



Showcasing research from Professor Bilu Liu's laboratory, Tsinghua-Berkeley Shenzhen Institute & Institute of Materials Research, Tsinghua Shenzhen International Graduate School, Tsinghua University, Shenzhen, China.

A robust chromium-iridium oxide catalyst for high-current-density acidic oxygen evolution in proton exchange membrane electrolyzers

We report a chromium-iridium oxide electrocatalyst with strong coupling interfaces, endowing it with high activity and stability for OER. This catalyst delivers ultrahigh current density at a low cell voltage and decent stability in proton exchange membrane electrolyzers. The hydrogen production cost of this electrolyzer is lower than the DOE (US) targets in 2026. This work not only introduces a new strategy to produce highly efficient and stable electrocatalysts, but also allows their practical use in industrial electrolyzers.

As featured in:



See Qiangmin Yu, Guoliang Chai, Bilu Liu *et al.*, *Energy Environ. Sci.*, 2023, **16**, 3734.