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Simulation of physico-chemical processes in the underwater ac discharge

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The paper presents the results of experimental studies of the parameters of an underwater discharge of alternating current with a frequency of 50 Hz, burning between two wire electrodes made of copper, molybdenum and steel. As a result of modeling the processes occurring in a gas bubble, the approximate composition of the gas phase and the concentration of the main active plasma particles were established.

Keywords: nonequilibrium discharge, reduced electric field strength, radiation intensity, active particles, electron energy distribution function, electron concentration.

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