



Highlighting a study on MoS₂-based hydrogen evolution reaction electrocatalyst by a group of researchers led by Prof. Seong-Ju Hwang from Yonsei University.

Boride-induced phase tuning of defect-introduced MoS₂ nanosheets to boost the electrocatalytic hydrogen evolution reaction

Transition metal dichalcogenides have garnered significant attention owing to their promising functionality and high economic feasibility. This study reports the remarkable improvement of the electrocatalyst performance of MoS₂ nanosheets *via* the boride-substitution-driven fine-tuning of their crystal phases. The coordinative bonding of boride ions to defective Mo sites in interlayer-expanded MoS₂ nanosheets is quite effective in optimizing the electrocatalytic activity and durability for hydrogen evolution reaction.

As featured in:



See Xiaoyan Jin,
Seong-Ju Hwang *et al.*,
J. Mater. Chem. A, 2023, **11**, 25308.