

Abstract Submitted  
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**Thermal transport measurements of spin ice materials<sup>1</sup>** WILLIAM TOEWS, JENNIFER REID, RAFEAL NADAS, University of Waterloo, STEFAN KYCIA, University of Guelph, TIMOTHY MUNSIE, McMaster University, HANNA DABKOWSKA, BRUCE GAULIN, McMaster University, Brockhouse Institute for Materials Research, ROBERT HILL, University of Waterloo — Extensive thermal conductivity measurements have been conducted on several rare-earth titanate materials. We report the consequences of crystalline quality and magnetic impurities on the mobility and dynamics of delocalized magnetic excitations. Detailed x-ray diffraction measurements have also been conducted on these samples to accurately characterize the sample quality. Differences between the various materials measured are also discussed.

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