Electronic Supplementary Information (ESI)

Regiospecific photodimerization reactions of an unsymmetrical alkene in two coordination compounds

Dong Liu^{*a,b*} and Jian-Ping Lang^{**a,c*}

^a College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou 215123, P. R. China

^b College of Chemistry and Materials Science, Huaibei Normal University, Huaibei 235000, P. R. China

^c State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, P. R. China

*E-mail: jplang@suda.edu.cn

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Fig. S1 (a) PXRD patterns of **1** (from single crystal data: black; as-synthesis: red) and **1a** (blue). (b) PXRD patterns of **2** (from single crystal data: black; as-synthesis: red) and **2a** (blue). (c) PXRD patterns of simulated **2** (black) and the crystals obtained from hydrothermal reaction of a mixture of Cd(NO₃)₂·4H₂O, 4-spy, HCBA and 5-NO₂-1,3-H₂BDC in a molar ratio of 1:1:2:2 at 150 °C (red).







Fig. S2 The ¹H NMR spectra of 1 (a), 1a (b), 2 (c), 2a (d), HH-ppcb (e) and HT-ppcb (f) in d_6 -DMSO at ambient temperature.



Fig. S3 The ¹³C NMR spectra of **HH-ppcb** (a) and **HT-ppcb** (b) in d_6 -DMSO at ambient temperature.



Fig. S4 The UV absorption spectra of 1 and 2 in DMF.



Fig. S5 The TG curves for 1 and 2.