

Unprecedented electrical conductivity in the delafossite layered metals

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The delafossites, named after the French crystallographer Gabriel Delafosse, are triangular lattice layered materials with general formula ABO_2 . The family includes insulators, large gap semiconductors and a few astonishingly high conductivity metals. I will describe our group's work on the latter, which have mean free paths of tens of microns at low temperatures, and are host to a range of unusual properties.

URL www.cpfs.mpg.de/physics_of_quantum_materials