



Showcasing cutting-edge research for catalytic hydrogen production on MXene fabricated catalysts from Dr Ejaz Hussain and Dr Khezina Rafiq's laboratory 52s, Institute of Chemistry, The Islamia University of Bahawalpur-63100, Pakistan.

Unveiling the potential of MXene-fabricated catalysts: an effective approach for H₂ generation from water splitting

This study represents an advanced scientific approach to generating hydrogen from water splitting. Reported catalysts (*i.e.*, TiO₂@Ti₃C₂T_x and TiO₂@C) have been found to be extremely stable and effective for hydrogen generation. The results depict that the relatively higher catalytic activities of TiO₂@Ti₃C₂T_x are attributed to the existence of multilayer MXenes. The findings of this study have been anticipated to guide the design of MXene-supported catalysts for hydrogen energy applications. Moreover, comprehensive assessment has made this work distinct from other reported studies in the same area.

As featured in:



See Khezina Rafiq,
Ejaz Hussain *et al.*,
Nanoscale Adv., 2024, **6**, 5861.