

SUPPORTING INFORMATION

Efficient hydrogen production and photocatalytic reduction of nitrobenzene over visible-light-responsive metal-organic framework photocatalyst

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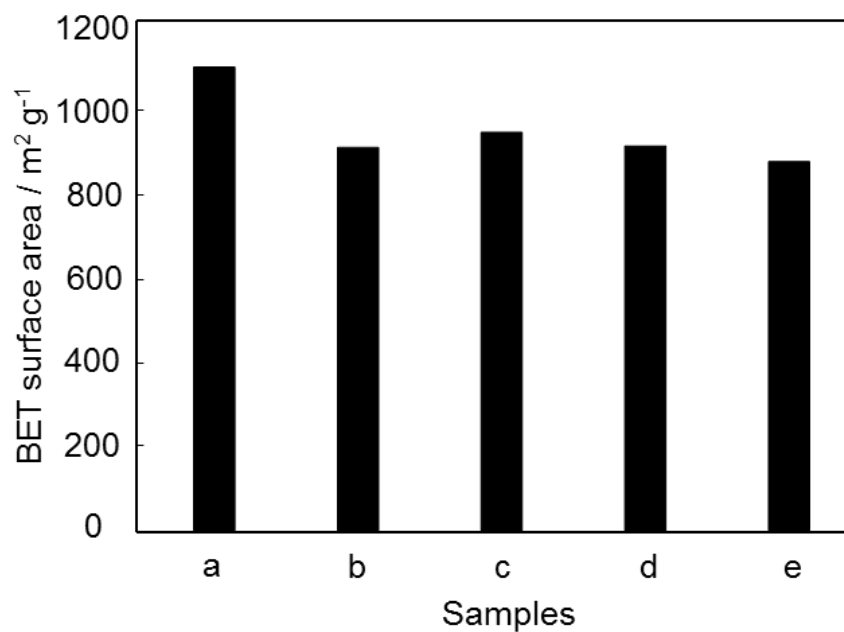


Fig. S1. BET specific surface areas of (a) Ti-MOF-NH₂, (b) Pt(0.5)/Ti-MOF-NH₂, (c) Pt(1.0)/Ti-MOF-NH₂, (d) Pt(1.5)/Ti-MOF-NH₂ and (e) Pt(2.0)/Ti-MOF-NH₂.

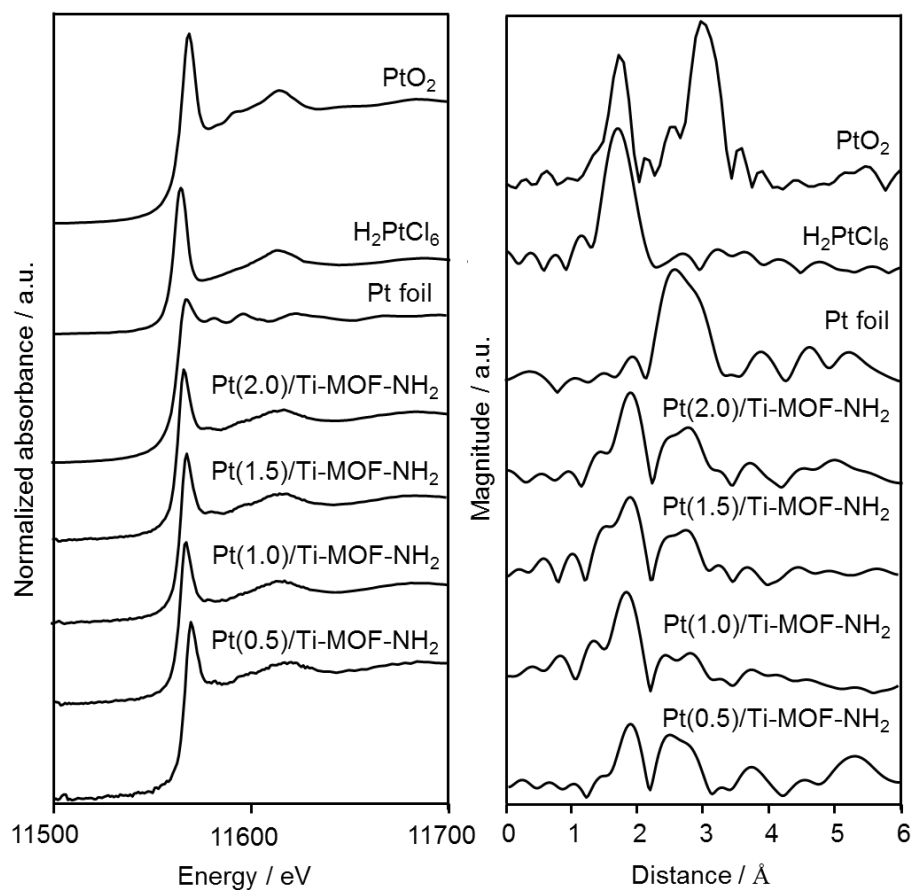


Fig. S2. XANES and FT-EXAFS spectra of PtO₂, H₂PtCl₆, Pt foil, Pt(0.5)/Ti-MOF-NH₂, Pt(1.0)/Ti-MOF-NH₂, Pt(1.5)/Ti-MOF-NH₂ and Pt(2.0)/Ti-MOF-NH₂.

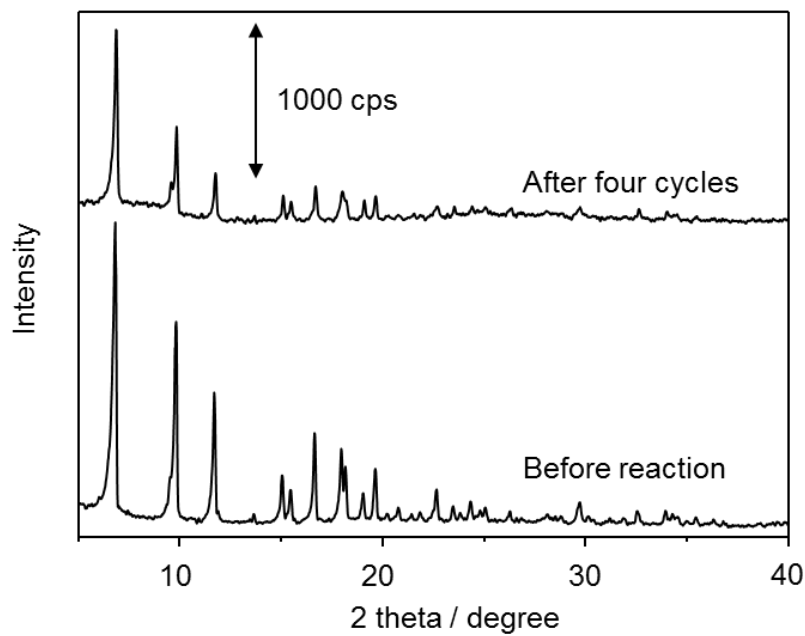


Fig. S3. XRD patterns of Pt(1.5)/Ti-MOF-NH₂ before and after four cycles of photocatalytic reduction of nitrobenzene under visible-light irradiation ($\lambda > 420$ nm).

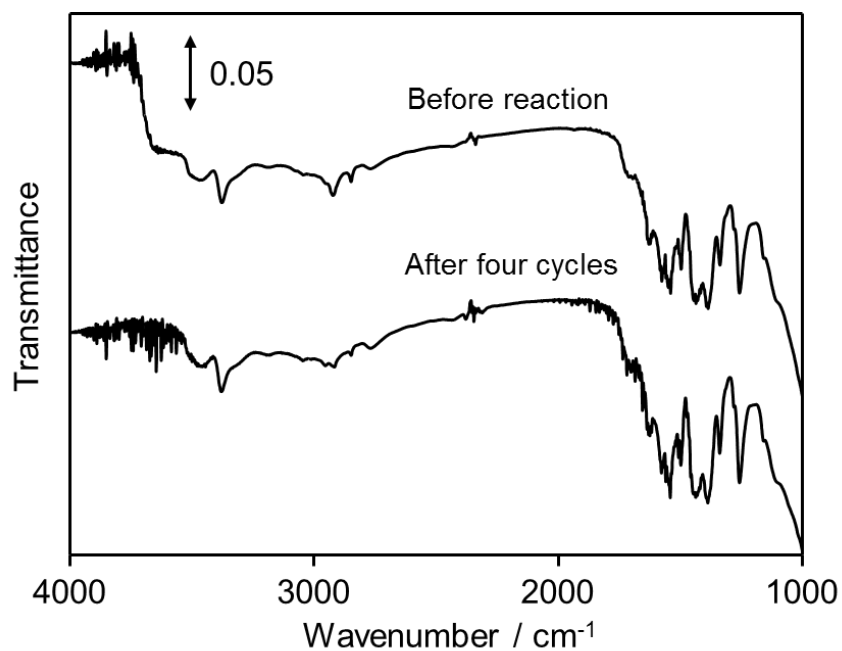


Fig. S4. FT-IR spectra of Pt(1.5)/Ti-MOF-NH₂ before and after four cycles of photocatalytic reduction of nitrobenzene under visible-light irradiation ($\lambda > 420$ nm).