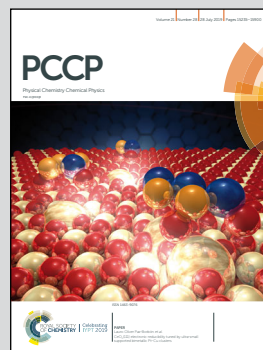


Showcasing research from the group of Professor Yasuaki Einaga,
Department of Chemistry, Keio University, Japan.

Electrochemical reduction of CO₂ using palladium modified boron-doped diamond electrodes: enhancing the production of CO

The Einaga group is working on the electrochemical reduction of CO₂ using boron-doped diamond (BDD) electrodes. This particular work is focusing on the study of CO₂ electrochemical reduction on the surface of a metal modified BDD electrode. CO production could be improved to 53.3% with the deposition of palladium particles by adjusting the amount of deposited palladium particles and the applied potential reduction. Meanwhile, the production of HCOOH, which used to be the product on the bare BDD electrode, was insignificantly affected.

As featured in:



See Prastika Krisma Jiwanti
and Yasuaki Einaga,
Phys. Chem. Chem. Phys.,
2019, 21, 15297.