Tuning the Topology Structures of Polymolybdate-based Hybrids from Interpenetrated Framework to Interdigitated Architecture *via* Changing Polymolybdate Clusters†

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Table S1 All of the H-bonds in **3**.

D-H···A[a]	D-H	H···A	D···A	∠D-H···A
C8-H8···O8	0.93	2.487	3.407	169.81
C8-H8···O16	0.93	2.549	3.066	115.50
C15-H15…O5	0.93	2.597	3.302	132.98
C13-H13···O13	0.93	2.242	3.112	155.50
C3-H3···O7	0.93	2.515	3.275	138.99
C9-H9···O2	0.93	2.426	3.257	148.80
C5-H5···O14	0.93	2.648	3.462	146.59
C6-H6···O15	0.93	2.658	3.343	131.01
C17-H17···O14	0.93	2.476	3.404	176.45
C24-H24···O18	0.93	2.494	3.412	169.03

[a]D = donor atom, A = acceptor atom.

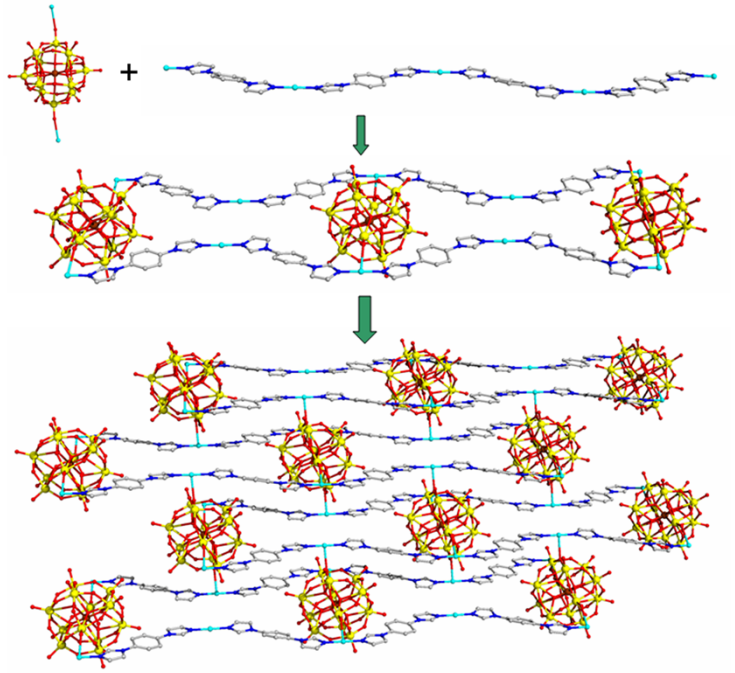

Fig. S1. View of the detailed formation process of the 2D layer in **3**.

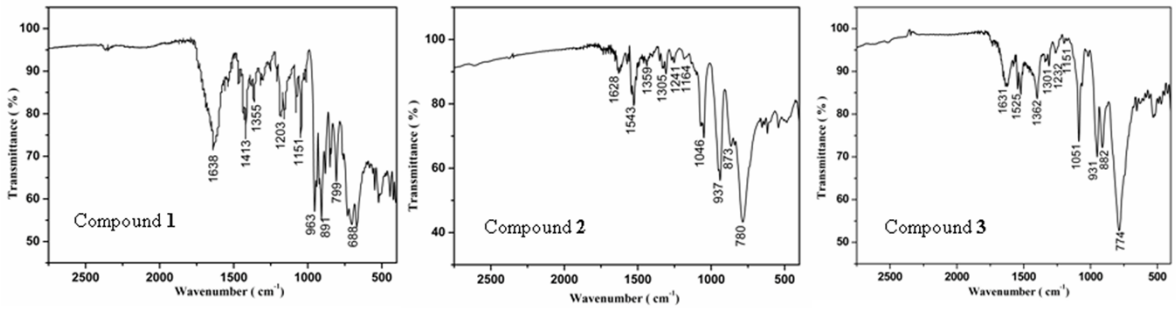

Fig. S2. The IR spectra of copounds **1-3**.

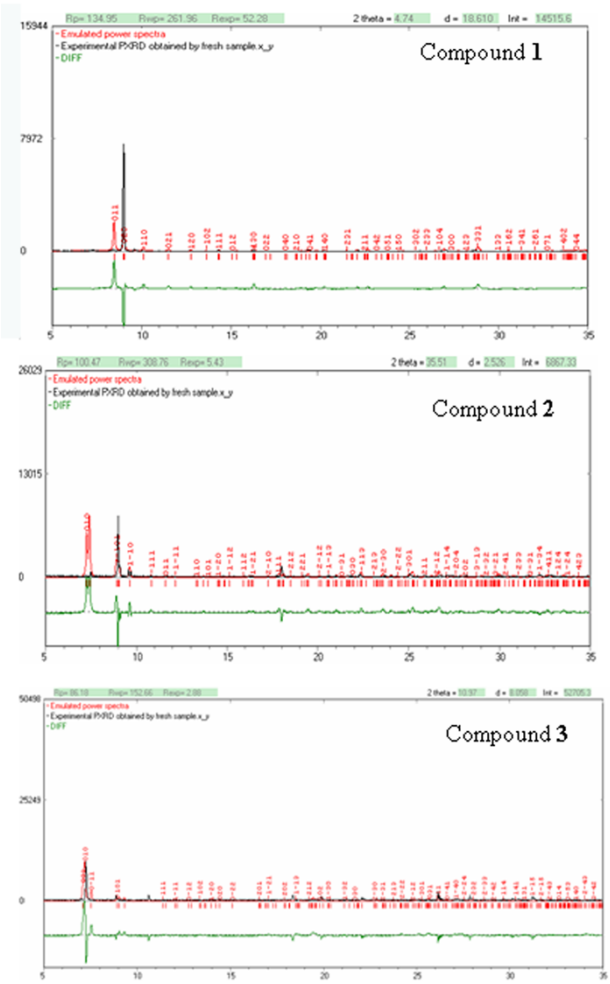

Fig. S3. Output of a calculated powder X-ray pattern by POWDER CELL for compounds 1-3.

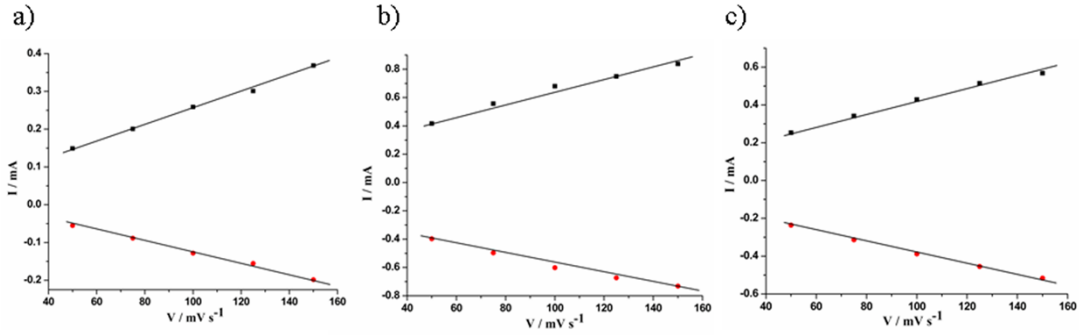

Fig. S4. The plots of the anodic and the cathodic peak currents for wave I of **1**- (a), **2**- (b) and **3**-CPE (c) againt scan rates, respectively.

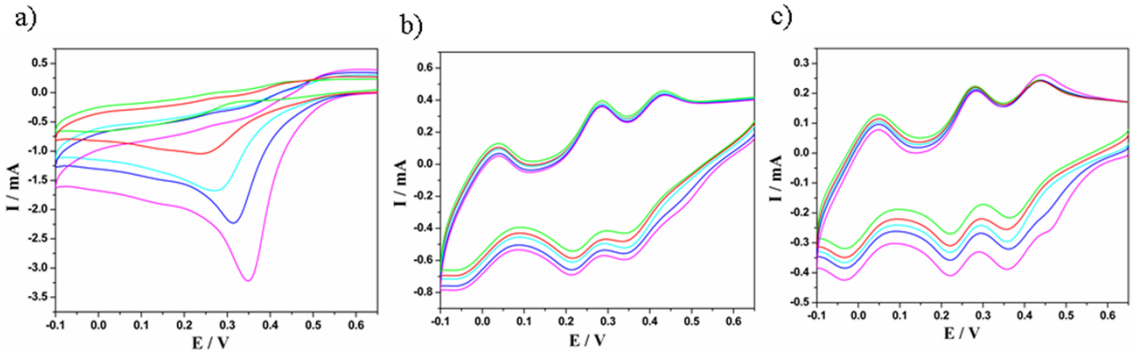

Fig. S5. Reduction of IO_3^- for **1**- (a), **2**- (b) and **3**-CPEs (c) in 1M H_2SO_4 solution (scan rate: 50 $mV \cdot s^{-1}$). The concentrations (from inner to outer) are 0, 5, 10, 15, 20 mM for IO_3^- respectively.

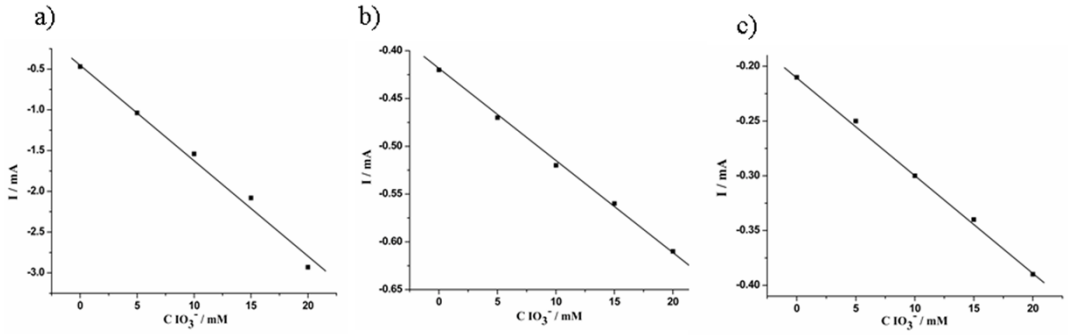

Fig. S6. The linear dependence of the cathodic catalytic current of wave I for **1**- (a), **2**- (b) and **3**-CPE (c), with IO_3^- concentration, respectively.

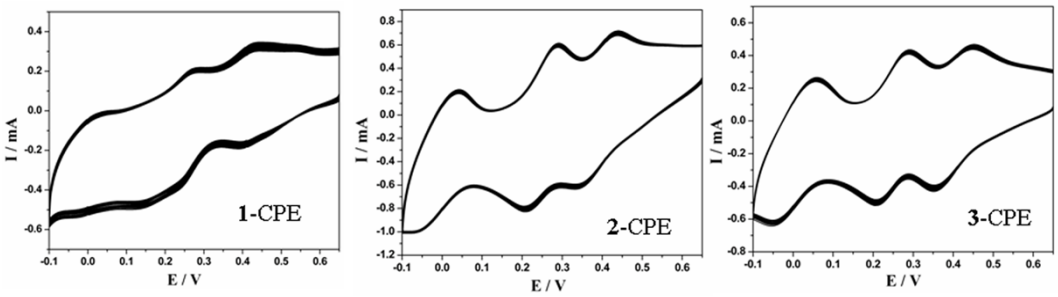

Fig. S7. The 40 consecutive CV cycles of the **1**-, **2**- and **3**-CPEs at the scan rate of 50 $mV \cdot s^{-1}$.