

Supporting Information

One-step solvothermal synthesis of topological insulator Bi₂Te₃ nanorod-modified TiO₂ photocatalyst for enhanced H₂-evolution activity

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Figure captions

Fig. S1. The photocatalytic H₂-evolution activity of Bi₂Te₃/TiO₂(0.5 wt%) in lactic acid (CA, 10 vol%), triethanolamine (TEOA, 10 vol%), and ethyl alcohol (EA, 25 vol%) of (a) TiO₂ and (b) Bi₂Te₃/TiO₂(0.5 wt%).

Fig. S2. (A) The XRD patterns and (B) UV-vis spectra of (a) TiO₂, (b) Bi₂Te₃/TiO₂(5.0 wt%) before photocatalytic H₂ evolution, and (c) Bi₂Te₃/TiO₂(5.0 wt%) after photocatalytic H₂ evolution.

Table S1. The ICP-OES results of Bi₂Te₃/TiO₂ samples.

Samples	Bi (wt%)	Te (wt%)	Molar ratio of Te/Bi	Actual ratio of Bi ₂ Te ₃ /TiO ₂ (wt%)
Bi ₂ Te ₃ /TiO ₂ (0.5 wt%)	0.2404	0.2165	1.47	0.45
Bi ₂ Te ₃ /TiO ₂ (5.0 wt%)	2.9553	2.5986	1.44	5.43

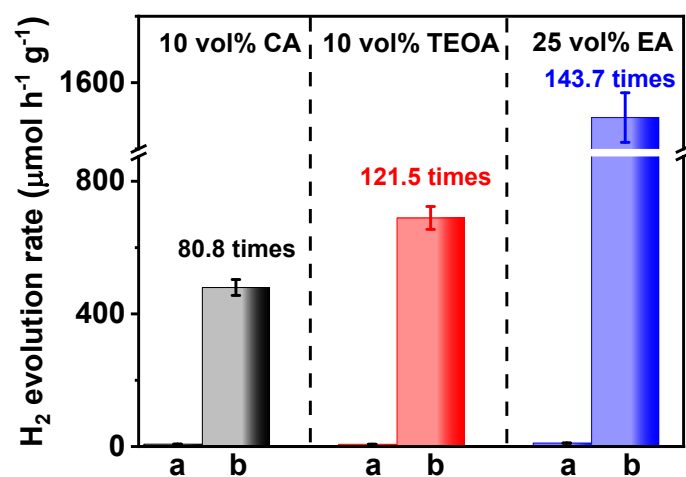


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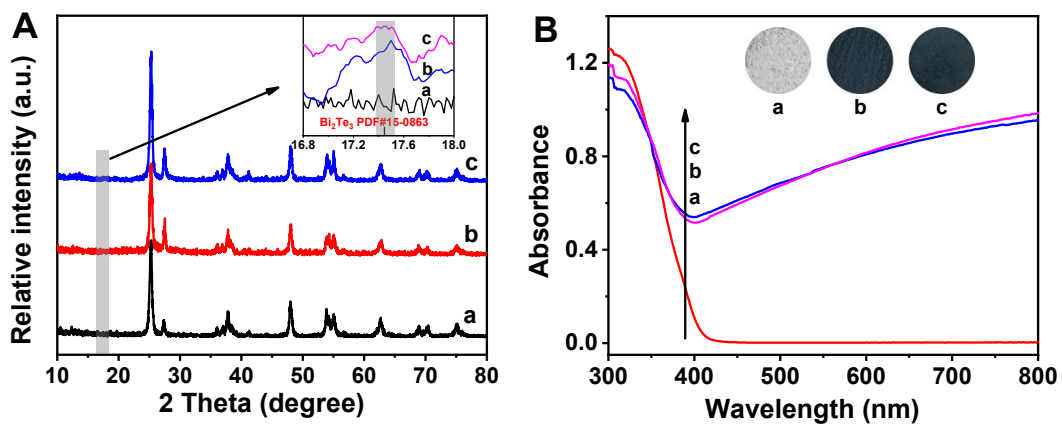


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