

Journal of Physics: Conference Series 2013 vol.479 N1

The influence of transverse acoustic oscillations on contraction of the glow discharge

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Abstract

The results of investigations of the interaction of longitudinal acoustic waves with electric gas discharge. Describes the phenomenon the formation of vortex flows in the acoustic gas discharge under the influence of a standing acoustic longitudinal waves. The phenomenon of occurrence vortex in the presence of transverse acoustic oscillations of the first tangential mode are analyzed. Presents the rationale of effective influence of the transverse acoustic oscillations on the glow discharge, which leads to the preservation of its diffuse form and, consequently, improve the energy input in the CO₂-laser. © Published under licence by IOP Publishing Ltd.

<http://dx.doi.org/10.1088/1742-6596/479/1/012009>
