

Abstract Submitted
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Transport and thermodynamic properties of Dirac antiferromagnetic CuMnAs single crystals¹ NI NI, EVE EMMANOUILIDOU, Department of Physics and Astronomy and California NanoSystems Institute, University of California, Los Angeles, CA 90095, USA, HUIBO CAO, Quantum Condensed Matter Division, Oak Ridge National Laboratory, Oak Ridge, TK 37831, USA, BING SHEN, JIE XING, AOSHUANG SHI, Department of Physics and Astronomy and California NanoSystems Institute, University of California, Los Angeles, CA 90095, USA — Although much research effort has been made on nonmagnetic topological semimetals, such as Dirac semimetals Cd₃As₂, Na₃Bi, and Weyl semimetals TaAs family, the study of magnetic topological semimetals is less explored. Recently CuMnAs has been proposed to an antiferromagnetic Dirac semimetal with both time-reversal and inversion symmetry breaking. In this talk, we will present the growth, transport and thermodynamic properties of Dirac antiferromagnetic CuMnAs single crystals.

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