

Abstract Submitted
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Hydrodynamic instabilities and dynamic strength RAEVSKIY VICKTOR, None — The paper presents results of numerical-theoretical and experimental investigations of influence of shear strength on growth of the Richtmyer-Meshkov instability and the Rayleigh-Taylor instability. It is revealed that, for monochromatic perturbations at accelerated boundary of a solid, there are the critical conditions when the perturbation growth is limited. High sensitivity of perturbation growth to dynamic strength near the stability boundary allowed to develop the method for determination of dynamic strengths of substances in wide range of pressures and strain rates ($\sim 10 \div 300$ GPa, strain rate $\sim 10E4 \div 10E7$ 1/s). The paper includes setup and results of series of tests devoted to investigation of dynamic strengths of some metals (Ti, Cu, Al, Be).

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None

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