

Supporting information

Ultrathin Nanosheet-Anchored Hexahedron Prismatic Bi₂MoO₆ Arrays: One-Step Construction and Crystal-Facet-Based Homojunction Boosting Photocatalytic CO₂ Reduction and N₂ Fixation

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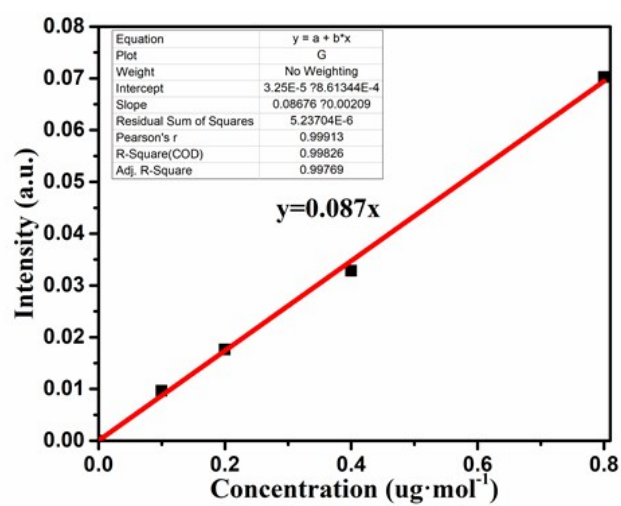


Fig. S1† Calibration curve used for estimation of NH_3 by NH_4^+ ion concentration.

CO ($\mu\text{mol}\cdot\text{g}^{-1}\cdot\text{h}^{-1}$)	CH ₄ ($\mu\text{mol}\cdot\text{g}^{-1}\cdot\text{h}^{-1}$)	NH ₃ ($\mu\text{mol}\cdot\text{g}^{-1}\cdot\text{h}^{-1}$)	Reference
13.55	5.45	111.6	This work
0.27	2.01	-	<i>Appl. Catal., B</i> 2019, 259 , 118088
17.10	0.71	-	<i>J. CO₂ Util.</i> 2019, 29 , 196–204
3.62	-	-	<i>Nano Energy</i> 2019, 61 , 54–59
-	0.85	-	<i>Chem. Phys. Chem.</i> 2017, 18 , 3240 – 3244
-	-	90.7	<i>Nanoscale</i> 2019, 11 , 10439
-	-	106.5	<i>Appl. Catal., B</i> 2019, 256 , 117781

Tab. S1† Comparison of photocatalytic CO₂ reduction and N₂ fixation yield of Bi₂MoO₆ –based catalysts reported in the recent literatures.

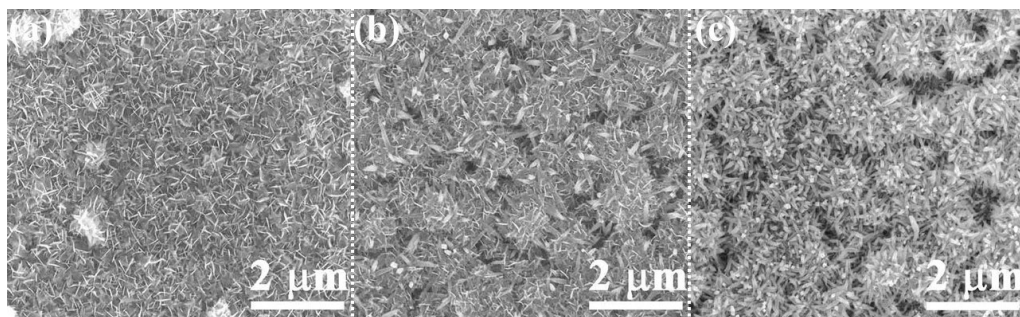


Fig. S2 FE-SEM images of Bi_2MoO_6 NS, NR and HJ

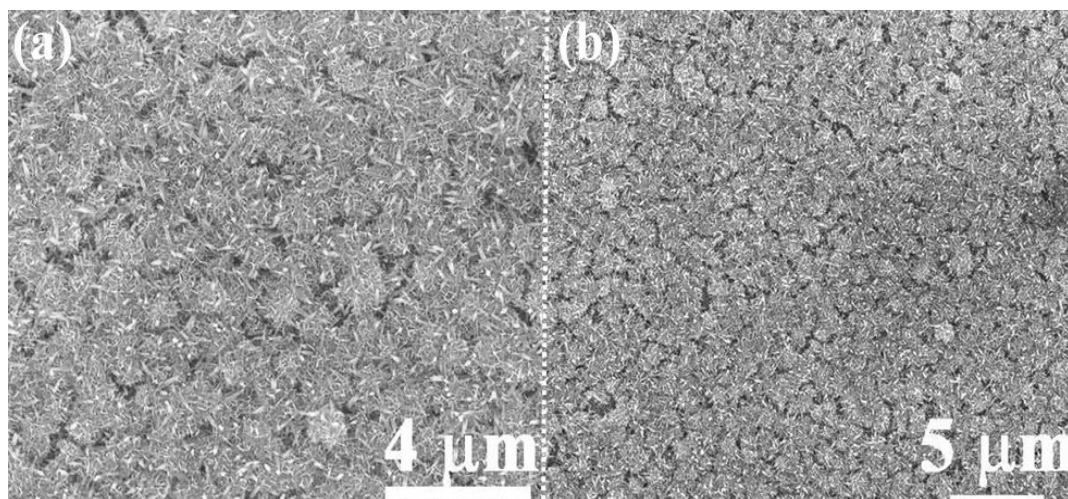


Fig. S3 FE-SEM images of Bi_2MoO_6 HJ of the larger ruler

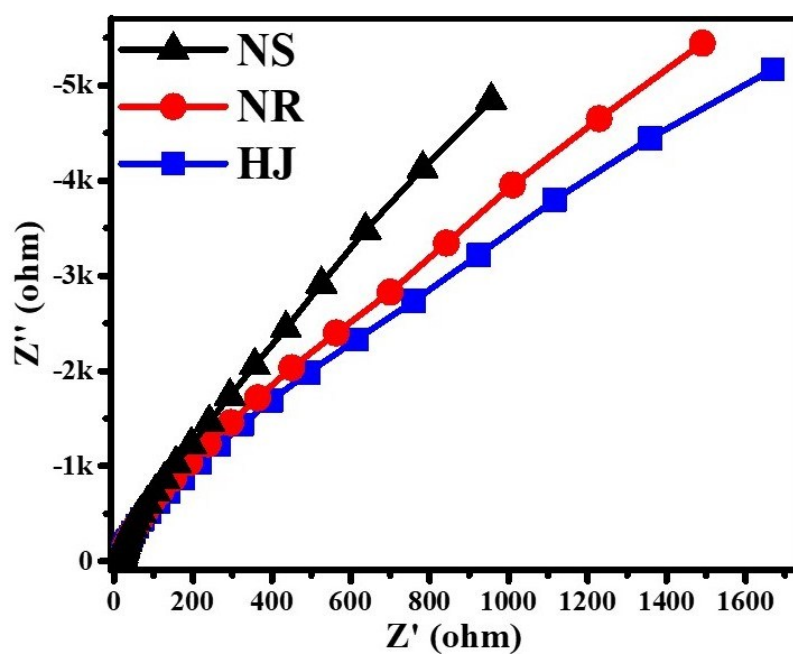


Fig. S4 EIS spectra of Bi_2MoO_6 NS, NR and HJ at 0 V vs. Ag/AgCl under illumination

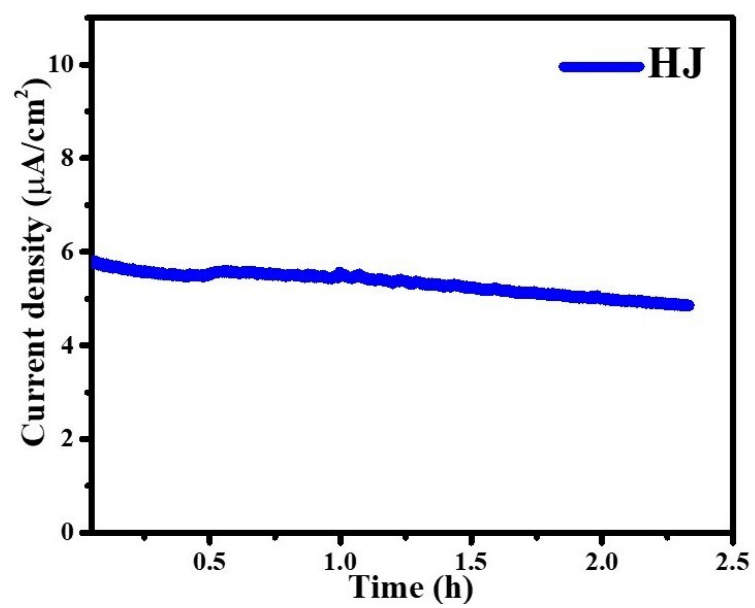


Fig. S5 The photostability spectra of HJ at 0 V vs.Ag/AgCl under illumination