

Investigation of the dynamics of double structures in a striation in a magnetic field

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Double dust structures formed in the glow discharge striation with particles of different sizes represent two separate dust clouds located one below the other in the striation. Each dust structure is located in a different part (phase) of the striation, that is, in a region with different discharge parameters: electron temperature, electron density, electric field.

In this paper the dynamics of a double dusty structure in a weak magnetic field is studied. The angular velocity of rotation of dust formations located in different phases of the striation is determined. This work was supported by grant No. 22-72-10004 from the Russian Science Foundation.