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Phonons in Bi2Te3 and Bi2Se3 Thin Films[1] SHANG-FEN REN, Illinois State University, WEI CHENG, Beijing Normal University — Bi2Te3 and Bi2Se3 are topological insulators attracted great research attention in recent years. In this research, some of calculated results on phonons in Bi2Te3 and Bi2Se3 bulk and single quintuple thin films are presented. The effects of spin-orbit couplings on phonon properties in these materials are discussed. Some features of Raman observations of these materials are explained.

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