## Perturbation of the Charge Density between two Bridged Mo<sub>2</sub> Centers: the Remote Substituent Effects

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## **Supporting Information Contents**

## <sup>1</sup>H NMR spectra

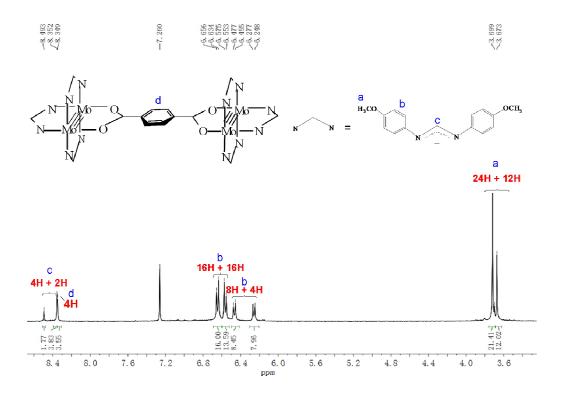


Figure S1. <sup>1</sup>H NMR spectrum for 1.

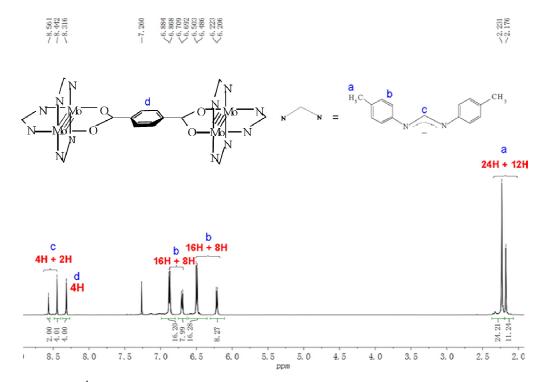


Figure S2. <sup>1</sup>H NMR spectrum for 2.

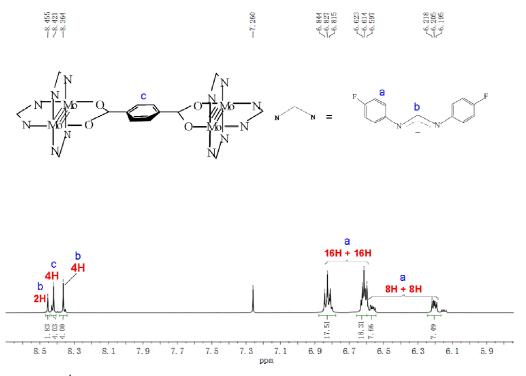
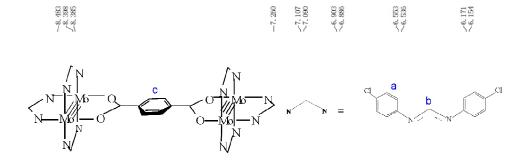


Figure S3. <sup>1</sup>H NMR spectrum for 3.



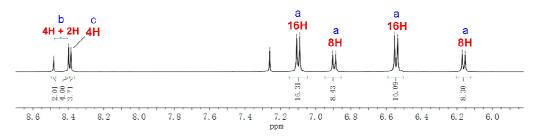
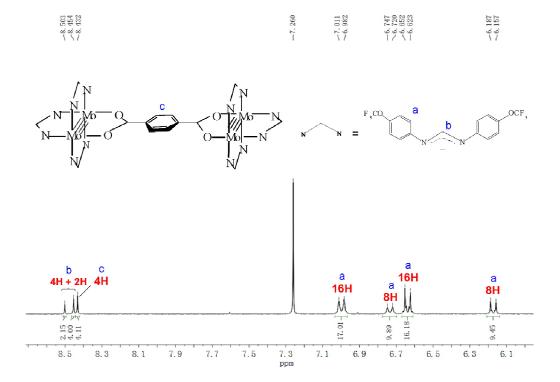


Figure S4. <sup>1</sup>H NMR spectrum for 4.



**Figure S5.** <sup>1</sup>H NMR spectrum for **5.** 

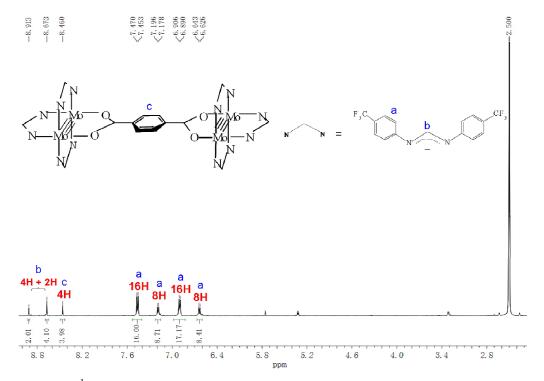
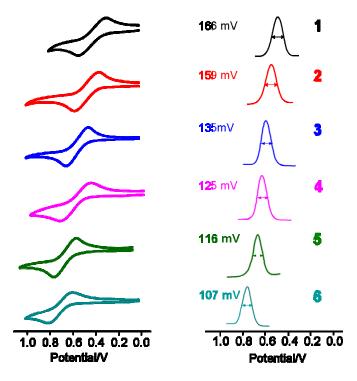
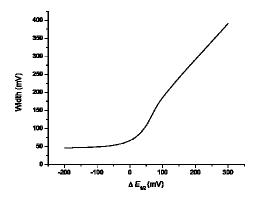


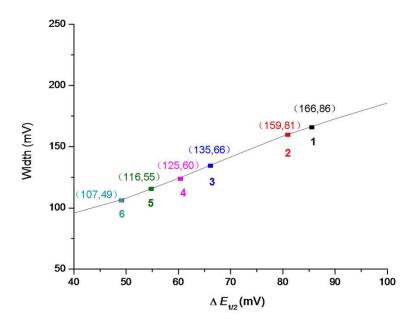
Figure S6. <sup>1</sup>H NMR spectrum for 6.



**Figure S7.** Electrochemical cyclic voltammograms (CVs, left) and differential pulse voltammograms (DPVs, right) for complexes **1-6** as labeled in different colors. The half-height widths ( $i_{\text{max}}/2$ ) are measured from the DPV plots.

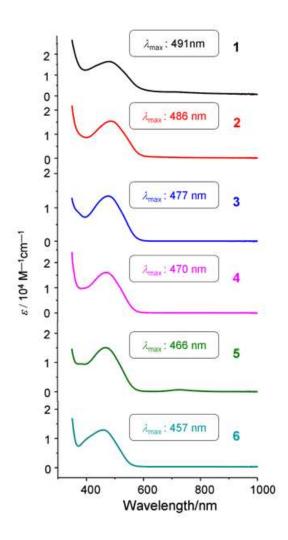


**Figure S8.** Working curve, generated from the data in ref 22 (Richardson, D. E.; Taube. H. *Inorg. Chem.* **1981**, *20*, 1278–1285), for electrochemical data analyses.



**Figure S9.**  $\Delta E_{1/2}$  data derived for complexes **1-6** from the working curve (**Figure S8**). **Table S1.** The values of width and  $\Delta E_{1/2}$  for complexes **1-6.** 

parameter	<b>1</b> (OCH <sub>3</sub> )	<b>2</b> (CH <sub>3</sub> )	<b>3</b> (F)	<b>4</b> (Cl)	<b>5</b> (OCF <sub>3</sub> )	<b>6</b> (CF <sub>3</sub> )
Width (mV)	166	159	135	125	116	107
$\Delta E_{1/2}$ (mV)	86	81	66	60	55	49



**Figure S10.** Electronic spectra showing the metal to ligand charge transfer (MLCT) absorption bands for complexes **1-6**.