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【533】Electronic structure of encapsulated mono-, bi- and trilayer T_d-$MoTe_2$

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Bulk T_d-$MoTe_2$ is a type-II Weyl semimetal and becomes superconducting at a critical temperature of $T_c = 0.1, \mathrm{K}$. Remarkably, superconductivity becomes far more robust in the 2D-limit, contrary to the trend in ultrathin metal-films. Recent transport measurements reported an increase in T_c for decreasing thickness, with $T_c = 7.6, \mathrm{K}$ in the monolayer. The reasons for the strong increase in T_c remains unknown. Here, we present the electronic structure of exfoliated mono-, bi- and trilayer T_d-$MoTe_2$ probed by ARPES. The electron pocket of monolayer $MoTe_2$ shows signatures of strong coupling to optical phonons with $\lambda \approx 1.5$. In bi- and trilayer $MoTe_2$ electron-phonon coupling is weaker consistent with thickness dependence of T_c.

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