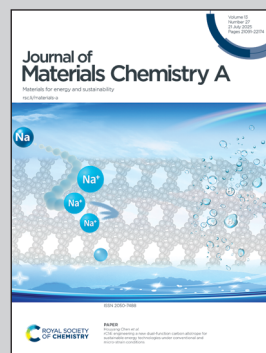


Showcasing research from Professor Teruki Motohashi's laboratory, Department of Applied Chemistry, Kanagawa University, Japan.

Thermally stable proton-conducting oxy-hydroxides synthesized in concentrated water vapor

The innovative synthesis method—“*vapor hydroxidation*”—using high-temperature treatment in concentrated water vapor yields a thermally stable, proton-conducting oxy-hydroxide,  $[\text{Ba}_2\text{O}_x(\text{OH})_y]_{0.55}\text{InO}_2$ , featuring a unique misfit-layered structure. Image reproduced by permission of Teruki Motohashi from *J. Mater. Chem. A*, 2025, **13**, 21472.

As featured in:



See Miwa Saito,  
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