

Problem of radio-frequency discharge at atmospheric pressure in local statement

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Abstract

© 2015 V. Ju. Chebakova, V. S. Zheltukhin and V. T. Dubrovin. Nonlinear problem of finding of parameters of atmospheric pressure capacitive coupled radio-frequency discharge (CCRFD) between symmetric electrodes is considered in local approach. Electrons, nuclear and molecular ions, metastable atoms and dimer argon, and also atoms in the main state are considered in the model. Results of numerical calculations for the model problem are given.

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Keywords

Difference scheme, Iterative method, Local statement, Low-temperature plasma, Mathematical simulation, Radio-frequency capacitive discharge