Hugoniot of the uranium alpha-phase in decaying shock wave

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Uranium and uranium-molybdenum alloy (1.4 percent Mo) compressibility was experimentally studied in explosively-initiated decaying shock wave. Stepped samples were suggested to obtain several Hugoniot points in each experiment. PDV was used for process recording [1,2]. The Hugoniot curve for uranium was plotted within the pressure range 10 to 60 GPa corresponding to the alpha-phase. The experimental data were compared with the discrete measurement results [3].

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