SFB1242

SFB 1242 Nichtgleichgewichtsdynamik kondensierter Materie in der Zeitdomäne

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Open-Minded

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Molecular-scale insights into surface (electro)chemistry

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Gathering molecular-level information about electrochemical interfaces is highly desirable to advance or understanding of – and to ultimately design and control – efficient electrochemical processes that underly a manifold of 'green' energy conversion applications, such as electrosynthesis and -catalysis, or (physiological) electron transfer systems in general. Despite the vast interest in solid/liquid surface chemistry, advanced operando experimental (and theoretical) tools that provide quasi-atomistic insight into chemical processes at (electrified) solid/liquid interfaces with nanoscale spatial and real-time chemical resolution are still scarce.

In my talk, I will highlight our recent methodological advances with operando nearfield Raman spectroscopy and break-junction experiments that allow us to gain correlated chemical, topographic and electronic molecular-level information about, for example, adsorption geometry, chemical interaction and conversion and molecular conductance with extreme spatial resolution under reaction conditions.

Für diese Zeit steht eine Kinderbetreuung nach vorheriger Anmeldung zur Verfügung.

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