5GH Foundation

Questionable Data on WEI Gaofei's Master Thesis

An investigation reveals that data presented on Figure 5-7, 5-8, 5-9 and 5-10 of WEI Gaofei's (魏高飞) Master Thesis was reused from the article [1] where he was listed as the first author. Critically, the same dataset was claimed to have been obtained under different experimental conditions in the two documents: In his Master Thesis, he claimed the experiments were conducted at 50 deg.C, while in the article [1], he claimed the experiments were conducted at 20 deg.C. The actual experimental conditions under which this dataset was generated remain unconfirmed and unclear.

10.1016/j.molliq.2024.124501

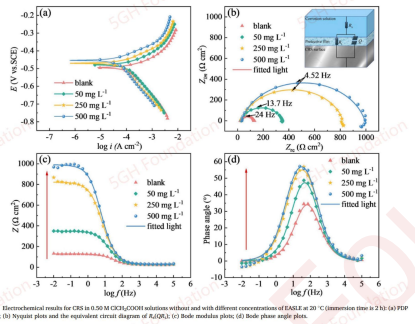

Fig. 6. Electrochemical results for CRS in 0.50 M $ClCH_2COOH$ solutions without and with different concentrations of EASLE at 20 °C (immersion time is 2 h): (a) PDP curves; (b) Nyquist plots and the equivalent circuit diagram of $R_s(Q_{dl}R_{ct})$; (c) Bode modulus plots; (d) Bode phase angle plots.

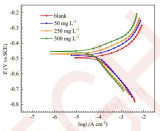

图 5-7 50 ℃时 CRS 在不含和含不同浓度 EASLE 的 0.50 mol/L $ClCH_2COOH$ 介质中的动电位极化曲线 (浸泡时间为 2 h)

Fig. 5-7 Potentiodynamic polarization curves for CRS in 0.50 mol/L $ClCH_2COOH$ without and with different concentrations of EASLE at 50 ℃ (immersion time is 2 h)

Master's thesis

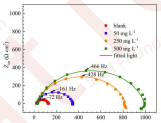

图 5-8 50 ℃时 CRS 在不含和含不同浓度 EASLE 的 0.50 mol/L $ClCH_2COOH$ 介质中的 Nyquist 图

Fig. 5-8 Nyquist plots of the corrosion of CRS in 0.50 mol/L $ClCH_2COOH$ medium without and with different concentrations of EASLE at 50 ℃

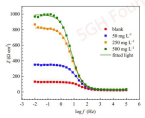

图 5-9 在 50 ℃条件下 CRS 在不含和含有不同浓度 EASLE 的 0.50 mol/L $ClCH_2COOH$ 介质中的 Bode 模值图

Fig. 5-9 Bode modulus of the corrosion of CRS in 0.50 mol/L $ClCH_2COOH$ medium without and with different concentrations of EASLE at 50 ℃

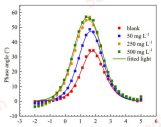

图 5-10 50 ℃时 CRS 在不含和含有不同浓度 EASLE 的 0.50 mol/L $ClCH_2COOH$ 介质中的 Bode 相角图

Fig. 5-10 Bode phases of the corrosion of CRS in 0.50 mol/L $ClCH_2COOH$ medium without and with different concentrations of EASLE at 50 ℃

[1] 10.1016/j.molliq.2024.124501
