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Allowance for the interaction between the underwater electric discharge channel plasma and the shock wave reflected from the chamber's wall

Dubovenko K.V.
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Краткое описание

The numerical simulation of a spark discharge formed along the axis of a cylindrical chamber filled with water has been carried out in the magnetohydrodynamic approximation. The simulation results are compared with the data known from the literature. The analysis of the spatiotemporal distribution of the pressure and temperature in the discharge chamber has been performed with due account for the interaction between the shock waves excited by the spark discharge and reflected from the chamber's wall and the plasma channel. © 2013 Allerton Press, Inc.

Включенные в указатель ключевые слова

Engineering controlled terms
Computer simulation; Electric sparks; Magnetohydrodynamics; Shock waves

Engineering uncontrolled terms
Cylindrical chambers; Discharge chamber; Plasma channel; Pressure and temperature; Spark discharge; Spatiotemporal distributions

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