

Abstract Submitted
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Magnetic Field Effect on the In-plane Electrical Resistivity of FeTe_{1-x}Se_x Single Crystals YIMIN XIONG, AMAR KARKI, Department of Physics and Astronomy, Louisiana State University, Baton Rouge, LA 70803-4001, BRIAN SALES, Materials Science and Technology Division, Oak Ridge National Laboratory, Oak Ridge, TN 37831, RONGYING JIN, Department of Physics and Astronomy, Louisiana State University, Baton Rouge, LA 70803-4001 — The in-plane electrical resistivity (ρ_{ab}) of FeTe_{1-x}Se_x single crystals is measured as a function of temperature (T), magnetic field (H), and the angle (θ) between H and electric current (I). The results reveal that ρ_{ab} strongly depends on both H and θ , indicating the participation of spin scattering in the electrical transport. The underlying physics will be discussed.

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