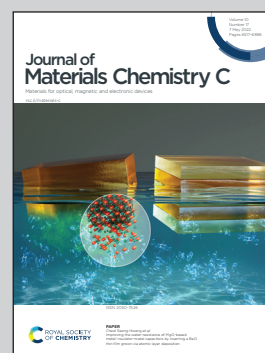


**Showcasing research from Professor Burton's laboratory,
Department of Physics, Shanghai University, China.**

Hydride ion intercalation and conduction in the electride Sr_3CrN_3

The newly discovered electride Sr_3CrN_3 has a honeycomb structure with channels that permeate throughout. It is found that these channels possess almost ideal properties for hydride ion transport as evidenced by the lowest activation energy ever reported. This finding is likely to be of significance in fuel-cell or energy-storage applications due to the universal availability of hydrogen. More broadly, the study highlights the potential importance of electrides to a clean energy future.

As featured in:



See Lee A. Burton *et al.*,
J. Mater. Chem. C, 2022, **10**, 6628.