

Short Communication

Surface Roughness Influence on CPE Parameters in Electrolytic Cells

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We investigate how the changes on the electrode surface may influence the behavior of the constant-phase elements (CPE) and, consequently, electrical response of an electrolytic cell. This analysis is performed by using an experiment with Milli-Q water and stainless steel electrodes with three different types of polishment: smooth, fine sandpaper, and rough sandpaper. The experimental data is obtained from an Electrical Impedance Spectroscopy (EIS) measure and analyzed by means of an equivalent circuit with CPE elements.

Keywords: Electrical Impedance, CPE, Surface roughness, PNP

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