

Supporting Information

Selective Oxidation of Benzyl Alcohol by Ag/Pd/m-BiVO₄ Microspheres under Visible Light Irradiation

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1. GC determination conditions

Column type: sh-rtx-5 capillary column; carrier gas: high purity nitrogen; carrier gas flow rate: 30 mL/min; inlet temperature: 130 °C; detector temperature: 260 °C; oven temperature: 90 °C; injection volume: 0.8 μ L.

2. XPS Analysis of Pd/m-BiVO₄

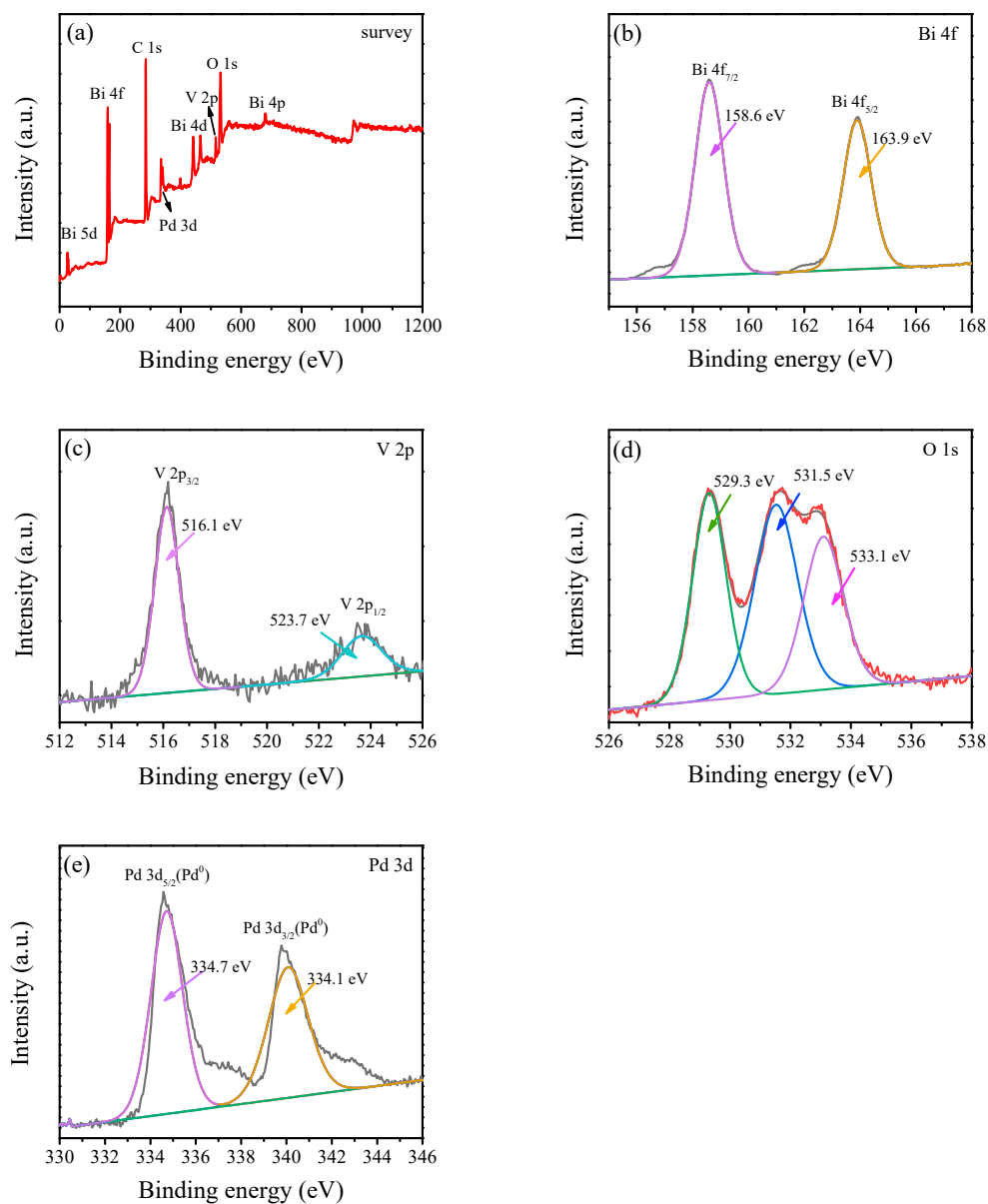


Figure S1. XPS spectra: (a) full spectrum of Pd/m-BiVO₄ (2 wt%), (b) Bi 4f, (c) V 2p, (d) O 1s, (e) Pd 3d.

3. Composition of Ag-Pd of the catalysts

3.1 Test of the composition of Ag-Pd of the catalysts

The compositions of Ag-Pd were tested by Inductively coupled plasma optic emission spectrometer (ICP-OES, iCAP 6000, Thermo Scientific, USA).

3.2 Results of the composition of Ag-Pd of the catalysts

Table S1. The composition of Ag-Pd of the catalysts

No.	Catalysts	Ag content (wt%)	Pd content (wt%)
1	Ag/m-BiVO ₄ (1 wt%)	1.25	--
2	Pd/m-BiVO ₄ (1 wt%)	--	1.53
3	Ag/m-BiVO ₄ (2 wt%)	2.69	--
4	Pd/m-BiVO ₄ (2 wt%)	--	2.76
5	Ag/Pd/m-BiVO ₄ (1 wt%, 2:1)	0.91	0.54
6	Ag/Pd/m-BiVO ₄ (2 wt%, 2:1)	1.69	0.80
7	Ag/Pd/m-BiVO ₄ (3 wt%, 2:1)	2.37	1.24
8	Ag/Pd/m-BiVO ₄ (4 wt%, 2:1)	2.44	1.32
9	Ag/Pd/m-BiVO ₄ (5 wt%, 2:1)	3.19	1.51