Stanford

Adam Nielander

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Bio

BIO

My research focuses in the areas electrocatalysis, electrolysis, and solar-driven chemical fuel production. We develop catalysts, instrumentation, methodologies, and device engineering/designs for improved production of chemical fuels (e.g., H2, NH3, ethanol) from abundant feedstocks (e.g., H2O, N2, CO2). This work includes in situ and operando studies of catalyst/ionomer interfaces under operating conditions and is underpinned by complementary driving aims to develop next-generation electrochemical technologies and to elucidate the fundamental principles that dictate the performance of sustainably-driven electrochemical processes.

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