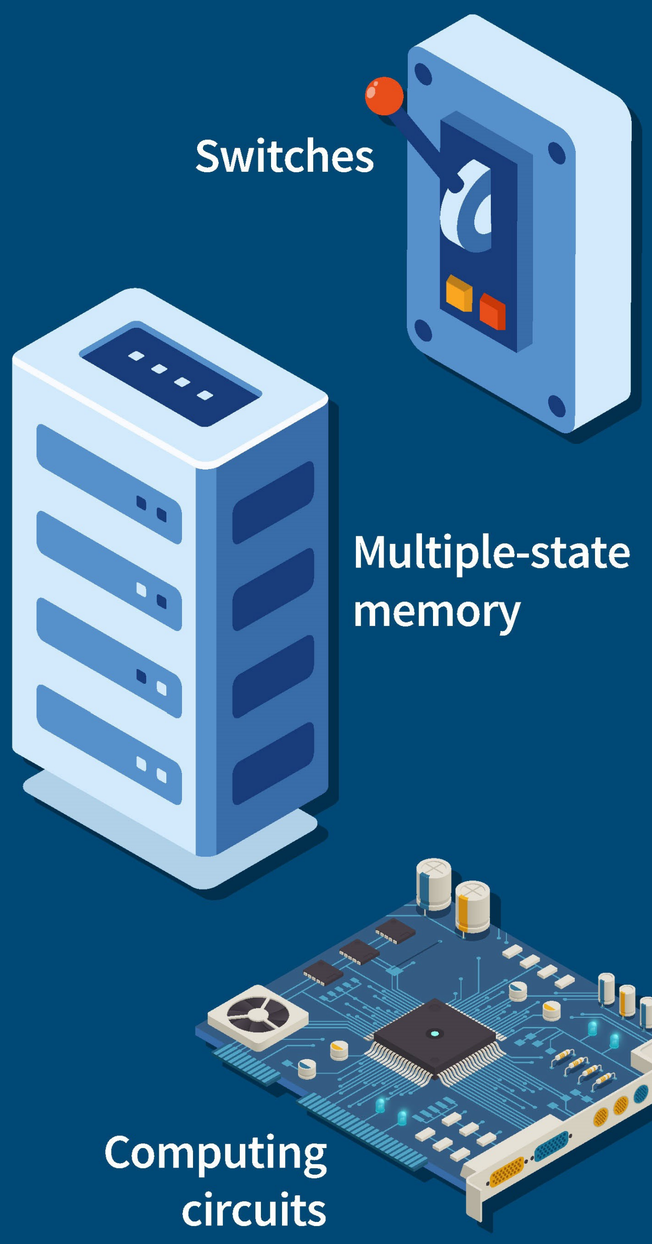
A Tetrafluoroborate-Based Perovskite with Multiferroic Properties Above Room Temperature

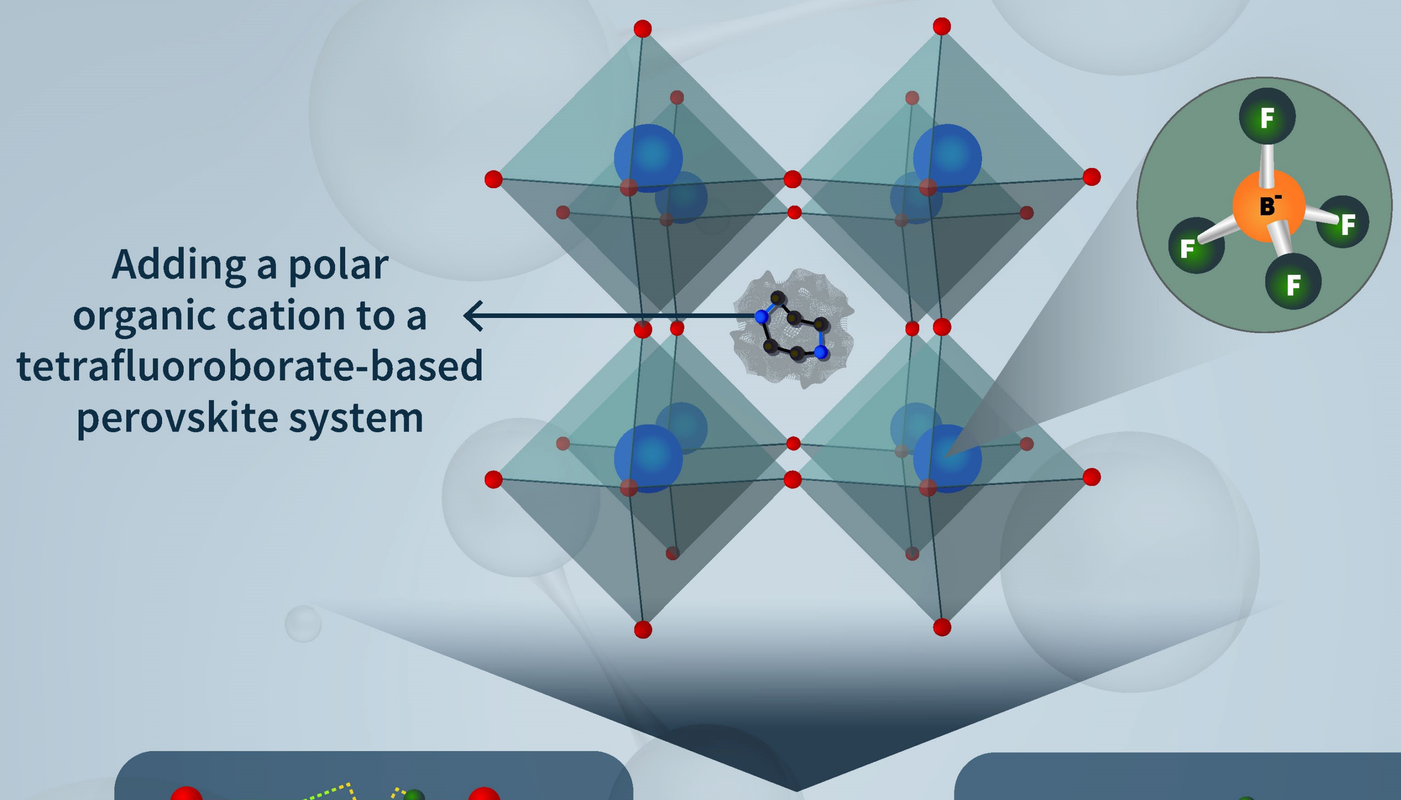
Chemical Science

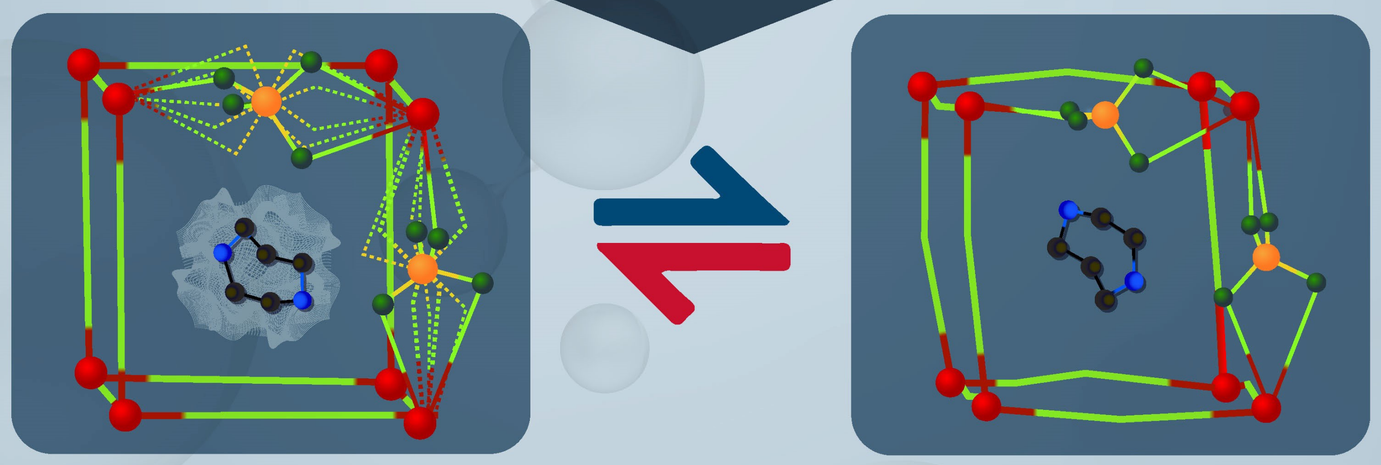
Functional materials with multiferroic properties above room temperature can be used to make



But designing such materials has been challenging

Structure of a new material obtained that shows multiferroic properties (co-existing ferroelectric and ferroelastic states) above room temperature





Ferroelastic state at below 455 K **with disordered cations**

Ferroelectric state at below 311 K **with ordered cations**

This system provides clues for the development of advanced multiferroic materials for use in next-generation flexible devices

Room-temperature ferroelectric and ferroelastic orders coexisting in a new tetrafluoroborate-based perovskite
Zhang et al (2021) | Chemical Science | DOI: 10.1039/d1sc01345a

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