

Abstract Submitted  
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**Thermal measurements of the MAX-phase material Cr<sub>2</sub>GeC<sup>1</sup>** D. T. PIWOWAR, P. ABBAZIA, D. FILOMENA, D. DOROFY, M. GARZON, S. E. LOFLAND, J. D. HETTINGER, Department of Physics and Astronomy, Rowan University, T. H. SCABAROZI, Department of Materials Science and Engineering, Drexel University — We have measured the specific heat and thermal transport in bulk Cr<sub>2</sub>GeC samples that have been hot-isostatically-pressed or hot pressed. We observe no difference in the results based upon the synthesis procedure. We find the low temperature specific heat is fit well by the standard expression. These measurements suggest a large density of states at the Fermi level or a large electron-phonon coupling in this material. The Debye temperature, extracted from the phonon contribution to the specific heat, is found to be 460 K which roughly correlates with the Debye temperature extracted from the ultrasonic elastic measurements. The phonon contribution to the thermal conductivity will also be reported.

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