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Supplementary Information

Synthesis of hierarchical flower-like Bi_2MoO_6 microspheres as efficient photocatalyst for photoreduction of CO_2 into solar fuels under visible light

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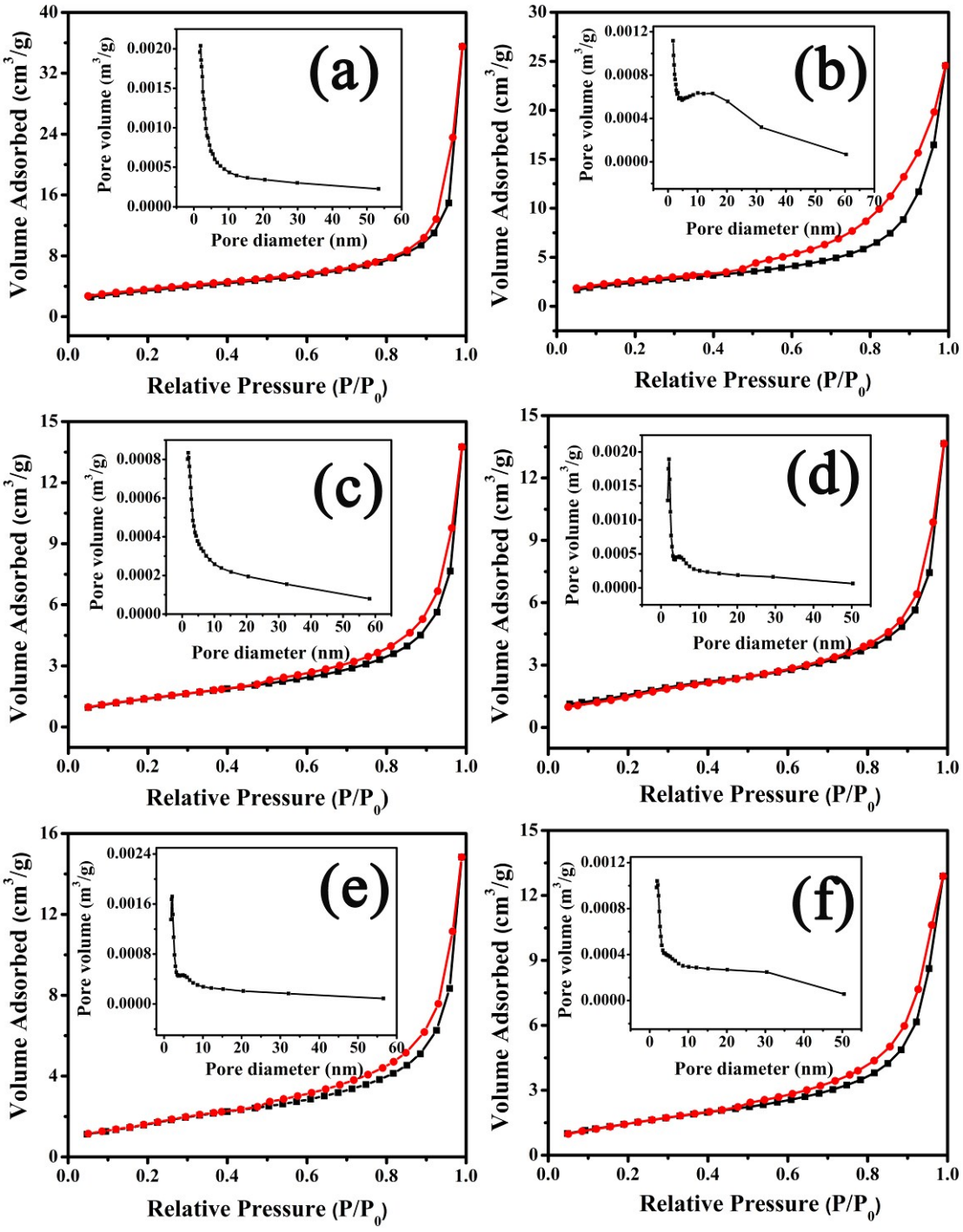

Fig. S1 N_2 adsorption–desorption isotherm and BJH pore distribution curve of of Bi_2MoO_6 samples prepared under different hydrothermal times in the presence of 0.3 g PVP: (a) 0 h, (b) 1 h, (c) 6 h (d) 12 h, (e) 24 h, and (f) 36 h.

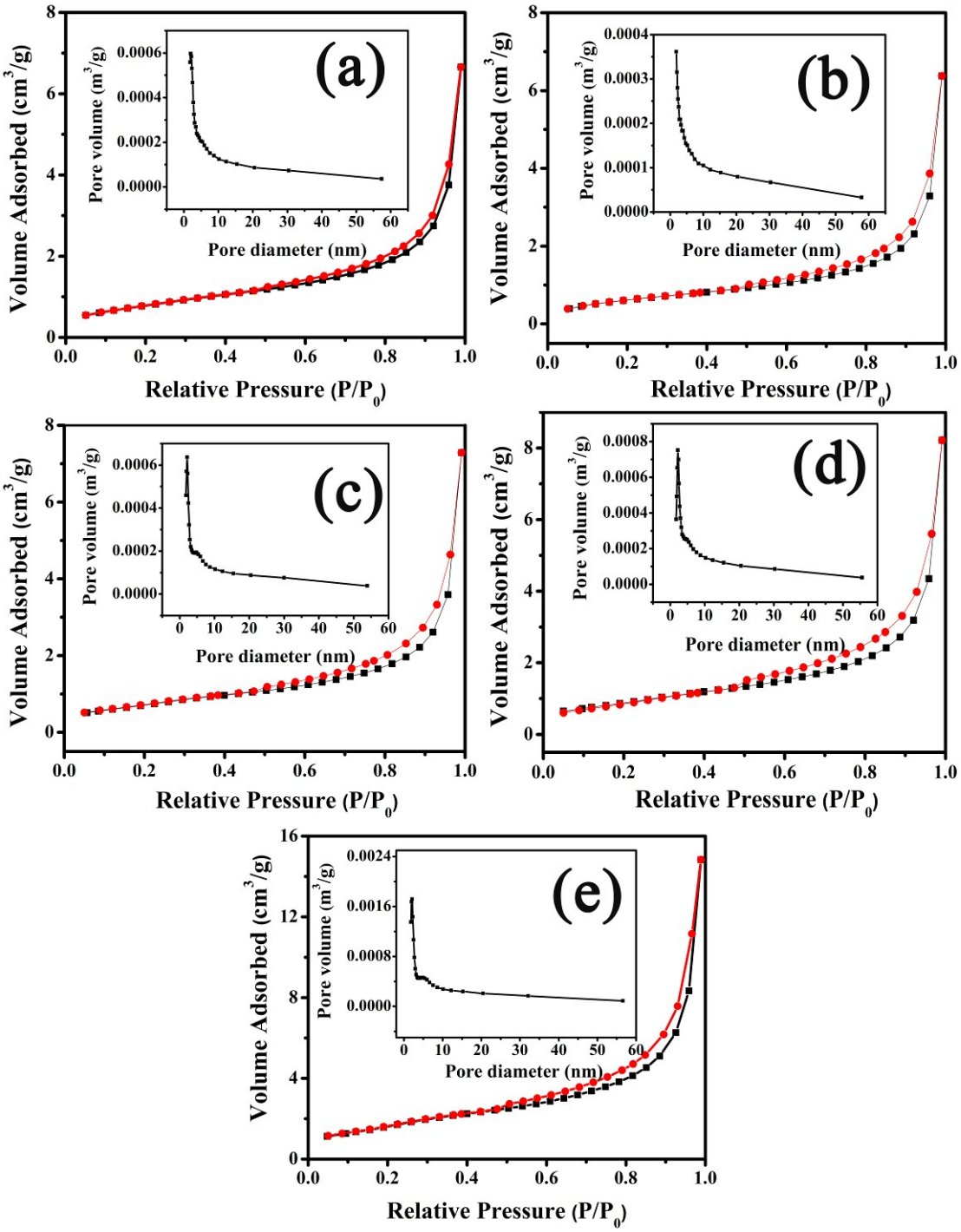

Fig. S2 N_2 adsorption–desorption isotherm and BJH pore distribution curve of of Bi_2MoO_6 samples prepared by hydrothermally treating for 24 h in the presence of different amount of PVP: (a) 0 g, (b) 0.05 g, (c) 0.1 g (d) 0.2 g, and (e) 0.3 g.

Table. S1 morphology, size and physical properties of Bi_2MoO_6 samples

Entry	photocatalyst[a]	BET				
		Morphology	Particle size	S_{BET} (m^2/g)	Average pore size (nm)	Pore volume (cm^3/g)
1	BM-0.3-0	nanoparticles	45 nm	12.2	17.82	0.054
2	BM-0.3-1	mixture of flakes and particles	0.3-0.8 μm	8.9	17.09	0.037
3	BM-0.3-6	flocculent nanoflakes	10-20 μm	5.2	16.34	0.021
4	BM-0.3-12	intercrossed flakes	10-20 μm	6.1	13.80	0.021
5	BM-0.3-24	flower-like microspheres	10-30 μm	6.3	14.57	0.022
6	BM-0.3-36	bloated and tight flower-like microspheres	12 μm	5.5	14.40	0.019
7	BM-0-24	irregular and dispersed flakes	5-10 μm	2.9	14.01	0.010
8	BM-0.05-24	assembled irregular flakes	5-10 μm	2.3	16.87	0.009
9	BM-0.1-24	sub-hierarchical microstructure	10 μm	2.7	16.655	0.011
10	BM-0.2-24	semi-flower-like microstructure	10 μm	3.3	15.52	0.012
11	BM-0.3-24	flower-like microspheres	10-30 μm	6.3	14.57	0.022

[a]BM-X-Y (X presents the amount of PVP, Y presents the hydrothermal time.)