

From Multifunctional Catalysts to Smart Substrates: Adsorption Control for Efficient Light Driven One-Pot Benzimidazole Synthesis over Pd/NH₂-Ni-Fe-MOF

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Fig. S1 FT-IR spectra of NH₂-Ni-Fe-MOF, Ni-Fe-MOF and Pd_{4.0}/NH₂-Ni-Fe-MOF.

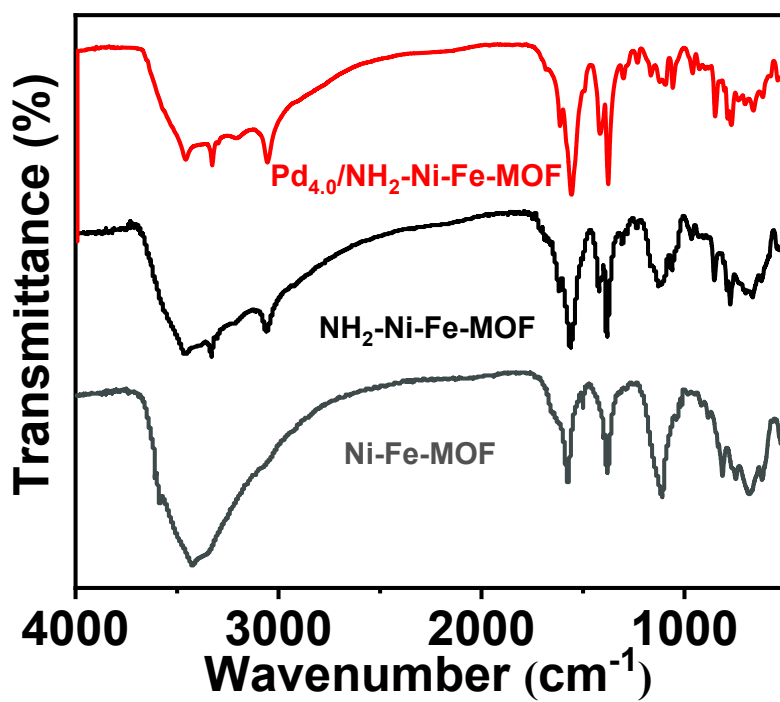


Fig. S2 Photograph of the reaction suspension performed between *o*-phenylenediamine and benzyl alcohol over Pd_{1,0}/NH₂-Ni-Fe-MOF under visible light irradiation.



Fig. S3 The wavelength dependence of the photocatalytic reactions between *o*-nitroaniline and benzyl alcohol to synthesize benzimidazole.

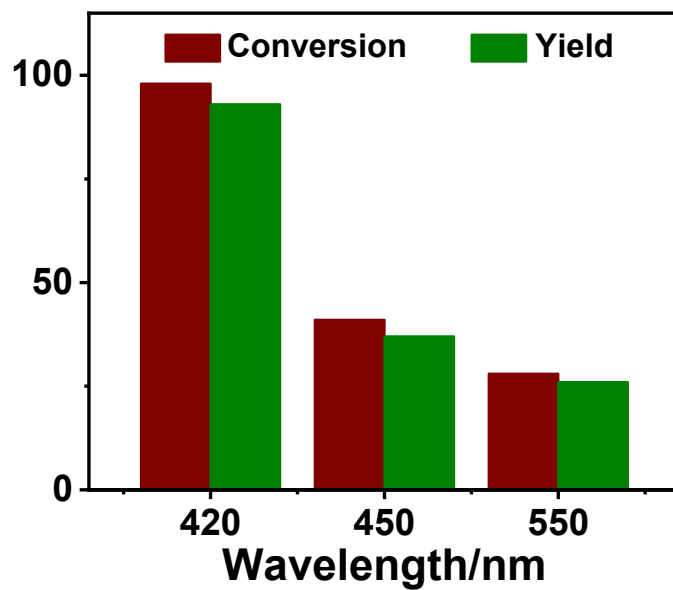


Fig. S4 (a) XRD patterns of Pd_{4.0}/NH₂-Ni-Fe-MOF before and after the reaction. (b) Cycling of Pd_{4.0}/NH₂-Ni-Fe-MOF for the N-heterocyclic reaction of benzyl alcohol with *o*-nitroaniline

