Long-term stable CO_2 reduction with high ethene yield and high current densities

Yannick Jännsch defended his doctoral thesis

Congratulations!

Yannick Jännsch defended his doctoral thesis about "Electrochemical CO_2 reduction by pulsed electrolysis: Development and optimization of an ethene-selective, long-term stable and scalable process" (German original title: "*Elektrochemische CO_2-Reduktion durch gepulste Elektrolyse: Entwicklung und Optimierung eines Ethen-selektiven, langzeitstabilen und skalierbaren Prozesses*") on Tuesday, August 2nd, 2022.

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Dr. Jännsch already published several parts of his thesis in peer-reviewed journals.

Y. Jännsch, M. Hämmerle, E. Simon, M. Fleischer, R. Moos:
Contributions of Pulsed Operation Along with Proper Choice of the Substrate for Stabilizing the Catalyst Performance in Electrochemical Reduction of CO_2 Toward Ethylene in Gas Diffusion Electrode Based Flow Cell Reactors
Energy Technology, **10**, 2200046 (2022), doi: 10.1002/ente.202200046

Y. Jännsch, M. Hämmerle, J. Leung, E. Simon, M. Fleischer, R. Moos:
Gas evolution in electrochemical flow cell reactors induces resistance gradients with consequences for the positioning of the reference electrode
RSC Advances, **11**, 28189-28197 (2021), doi: 10.1039/D1RA05345K

Y. Jännsch, J.J. Leung, M. Hämmerle, E. Magori, K. Wiesner-Fleischer, E. Simon, M. Fleischer, R. Moos:
Pulsed potential electrochemical CO_2 reduction for enhanced stability and catalyst reactivation of copper electrodes
Electrochemistry Communications, **121**, 106861 (2020), doi: 10.1016/j.elecom.2020.106861

The evaluation board and the candidate.
From left to right: Prof. Roth, Prof. Moos, Dr. Jännsch, Prof. Fleischer, and Prof. Brüggemann