On the dynamics of light erosive multichannel discharges

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The paper describes an experimental method to carry out research of dynamics and macrostructure of optical multichannel discharges (time of exaltation ~10^{-8} c), both in atmosphere, and in vacuum (p~10-10^2 torr). In order to generate counter light erosive plasma-gas flows two targets were used representing aluminium film by depth 200 nm marked on the part of a backlash by magnetron sputtering on glass by depth 2 mm. The experimental definition of dynamics and macrostructure of polychannel lighterosive discharges is executed by a method of a polarization interferometry. These researches are necessary at analysis and mining of a broad band of photon powerplants high-density powers.

Keywords: *spatially confined discharge, cumulative discharge, optical discharges with an exhaling wall, macrostructure, emission characteristics.*

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