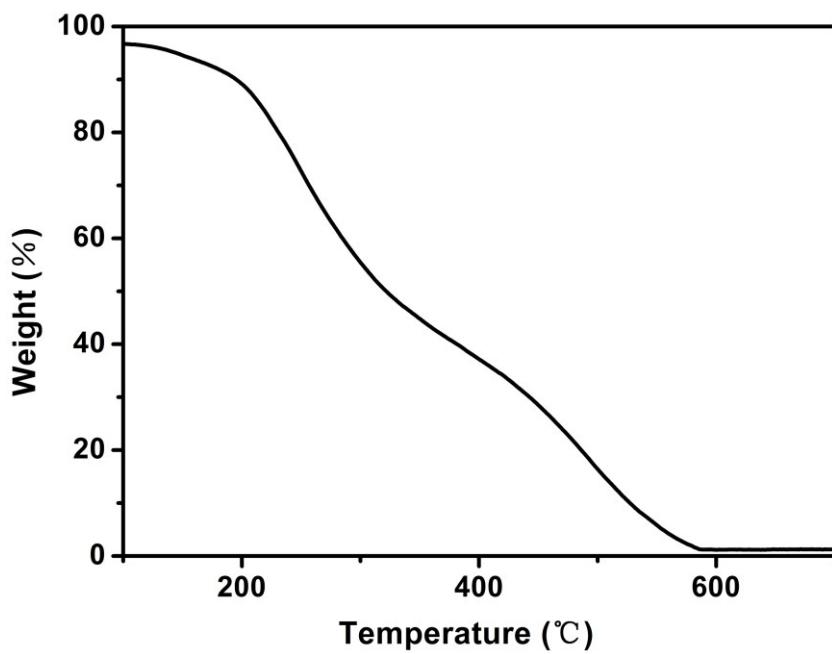


Fig. S4 TGA curve of bacitracin

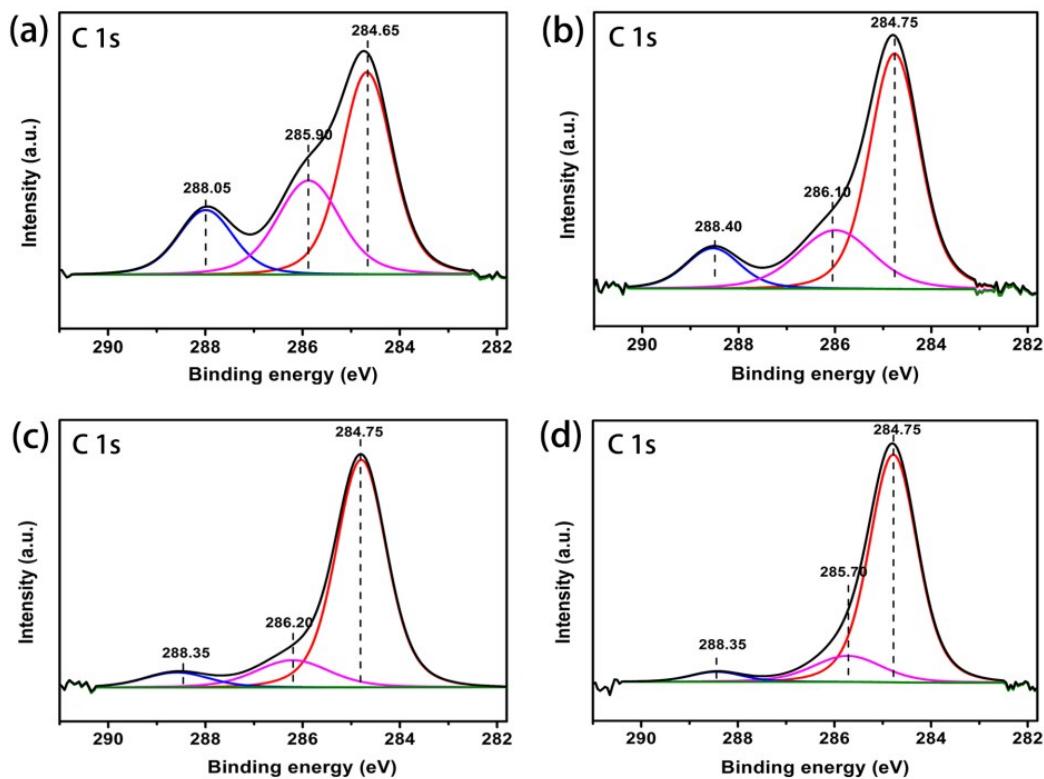


Fig. S5 High-resolution XPS spectra of C1s ((a): T-25, (b): T-200, (c): T-400,(d): T-500.

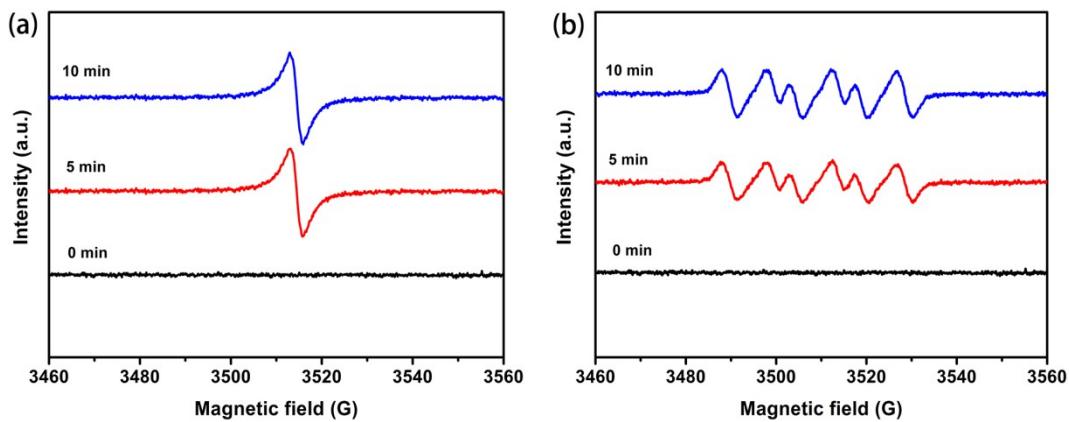


Fig. S6 EPR spectra of radical adducts with DMPO in T-300 system at different irradiation time ((a): h^+ ; (b): $\cdot O_2^-$)