



Showcasing research by Associate Professor Ruyi Zhong and Professor Siyu Ye *et al.* from Guangzhou University, China and Professor Limin Huang *et al.* from Southern University of Science and Technology, China.

Room-temperature fabrication of defective CoO_xH_y nanosheets with abundant oxygen vacancies and high porosity as efficient 5-hydroxymethylfurfural oxidation electrocatalysts

Defective cobalt oxide hydrate (CoO_xH_y) nanosheets with abundant oxygen vacancies and high porosity were fabricated *via* room-temperature reductive treatments with methylamine (MA) and/or NaBH_4 (BH). The oxygen vacancies facilitated the adsorption and activation of 5-hydroxymethylfurfural (HMF), the mesopores improved the mass transportation of reactants and products, whereas the micropores switched the product selectivity.

As featured in:



See Siyu Ye and Limin Huang *et al.*, *Green Chem.*, 2023, 25, 4674.