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Review

Electrochemical Methods of Real Surface Area Determination of Noble Metal Electrodes – an Overview

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The electrochemical methods of real surface area determination of noble metal electrodes and their alloys are summarized. These methods utilize hydrogen adsorption, surface oxide reduction, double layer capacitance, adsorbed carbon monoxide stripping and underpotential deposition of metals. The principles, advantages and limitations of the methods are discussed. The examples of their use are shown. The comparison between various methods is presented.

Keywords: Real surface area; Noble metals; Alloys; Electrodes; Adsorption

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