

Cramer, M. S.; Sen, R.

Shock formation in fluids having embedded regions of negative nonlinearity. (English)

Zbl 0623.76071

Phys. Fluids 29, 2181-2191 (1986).

MSC:

- 76L05 Shock waves and blast waves in fluid mechanics
- 76N15 Gas dynamics, general
- 76M99 Basic methods in fluid mechanics
- 82B40 Kinetic theory of gases in equilibrium statistical mechanics

Cited in **20** Documents

Keywords:

one-dimensional finite-amplitude waves; inviscid Van der Waals gases; saturated vapor line; shock formation process; perfect gas theory; periodic wave trains; single-phase Navier-Stokes fluids

Full Text: [DOI](#)

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