

### Supporting Information:

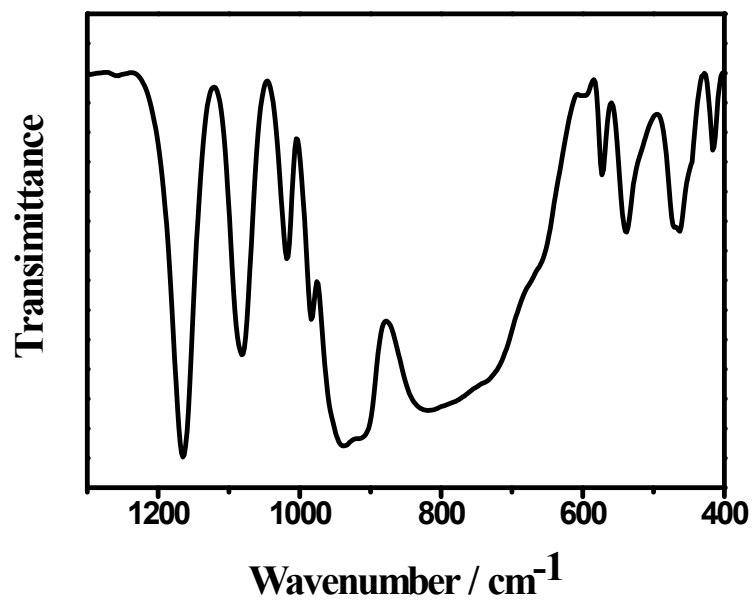
#### Preparation of polyoxometalate stabilized gold nanoparticles and composite assembly with graphene oxide: enhanced electrocatalytic performance

Lin Suo, Wenmei Gao, Yu Du, Ruiqiang Wang, Lixin Wu, Lihua Bi\*

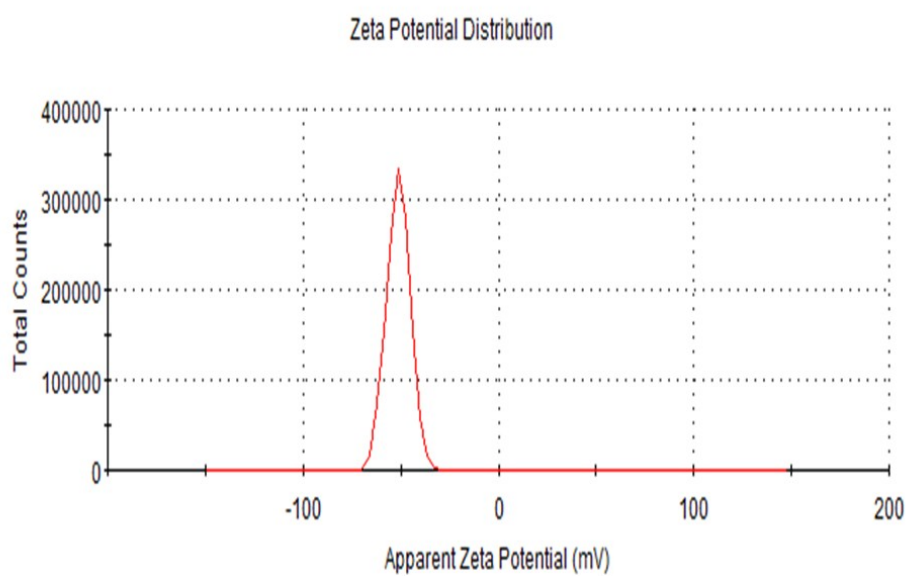
**Table S1.** The difference of anode and cathode currents for four composite films.

Film number	Wave	Anode current ( $\mu\text{A}$ )	Cathode current ( $\mu\text{A}$ )	Current difference ( $\mu\text{A}$ )
Film 1	I	18.14	30.12	11.98
	II	11.76	20.14	8.38
Film 3	I	25.98	41.25	15.27
	II	12.92	27.01	14.09
Film 4	I	19.07	43.94	24.87
	II	1.01	43.55	42.54
Film 5	I	0.53	58.16	57.63
	II	19.37	62.02	42.65

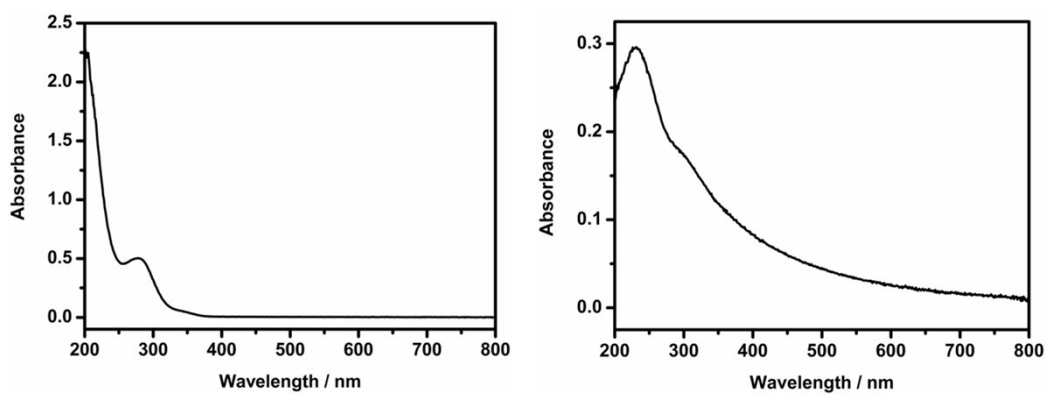
Note: All the currents are taken with absolute value.



**Fig. S1.** IR spectrum of P<sub>5</sub>W<sub>30</sub> in KBr pellet.



**Fig. S2.** Zeta potential pattern of the Au@P<sub>5</sub>W<sub>30</sub> NPs in water.



**Fig. S3.** UV-vis spectra of P<sub>5</sub>W<sub>30</sub> ( $5 \times 10^{-6}$  mM) (left) and GO (right) in aqueous solutions.