

Abstract Submitted
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Characterization **of**
superconductivity in electron-doped $LnOBiS_2$ compounds with specific heat measurements¹ BENJAMIN WHITE, DUYGU YAZICI, KEVIN HUANG, ALAN CHANG, AARON FRIEDMAN, M. BRIAN MAPLE, University of California, San Diego — Superconductivity has been reported recently in $Bi_4O_4S_3$ and electron-doped $LnOBiS_2$ compounds with $Ln = La, Ce, Pr, Nd, Yb$. These materials share a similar crystal structure composed of superconducting BiS_2 layers, which are separated by oxide blocking layers. Early studies have concentrated primarily on the electrical transport properties and magnetic susceptibility measurements of these systems. We present results from specific heat measurements, which were performed in order to study and characterize the superconducting and normal-state properties of several electron-doped $LnOBiS_2$ systems.

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