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Low Temperature Thermoelectric Characterization of Ag_2Se .¹
FIVOS DRYMIOTIS, DAVID NEFF, MICHAEL CONEY, SABAH BUX, JEAN-PIERRE FLEURIAL, NASA/Jet Prop Lab — Previous work on Ag_2Se showed that this n-type material could have a dimensionless thermoelectric figure of merit (zT) ~ 1 at room temperature, due to its high mobility and low thermal conductivity. However, the results from the initial reports have not yet been reproduced. In this talk, I will summarize our efforts to replicate the aforementioned thermoelectric performance, and also discuss the experimental setup that we utilized in order to perform the low-temperature thermoelectric characterization of this material.

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