Electronic Supplementary Information

Insights on the corrosion inhibition of copper in hydrochloric acid solution by the self-assembled film of 4-octylphenol

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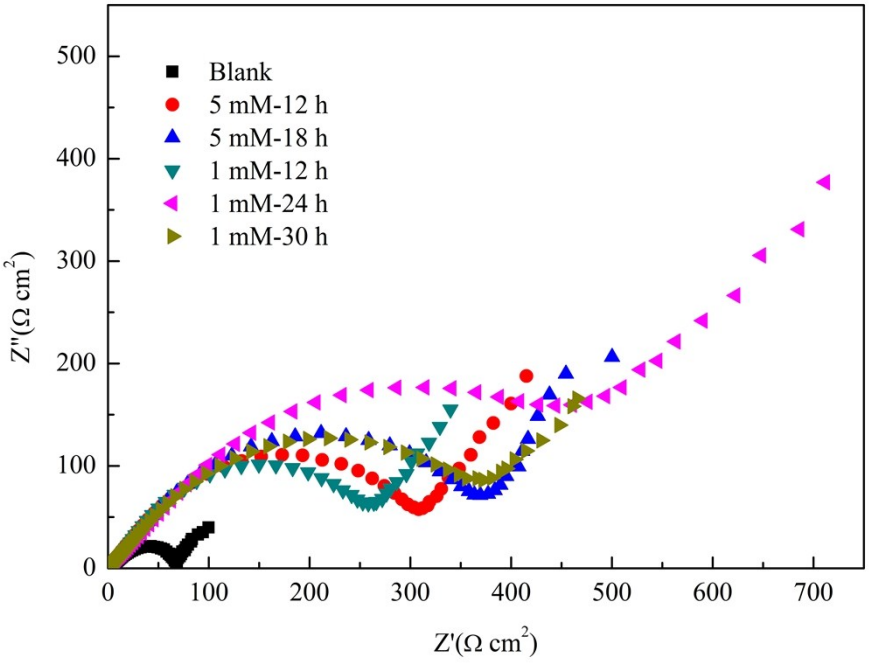

Fig. S1 Nyquist plots in 0.5 M HCl for the blank copper and OP covered copper electrodes immersed in 1.0 and 5.0 mM OP solution for different time

Table S1 Impedance parameters for the blank copper and copper electrodes self-assembled in 1.0 and 5.0 mM OP solution for different time in 0.5 M HCl solution.

C-*t* (mM-h)	Q_f ($\mu S\ s^n\ cm^{-2}$)	n_1	R_f ($\Omega\ cm^2$)	Q_{dl} ($\mu S\ s^n\ cm^{-2}$)	n_2	R_{ct} ($\Omega\ cm^2$)	W ($m\Omega\ cm^2$)	η_R (%)
0	—	—	—	1452	0.60	69.5	101	—
5-12	488.7	0.71	24.4	414.2	0.82	252.4	18.2	74.9
5-18	507.9	0.68	38.1	420.4	0.83	292.3	15.8	79.0
1-12	743.4	0.67	11.2	982.5	0.81	220.8	21.6	70.0
1-24	665.8	0.73	34.6	192.5	0.83	472.1	18.1	86.3
1-30	312.9	0.74	21.1	655.2	0.68	331.5	22.3	80.3