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Stuttgarter Physikalisches Kolloquium

Max-Planck-Institut für Festkörperforschung
Max-Planck-Institut für Intelligente Systeme
Fachbereich Physik, Universität Stuttgart

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Login data will be announced by e-mail and on the colloquium webpage.

Dienstag, 1. Dezember 2020 | **16.15 Uhr** | **Online-Vortrag**

Stuttgarter Max-Planck-Institute, Heisenbergstraße 1, 70569 Stuttgart-Büsnau

Soft chemistry approaches to superconductivity in infinite layer nickelates

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Abstract

Since their discovery, superconductivity in cuprates has motivated the search for materials with analogous electronic or atomic structure. We have used soft chemistry approaches to synthesize superconducting infinite layer nickelates from their perovskite precursor phase, using topotactic reactions. We will present the synthesis and transport properties of the nickelates, observation of a doping-dependent superconducting dome in (Nd,Sr)NiO_2, and our current understanding of the electronic structure.