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Shock waves in an incompressible anisotropic elastoplastic medium with hardening and their structures. (English) Zbl 07423547

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Summary: Shock waves and their structures in an incompressible anisotropic elastoplastic medium with hardening are studied. It is assumed that the processes in the structure are determined by stress relaxation, which ensures medium hardening. It is found that a shock adiabat can consist not only of one-dimensional, but also of two-dimensional branches.

MSC:

74Cxx Plastic materials, materials of stress-rate and internal-variable type
74Sxx Numerical and other methods in solid mechanics

Full Text: DOI

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