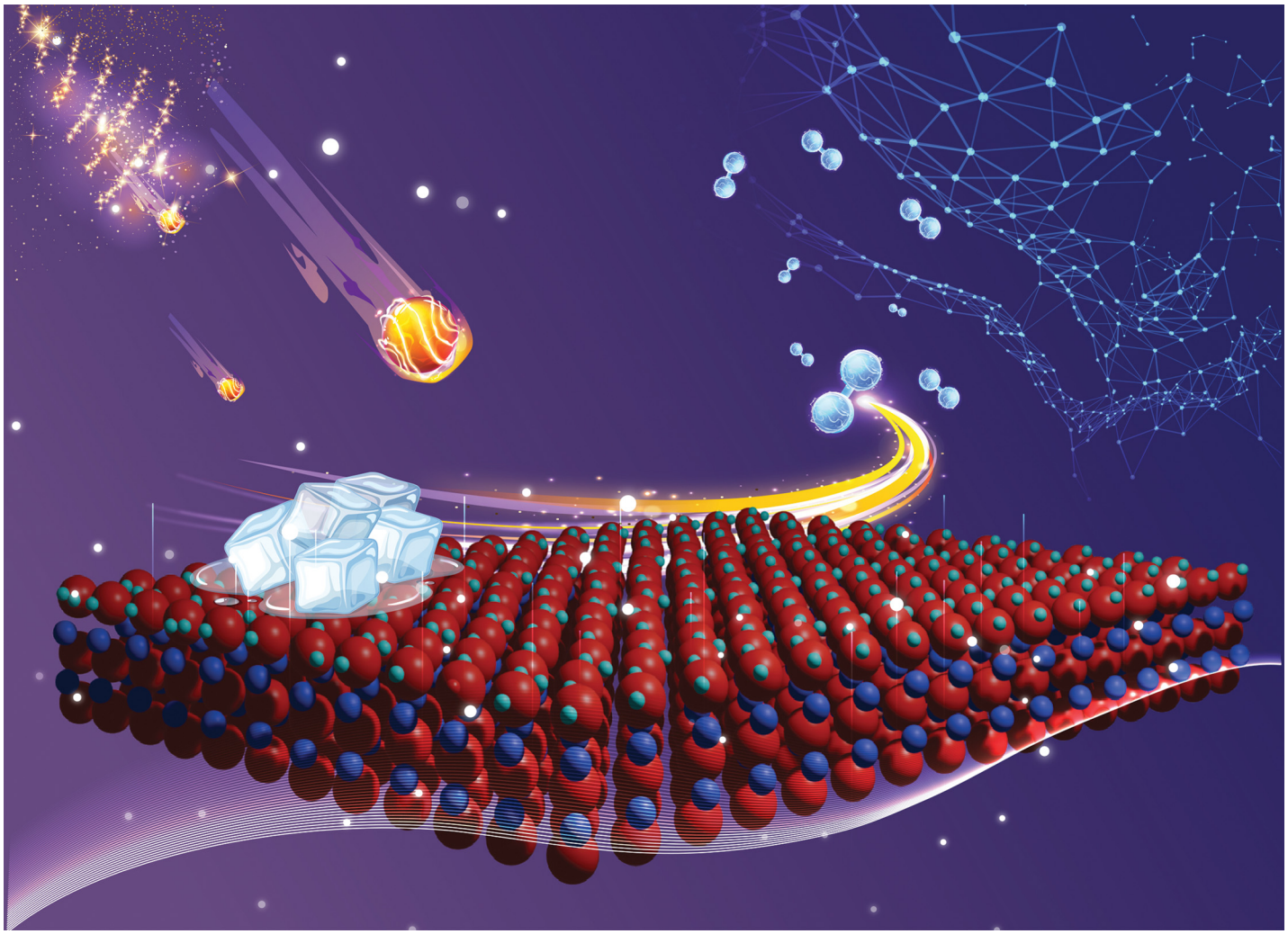
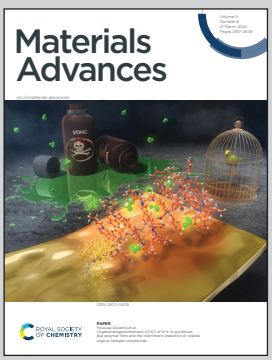


Showcasing a cutting-edge research for catalytic hydrogen production on Pd@$Ti_3C_2T_x$–TiO_2 from Dr Ejaz Hussain and Dr Khezina Rafiq's laboratory 52s, Institute of Chemistry, The Islamia University of Bahawalpur–63100, Pakistan.

Scaling up the charge transfer on Pd@$Ti_3C_2T_x$–TiO_2 catalysts: a sustainable approach for H_2 generation *via* water splitting

This study represents an advanced scientific approach for hydrogen generation from water splitting. As reported catalysts *i.e.* Pd@$Ti_3C_2T_x$–TiO_2 have been found to be extremely stable and attractive for hydrogen generation. The results depict that, Pd, along with TiO_2, not only controls the charge transfer but also enhances the catalytic performances during photoreaction. Findings of this study can be anticipated to guide design of new catalysts for hydrogen energy applications. Moreover, comprehensive assessment has made this work distinct among other reported studies in the same area.

As featured in:



See Khezina Rafiq, Ejaz Hussain *et al.*, *Mater. Adv.*, 2024, **5**, 2238.

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