

## OXIDE QUASICRYSTALS: NEW 2D MATERIALS FROM HYPERSPACE?

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The discovery of a new member in the family of two-dimensional materials will be presented: A 2D oxide quasicrystal that is long-range ordered, but aperiodic. Derived from a periodic  $\text{BaTiO}_3$  film on Pt(111), it reveals a sharp 12-fold diffraction pattern, a symmetry forbidden for periodic structures. STM resolves the aperiodic structure of surface atoms, arranged in squares, triangles, and rhombi. Peculiarities and structure evolution of related films will be also discussed.

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