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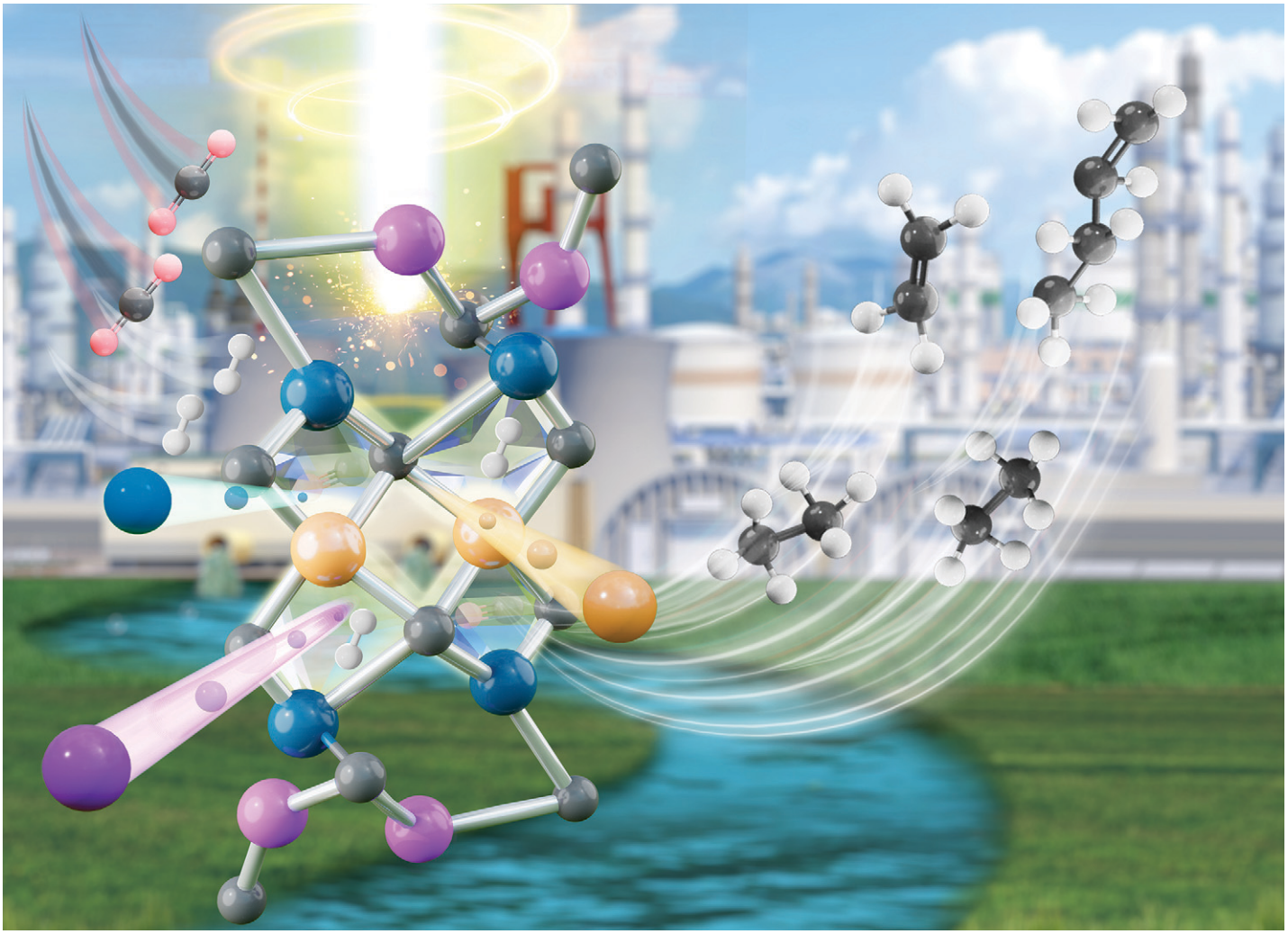
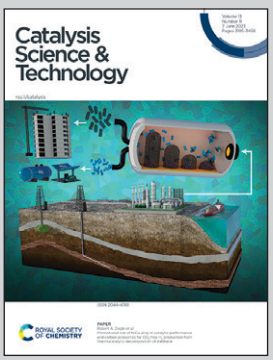


Showcasing research from Professor Xuning Li's laboratory, State Key Laboratory of Catalysis, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, China

Topotactic transformation of metal–organic frameworks to iron-based catalysts for the direct hydrogenation of CO_2 to olefins

A series of Fe-based catalysts with different doped metal promoters (Zn, Mn and Ni) were synthesized to investigate the impact of the promoters on the selectivity of CO_2 hydrogenation. By using Mössbauer spectroscopy, it was observed that the proportion of specific Fe sites within Fe_5C_2 (site II and III) is correlated with both the ratio of olefin to paraffin and olefin selectivity.

As featured in:



See Qi Yu, Xiong Su, Xuning Li *et al.*, *Catal. Sci. Technol.*, 2023, **13**, 3258.

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