

Abstract Submitted  
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**Magneto-thermal conductivity in multiferroic HoMnO<sub>3</sub>** YOUNG JAI CHOI, PETER A. SHARMA, SANG-WOOK CHEONG — It is well known that multiferroic HoMnO<sub>3</sub> exhibits a rich phase H-T diagram. We have discovered that thermal conductivity of hexagonal HoMnO<sub>3</sub> shows an unconventional diversity of anomalies at low temperatures under external magnetic fields. In order to understand the origin of these anomalies, we have performed comprehensive characterization experiments on the multiferroic compound, including measurements of dielectric constant, DC and AC magnetic susceptibility, and polarization as functions of temperature and applied magnetic field.

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