

Ferromagnetism

Charge density wave



Showcasing collaborative research from Institute of Materials Research and Engineering, and National University of Singapore, Singapore.

Coexistence of ferromagnetism and charge density waves in monolayer LaBr_2

Ferromagnetism in two-dimensional materials holds potential for next-generation high-performance electronic device applications. However, ferromagnetism is often suppressed by charge density waves (CDWs) due to periodic charge density redistribution in these materials, hindering their magnetic applications. Here, IMRE and NUS researchers report a new form of CDWs in a monolayer electride LaBr_2 , in which the CDW promotes magnetism instead of suppressing it.

As featured in:



See Yuan Ping Feng, Ming Yang, Lei Shen et al.,
Nanoscale Horiz., 2023, **8**, 1054.