

Abstract Submitted
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Sound velocity under shock compression and bct-bcc transition of Tin¹ HAIFENG LIU², IAPCM, LIN ZHANG³, IFP, GONGMU ZHANG, HAIFENG SONG, IAPCM, XUEMEI LI, IFP, YANHONG ZHAO, IAPCM, JIANBO HU, IFP, TANG LI, IAPCM, IAPCM TEAM, IFP TEAM — The longitudinal sound velocity of material can be resolved from the particle velocity of window profile under shock loading. Two analysis methods are proposed. One is name for the speedy change derivative of sound velocity versus time and the other is the continue lowering of velocity plateau. We carefully analysis the experimental data from the direct reverse-impact configuration and the new sound velocity data are provided. The results show the experimental points of the longitudinal sound velocity against shock pressure are dispersive and the range of transition pressure from bct-bcc under dynamic compression is difficult to obtain.

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