

Structure sensitivity of fuel cell anode reactions

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This talk discusses the structure sensitivity of fuel cell anode reactions such carbon monoxide oxidation, methanol oxidation, and ethanol oxidation on stepped single-crystal platinum electrodes. Electrochemistry experiments are complemented with in situ infrared spectroscopy and on-line mass spectrometry, and compared to experimental results obtained in ultra-high vacuum and density functional theory calculations. Mechanistic implications of our results will be discussed.

Literature:

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