

2022 Scanning Probe Category

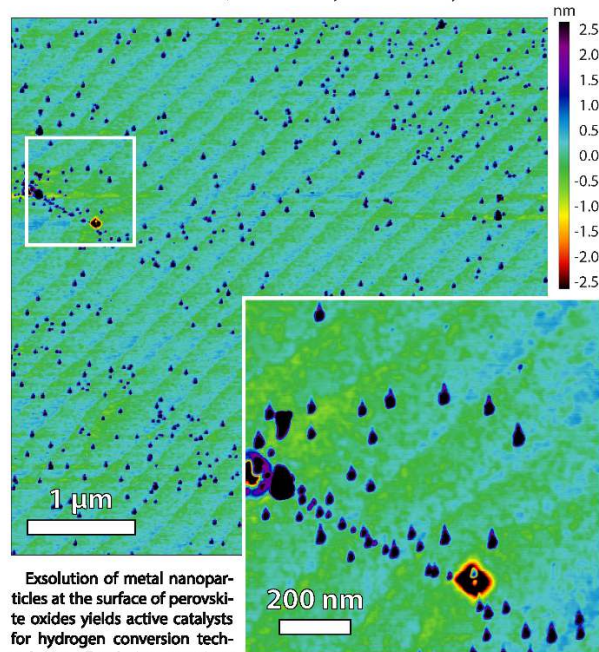
First place: “Nanoparticle growth in a twisted relationship”

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Nanoparticle growth in a twisted relationship

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Exsolution of metal nanoparticles at the surface of perovskite oxides yields active catalysts for hydrogen conversion technologies. Exsolution reactions can be influenced by a plethora of material properties. For instance, strain fields - in this case induced by two adjacent dislocations - appear to shape the initial nanoparticle growth. Nanoparticles are finely arranged between two dislocations visible as etch pits at the surface of the epitaxial thin film with well-defined step terrace structure.



Scanning Probe Microscopy



Moritz Weber