



Showcasing research from Professor Hong's laboratory, Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, China.

Water-stable metal-organic frameworks (MOFs): rational construction and carbon dioxide capture

To prepare water-stable MOFs, several important strategies such as increasing the bonding strength of building units and introducing hydrophobic units have been proposed. Many water-stable MOFs have been prepared for capturing carbon dioxide in various scenarios, including flue gas decarbonization, direct air capture, and purified crude natural gas. Here, the design and synthesis of water-stable MOFs, as well as their applications in carbon capture are highlighted.

As featured in:



See Qihui Chen,
Maochun Hong *et al.*,
Chem. Sci., 2024, **15**, 1570.