

Showcasing research from Professor Ren's laboratory, School of Chemical Engineering and Technology, Xi'an Jiaotong University, Xi'an, China.

Tuning intermediate binding enables selective electroreduction of carbon dioxide to carbon monoxide on a copper-indium catalyst

Copper is found to catalyze the exclusive formation of carbon monoxide if an optimum amount of indium is coated on the surface of copper nanowires. Through a rigorous analysis of electrochemical reduction of CO, electrochemical adsorption of *CO and *in situ* Raman spectroscopy, we reveal that In is the active site for carbon monoxide generation through quick desorption of carbon monoxide.

Image reproduced by permission of Shengzhou Xu and Dan Ren from *Chem. Sci.*, 2025, **16**, 8661.





