LIGHT PRESSURE ON NON-SPHERICAL METALLIC PARTICLE

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S u m m a r y

The time-averaged force of light pressure on an ellipsoidal metallic particle has been considered. Under the action of this force, the particle polarizability becomes a tensor quantity. The expressions for the averaged force vector components in the cases of plane-polarized and circularly polarized light have been derived. We have demonstrated that the force of light pressure can depend substantially on the shape of a non-spherical particle and its orientation with respect to the directions of light propagation and light polarization.