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Microstructure control of $\text{Bi}_{0.4}\text{Sb}_{1.6}\text{Te}_3$ thermoelectric material by pulse-current sintering under cyclic uniaxial pressure

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ABSTRACT-

The effect of the sintering holding time on the microstructure and thermoelectric properties of $\text{Bi}_{0.4}\text{Sb}_{1.6}\text{Te}_3$ prepared by pulse-current sintering under cyclic uniaxial pressure was investigated. The sintering was performed at 400 °C under a cyclic pressure of 0 MPa and 100 MPa, and the holding time was varied from 0 to 60 min. The microstructure of samples, including grain size, hexagonal *c*-plane texture, and high-angle grain boundary, changed with holding time, that is, grain size and *c*-plane

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