DETERMINATION OF THE CRITICAL POINT PARAMETERS OF LIQUID-GAS TRANSITION FOR BORON.

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The expanded final states with pressures 0.004-1,55 GPa of porous (m=5-8) of boron (amorphous phase) from a shock compressed state with pressures 20-30 GPa and the heating of the sample surface layer particles in the process of expansion were observed. The fast heating and vaporization of the boron particles in the atmosphere of shock-compressed helium at shock wave velocity 9-16 km/s was registered. The position of the critical point of liquid-gas transition in p-T coordinates for boron was determined as: p=1,05 GPa, T=8100 K with error bars estimated as 0,14 GPa and 400 K.

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