Low-temperature thermal conductivity of the metal-organic perovskite [C(NH$_2$)$_3$][Cu(HCOO)$_3$]$^1$ DHARMENDRA SHUKLA, NARAYAN PRASAI, JOSHUA L. COHN, Department of Physics, University of Miami, MERCEDES M. A. MAZZA, AMY M. SCOTT, Department of Chemistry, University of Miami — We report measurements of thermal conductivity on single crystals of the metal-organic hybrid perovskite [C(NH$_2$)$_3$][Cu(HCOO)$_3$] in the temperature range 5K to 300K. In addition to its potential in photovoltaic applications, this compound draws interest for its low-dimensional antiferromagnetism associated with Cu-formate chains (along the crystallographic $c$-axis of the orthorhombic structure).$^a$ We will present thermal conductivity measurements along the three main symmetry directions ([100], [010], and [001]) and discuss its anisotropy.


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