

Abstract Submitted  
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**High pressure thermal conductivity of indium** A. GOLYSHEV, A. MOLODETS, IPCP RAS — Results on electroconductivity and thermal conductivity of indium in a range of pressure to 27 GPa and temperatures to 1000 K are presented. Electroresistance of the indium samples at step shock compression was measured in this pressure range. The indium equation of state was constructed; on this basis indium thermodynamic parameters evolution was calculated for the shock wave experiments carried out and then the volume-temperature dependences specific electroresistance and thermal conductivity of indium were defined. It was shown that the thermal conductivity of indium does not depend on temperature, and its triple increase is caused by volume change only in the investigated pressure and temperature range. This work is partially supported by Presidium of the Russian Academy of Sciences program Thermophysics and mechanics of extreme energy effects and physics of high compressed matter.

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