

The background of the entire page is a scanning electron micrograph (SEM) showing a highly textured, hierarchical surface. The surface is composed of many small, overlapping, plate-like or leaf-like structures that create a rough, three-dimensional topography. The color scheme is a gradient of purples and blues, with some areas appearing lighter and others darker, highlighting the intricate details of the surface morphology. Several small, dark, circular features are scattered across the surface, possibly representing pores or specific structural elements.

ADVANCED FUNCTIONAL MATERIALS

SUPEROLEOPHOBIC MATERIALS

A single-step and single-component bio-inspired method for the fabrication of hierarchical superoleophobic surfaces is presented by B. Pokroy and co-workers on page 4572. Fabrication via the thermal deposition of fluorinated wax results in crystalline, oriented, 3D hierarchical structures with high surface roughness and re-entrant curvature. The surfaces exhibit superhydrophobic and superoleophobic qualities combined with exceptional stability, making them applicable to a wide range of fields.