

***Electronic Supplementary Information (ESI)***

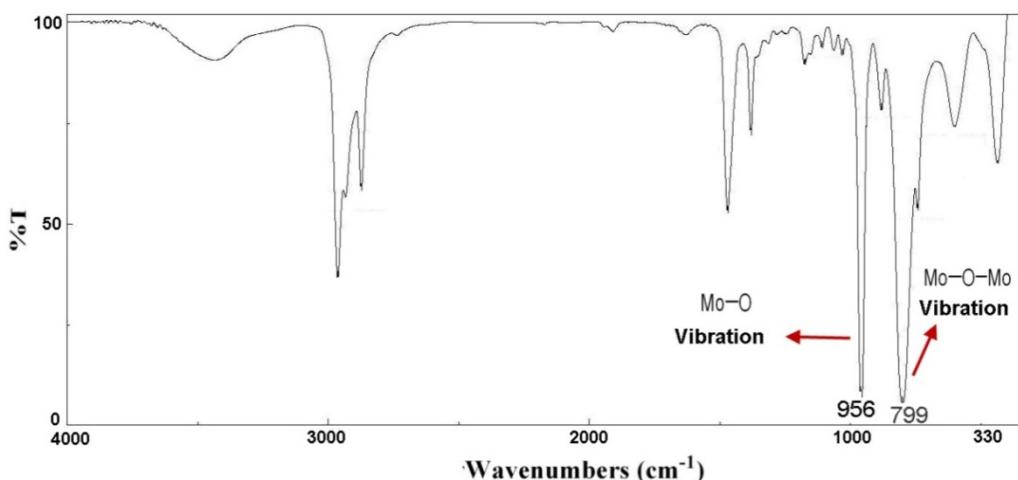
**Synthesis and characterization of a new porphyrin–polyoxometalate  
hybrid material and investigation of its catalytic activity**

Mehdi Araghi, Valiollah Mirkhani,\* Majid Moghadam,\* Shahram Tangestaninejad, Iraj  
Mohammelpoor-Baltork

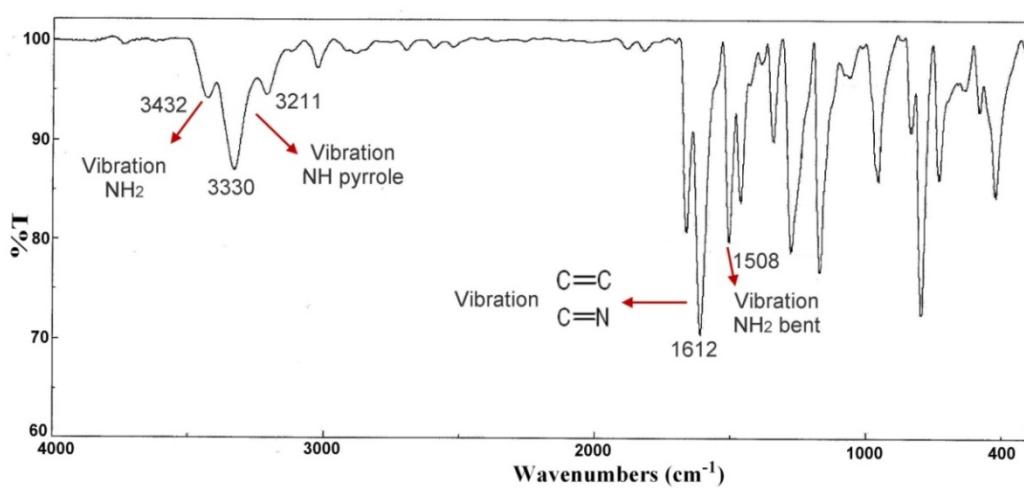
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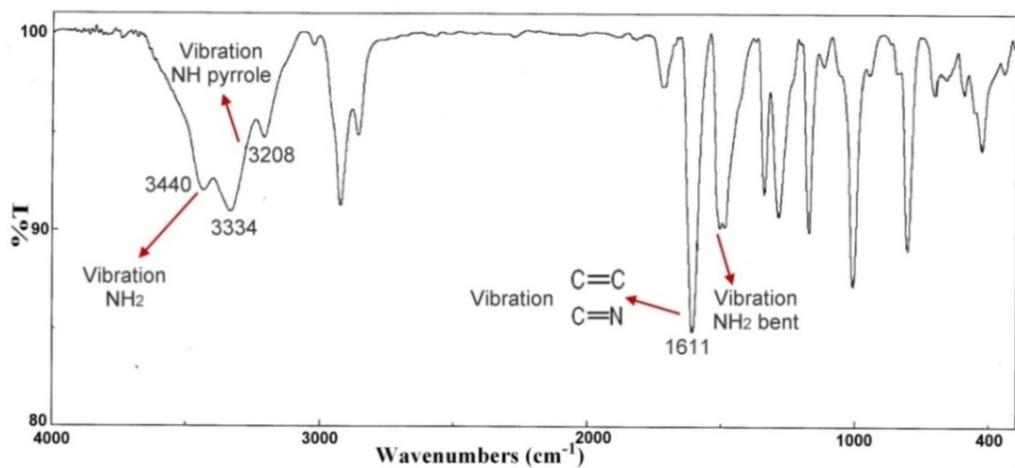
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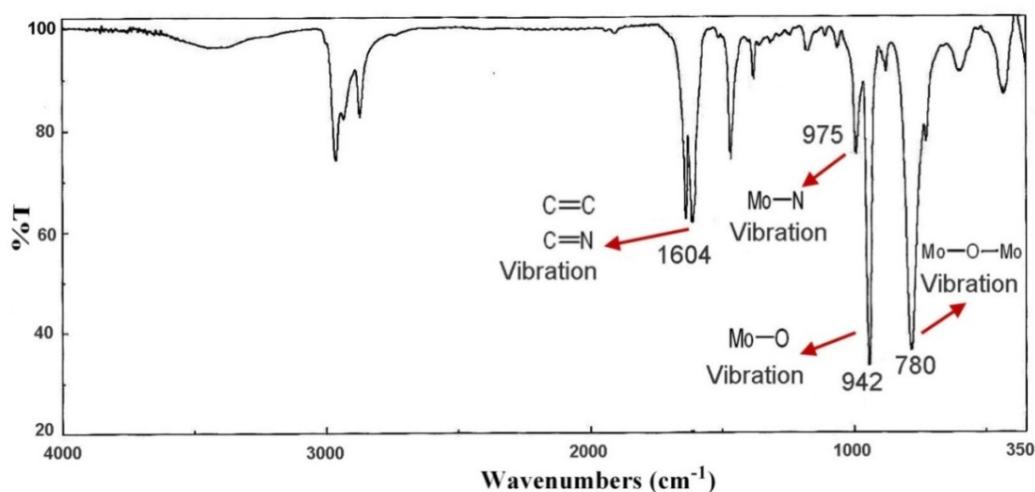
(A)



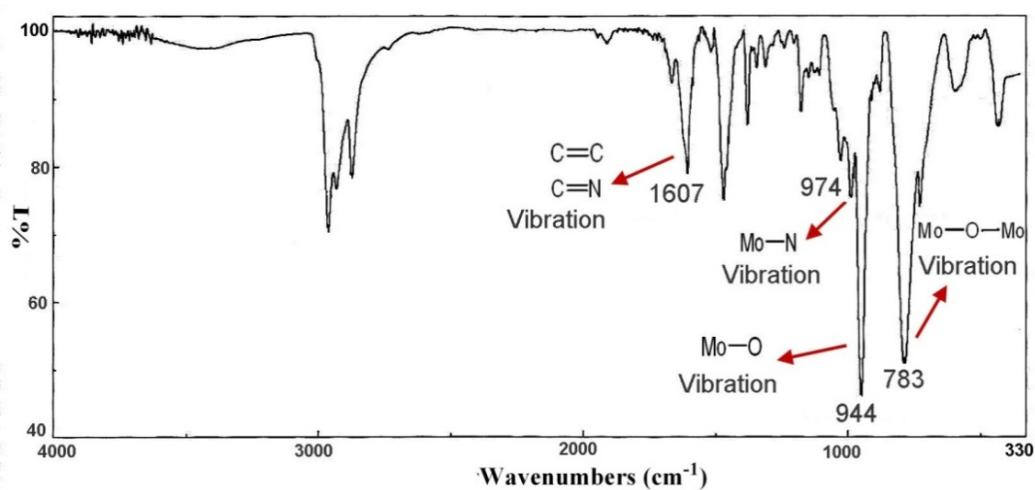
(B)



(C)

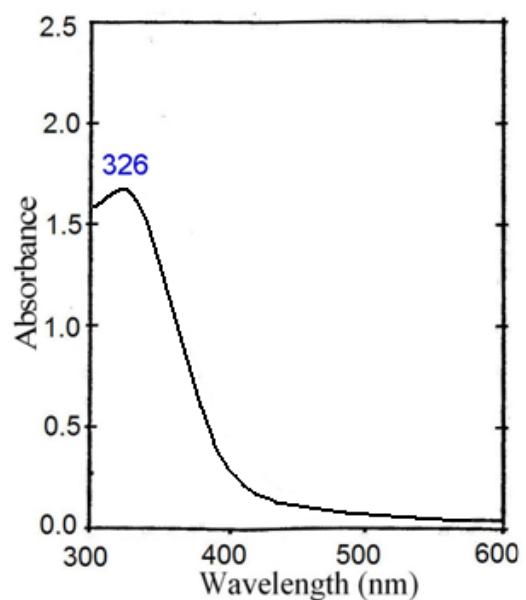


(D)

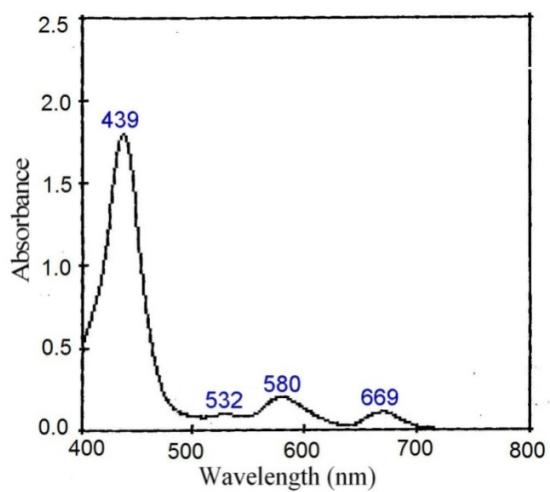


(E)

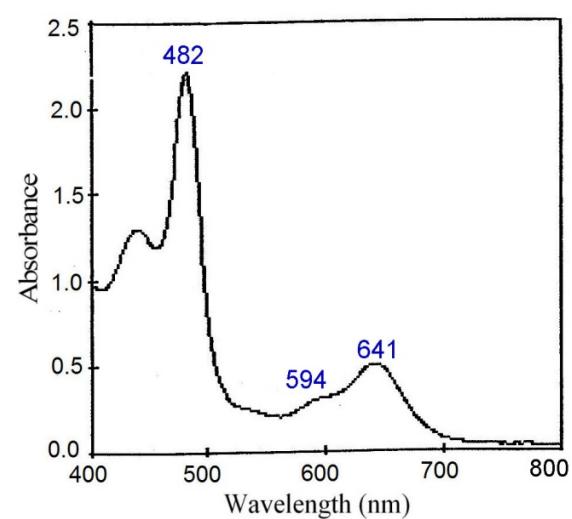
**Fig. S1.** FT IR spectra of: (A) Tetrabutylammonium hexamolybdate,  $[(\text{C}_4\text{H}_9)_4\text{N}]_2[\text{Mo}_6\text{O}_{19}]$ ; (B) 5,10,15,20-tetrakis(4-aminophenyl)porphyrin (1); (C) 5,10,15,20-tetrakis(4-aminophenyl)porphyrinatomanganese(III) chloride (2); (D) hybrid compound (1a); (E) hybrid compound (2a).



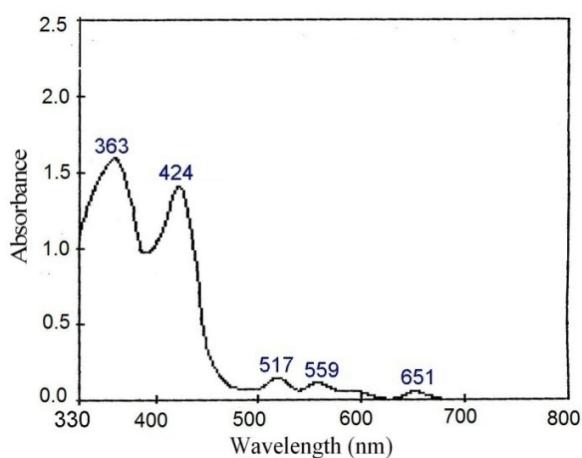
(A)



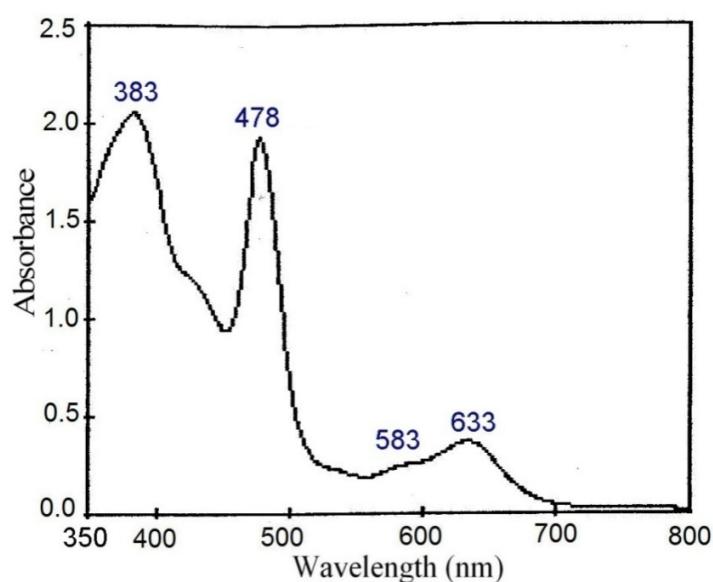
(B)



(C)

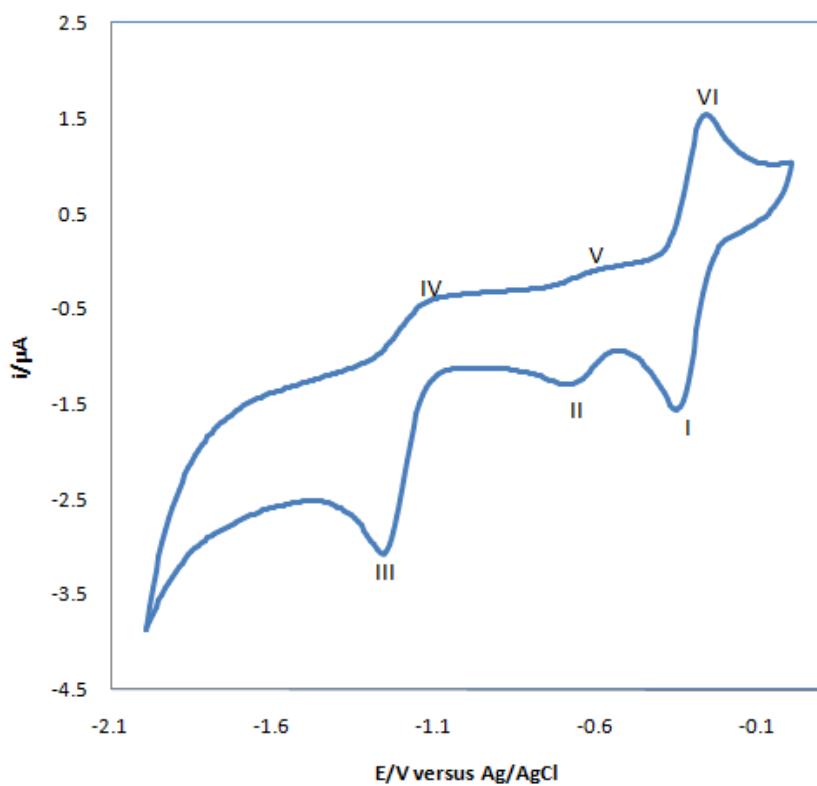


(D)

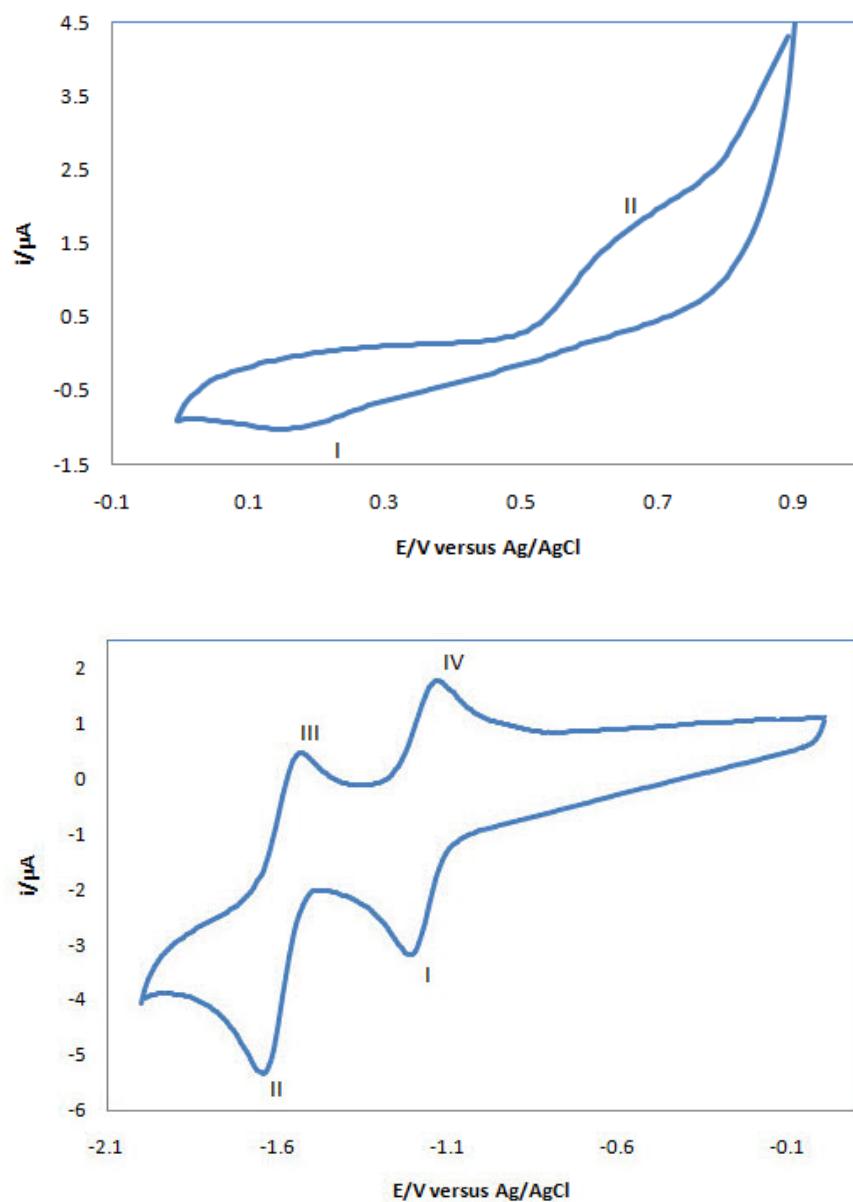


(E)

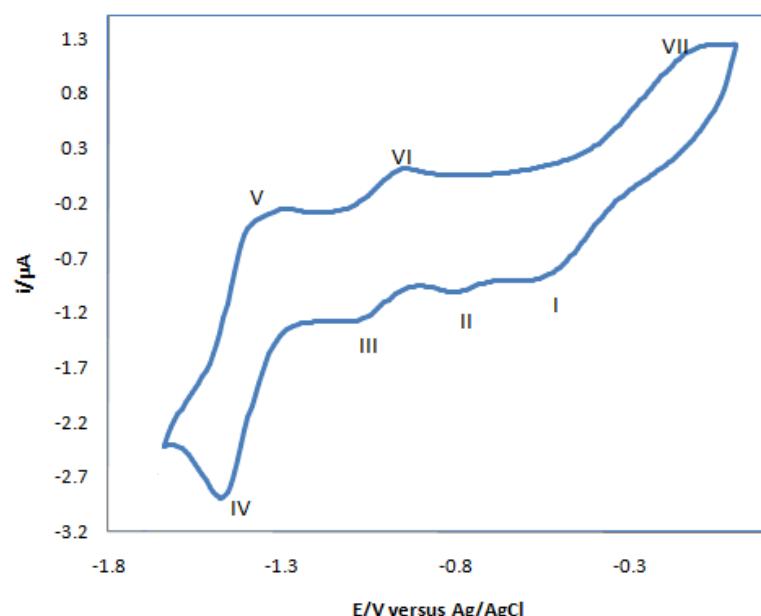
**Fig. S2.** UV-Vis spectra of : (A) Tetrabutylammonium hexamolybdate,  $[(C_4H_9)_4N]_2[Mo_6O_{19}]$ , (B) 5,10,15,20-tetrakis(4-aminophenyl)porphyrin (**1**); (C) 5,10,15,20-tetrakis(4-aminophenyl)-porphyrinatomanganese(III) chloride (**2**); (D) hybrid compound (**1a**); (E) hybrid compound (**2a**).



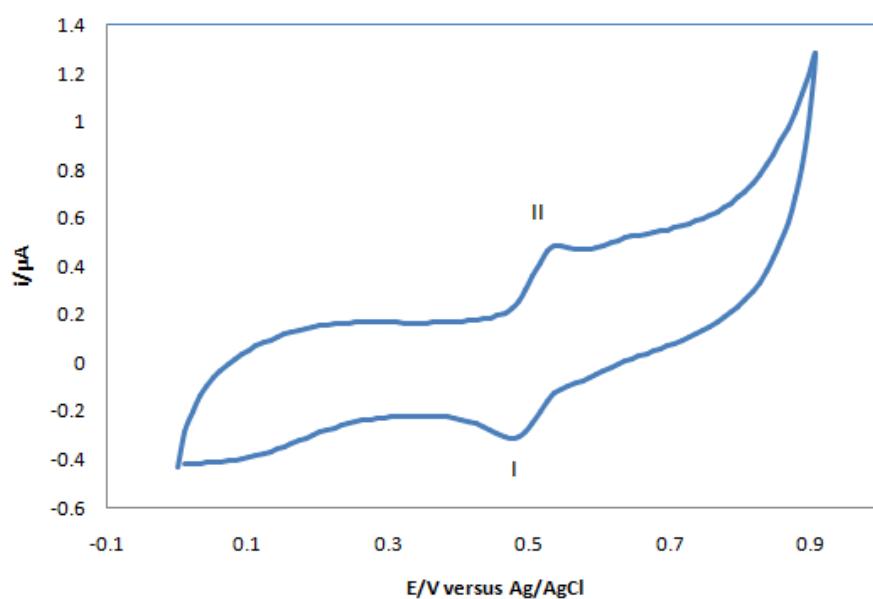
(A)

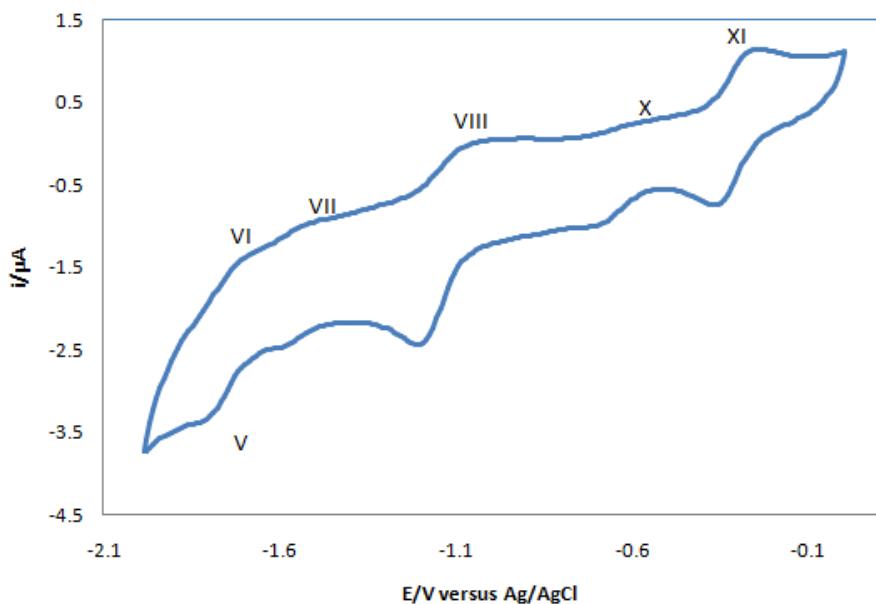


(B)

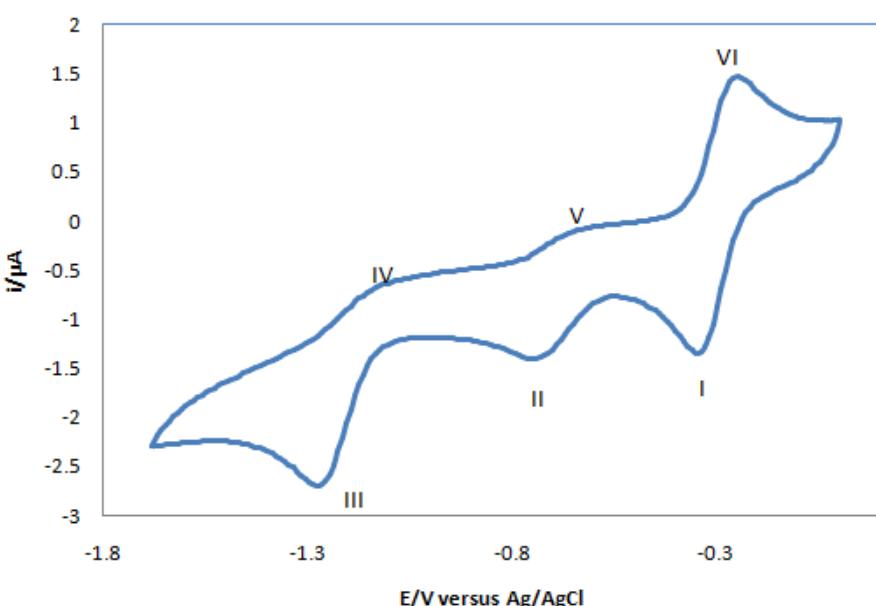


(C)





(D)



(E)

**Fig. S3.** Cyclic voltammetry of : (A) Tetrabutylammonium hexamolybdate,  $[(\text{C}_4\text{H}_9)_4\text{N}]_2[\text{Mo}_6\text{O}_{19}]$ ; (B) 5,10,15,20-tetrakis(4-aminophenyl)porphyrin (**1**); (C) 5,10,15,20-tetrakis(4-aminophenyl)- porphyrinatomanganese(III) chloride (**2**); (D) hybrid compound (**1a**); (E) hybrid compound (**2a**).