

Abstract Submitted
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Measurement Setup for Characterizing Thermoelectric Materials at High Pressure¹ MATTHEW JACOBSEN, WEI LIU, BAOSHENG LI, Mineral Physics Institute, Stony Brook University — Several investigations have recently resulted in the development of methods for studying thermoelectric materials at high pressure. However, these investigations have focused primarily on probing the electrical resistivity and Seebeck coefficient. While these are important to the effective operation of thermoelectric materials, they are only part of the whole picture. In an effort to address this on a bulk materials scale, facilities have been developed in the High Pressure Laboratory of the Mineral Physics Institute to investigate these properties, along with investigations of the thermal conductivity and ultrasonic sound velocity. With these facilities, it is likely that further studies of these materials will help advance the theoretical understanding of thermoelectrics and further the development of new, more effective thermoelectric materials.

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