Electric Supplementary Information

Controllable synthesis of hollow and porous Ag/$BiVO_4$ composites with enhanced visible-light photocatalytic performance

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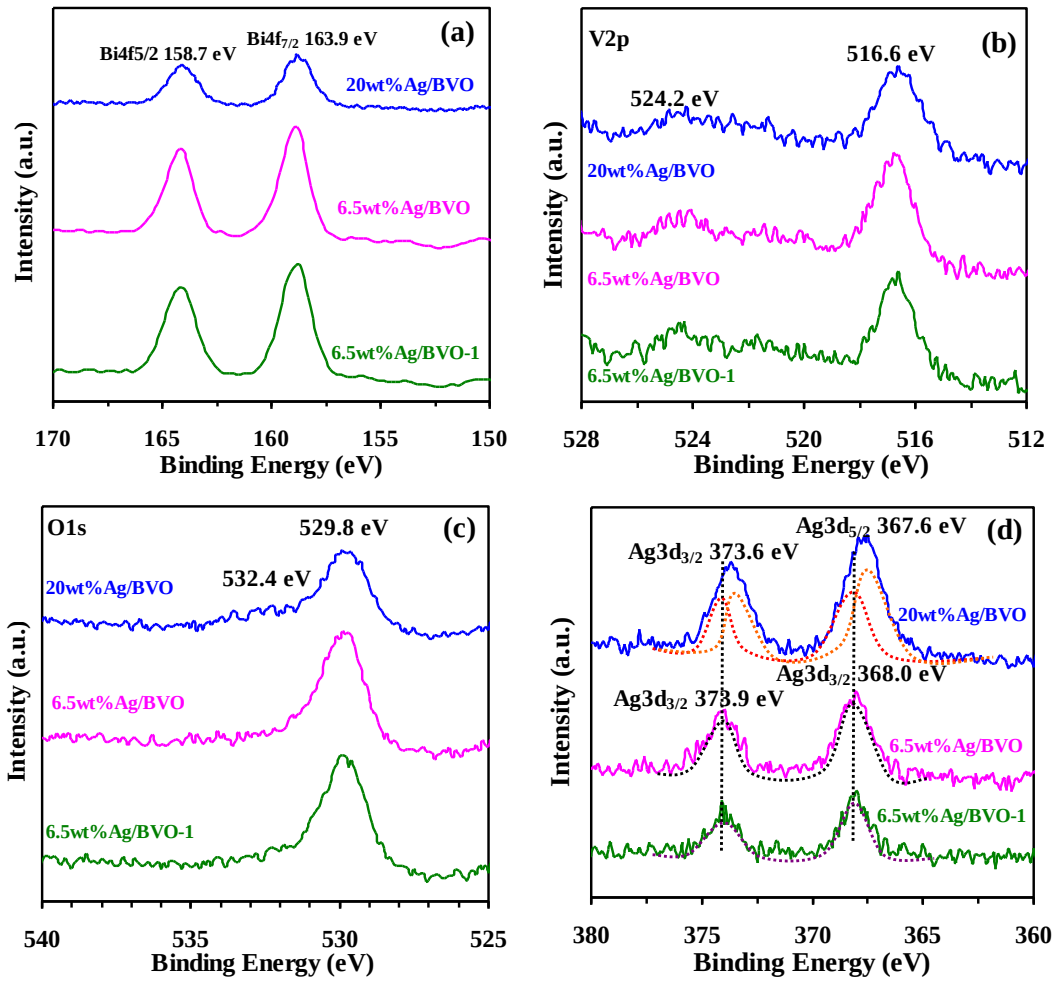

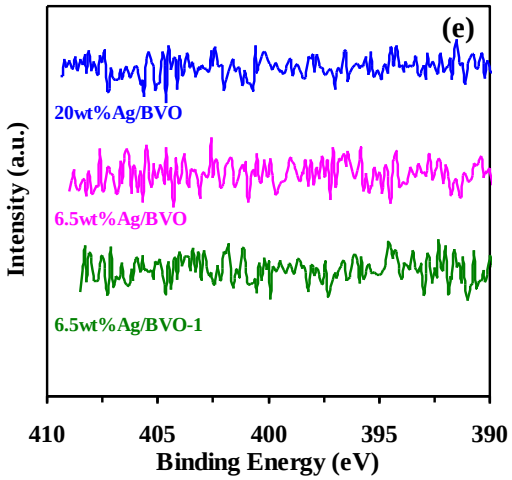

Fig. S1 XPS spectra of as-prepared samples: (a) Bi4f, (b) V2p, (c) O1s, (d) Ag 3d, and (e) N1s.

Table S1 Total amount of Ag and the amount of Ag metal on the surface of the as prepared samples.

Samples	Bi/V molar ratio	Total Ag (wt%)	Ag^0/Ag^+	Metal Ag (wt%)
3.3 wt%Ag/BVO	1.03	2.4	No Ag^+	2.4
6.5 wt%Ag/BVO	1.01	6.1	No Ag^+	6.1
6.5 wt%Ag/BVO-1	1.01	5.7	No Ag^+	5.7
13 wt%Ag/BVO	1.05	8.2	1.3	4.6
20 wt%Ag/BVO	1.05	14.1	1.1	7.4

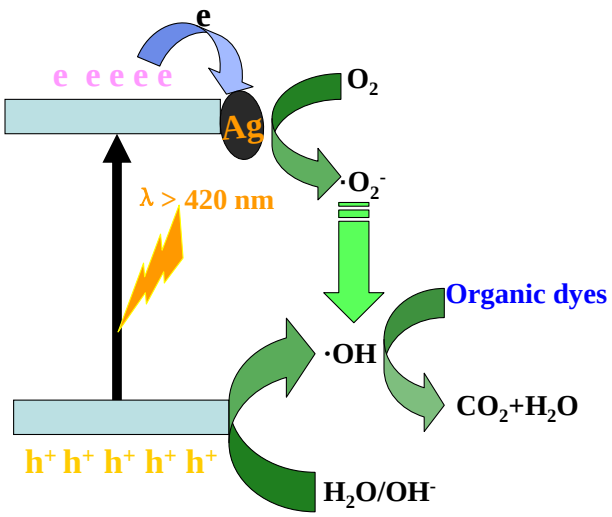

Fig. S2 Separation mechanism of photogenerated charge carriers in the Ag/BVO composite.

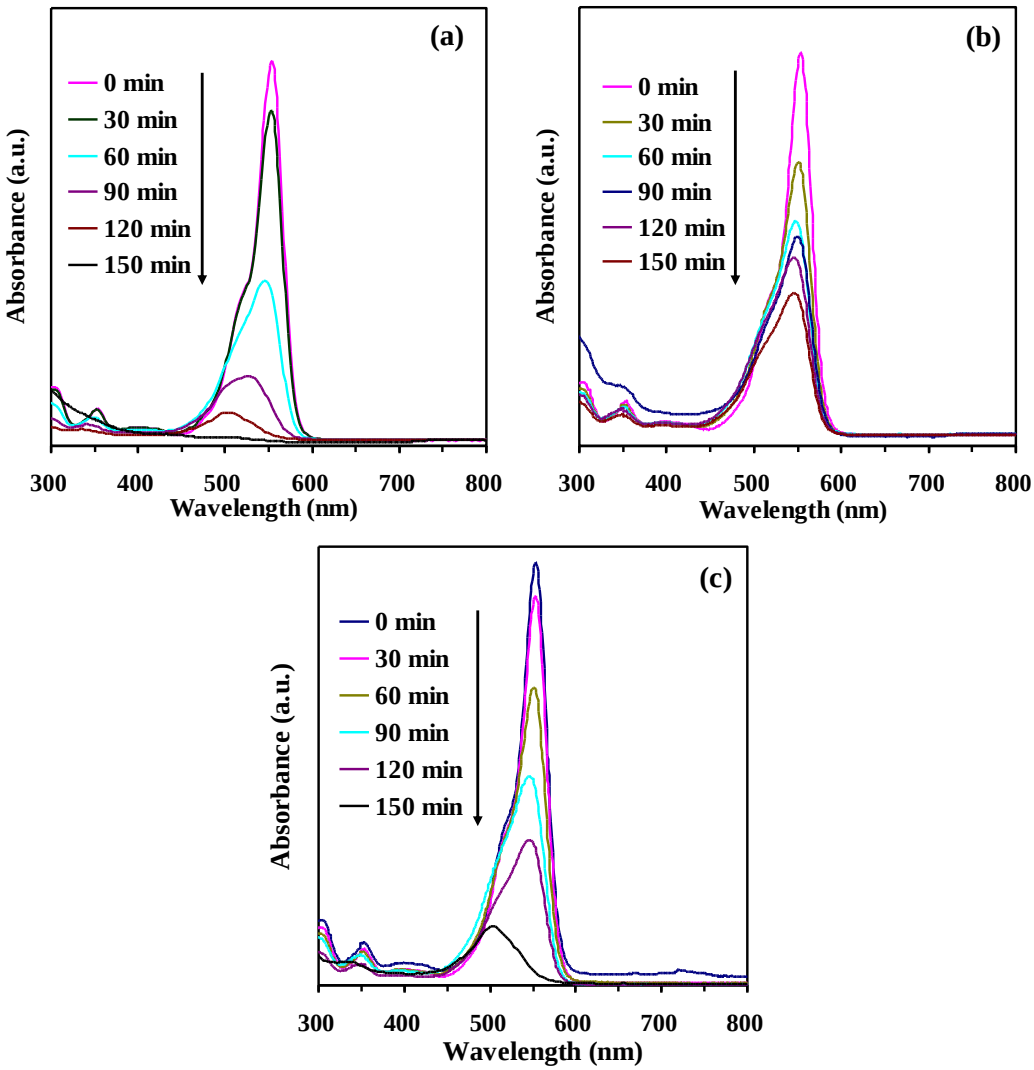

Fig. S3 UV-vis absorption spectra of Rh-B solution (20 mg/L) irradiated under visible light for different time intervals in the presence of 50 mg (a) 6.5wt%Ag/BVO, (b) BVO and (c) 6.5wt%Ag/BVO-1