

Study of sensor designs for recording the parameters of high-speed microparticles in the accelerator path (review)

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The paper provides an overview of various designs of sensors for recording the parameters of microparticles in the accelerator path, with the help of which the impact of micrometeoroids and space debris particles on the structural elements of a spacecraft is simulated. The model of a cylindrical induction type sensor (Faraday cup) is considered in more detail, as well as a possible modification of the design of this sensor to measure the distribution of microparticles in the accelerator path.

Keywords: micrometeoroids, accelerator, sensor, microparticles, photosensor.

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