

论文摘要

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电解法处理铬渣溶浸液的电极反应机理

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摘 要: 运用线性电位扫描伏安法(LSV)分析电解法处理铬渣溶浸液中 Cr^{6+} 初始浓度、溶液初始酸度、电位扫描速度等因素对铁电极极化曲线测定的影响,并确定了三者的最佳取值;依据峰电位,峰电流密度与扫描速度的关系,研究了体系电极过程的可逆性,发现该电极过程具有明显的不可逆性特征。

关键字: 线性电位扫描伏安法;极化曲线;铬渣溶浸液

Electrode reactive mechanism of chromium residue solution treatment by electrolytic method

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Abstract: Linear sweep voltammetry(LSV) was employed to investigate the influence of the initial concentration of Cr^{6+} , pH of solutions and the scanning speed of potential on the polarization curves of Fe electrode. The three optimum values were given from experimental data. Based on the relationship of peak potential, peak current density and scanning speed, it is found that the electrochemical process is irreversible.

Key words: linear sweep voltammetry; polarization curve; chromium residue solution

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