Supporting Information

Hollow microspherical Bi_2MoO_6/Zn-Ti layered double hydroxide heterojunction for efficient visible-light photocatalytic degradation of organic contaminants

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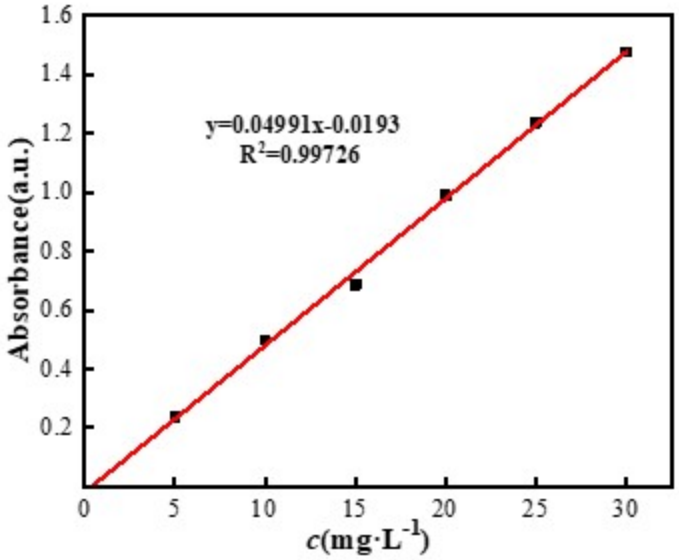

Figure S1 Standard curve of RhB solution.

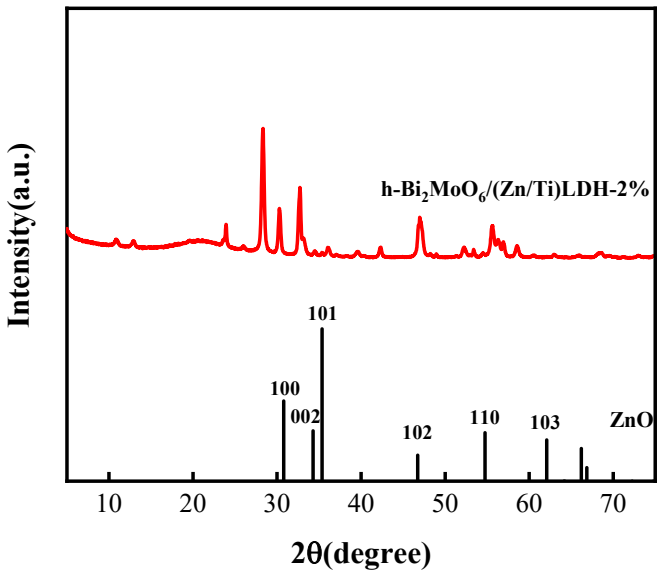

Figure S2 XRD pattern of h-Bi_2MoO_6/(Zn/Ti)LDH-2%.

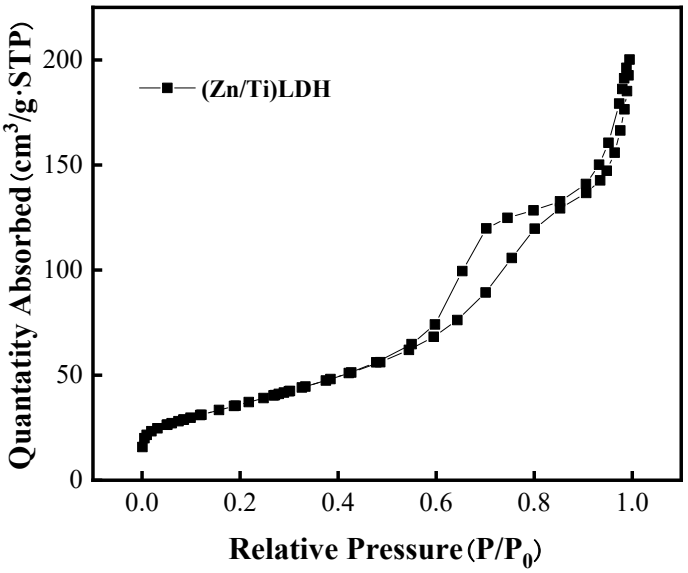

Figure S3 N_2 adsorption-desorption isotherm of (Zn/Ti)LDH.

Table S1. The surface area, pore volume and pore diameter of samples.

Sample	Surface Area ($m^2 \cdot g^{-1}$)	Pore Volume ($cm^3 \cdot g^{-1}$)	Pore Diameter (nm)
h-Bi_2MoO_6	16.0	0.142	30.5
h-Bi_2MoO_6/(Zn/Ti)LDH-1.5%	17.7	0.106	19.3
h-Bi_2MoO_6/(Zn/Ti)LDH-2%	20.3	0.172	17.0
h-Bi_2MoO_6/(Zn/Ti)LDH-3%	22.6	0.095	15.1
h-Bi_2MoO_6/(Zn/Ti)LDH-4%	27.1	0.129	16.5
(Zn/Ti)LDH	134.3	0.310	7.2

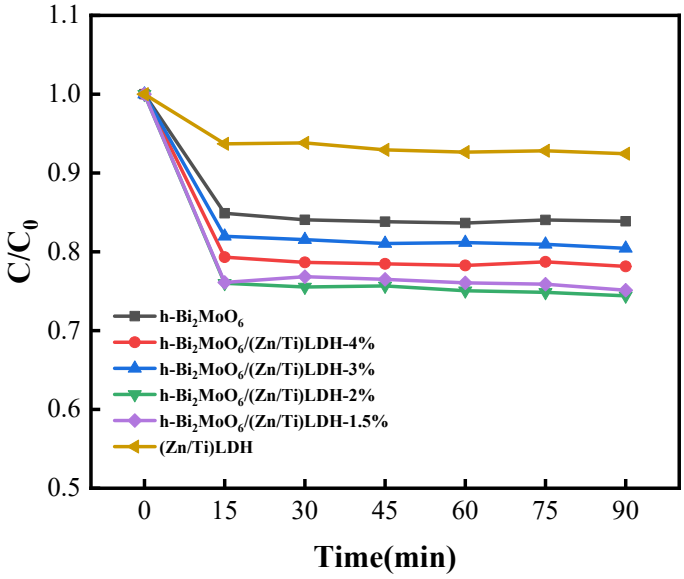

Figure S4 Adsorption performance of the as-prepared samples.

Table S2. Photodegradation performance of the as-prepared samples compared with other related photocatalysts.

Sample	Light source	Catalyst concentration ($g \cdot L^{-1}$)	Pollutant concentration ($mg \cdot L^{-1}$)	Degradation time(min)	Degradation rate(%)	Ref.
Bi_2MoO_6/Ag_2O	300W Xe (λ > 420 nm)	0.6	10	60	95	[1]
Ag/Bi_2MoO_6	300W Xe (λ > 420 nm)	1	5	210	97	[2]
$PtCo\text{-}Bi_2MoO_6$	300W Xe (λ > 420 nm)	0.5	10	30	95	[3]
$Ag/Ag_3PO_4/Bi_2MoO_6$	300W Xe (λ > 420 nm)	0.2	5	80	100	[4]
$ZnFe_2O_4/Bi_2MoO_6$	150W Xe (λ > 420 nm)	1	10	240	99.9	[5]
$BiFeO_3/Bi_2MoO_6$	150W Xe (λ > 420 nm)	1	10	300	93.84	[6]

δ-Bi_2O_3/Bi_2MoO_6	500WXe	0.6	5	180	100	[7]
Fe_3O_4/SiO_2/Bi_2MoO_6	300W Xe (λ > 420 nm)	1	10	120	100	[8]
SiO_2/Bi_2MoO_6	500W Xe (λ > 420 nm)	0.2	5	60	100	[9]
Cl-doped Bi_2MoO_6	300W Xe (λ > 420 nm)	1	5	160	99.5	[10]
Bi_2MoO_6/(Zn/Ti)LDH	500W Xe (λ > 400 nm)	1	10	60	100	This work

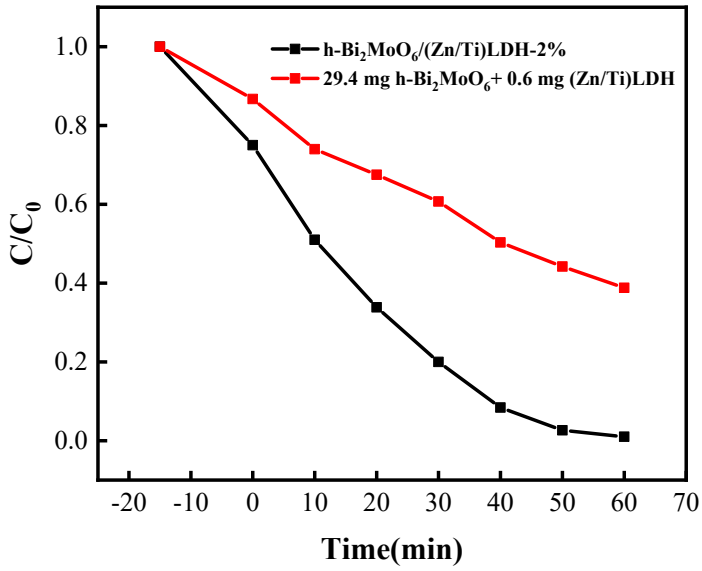

Figure S5 Photocatalytic performance of h-Bi_2MoO_6/(Zn/Ti)LDH-2% and the mixture.

References

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