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LIP'S ELECTRIC PROPULSION DEVELOPMENTS FOR CHINESE SATELLITE PLATFORM

Abstract

The electric propulsion has been developed by Lanzhou Institute of Physics(LIP) since 1974, and now LIP become the major supplier of the electric propulsion subsystem in China, including ion thrusters, power processing units, xenon tank, etc. In fact, LIP has developed a series of ion thrusters for various application requirements, such as station keeping, orbit transferring, deep space exploring, drag-free controlling and so on.

In this paper, these applications of LIP's ion electric propulsion were presented respectively. Firstly, the LIPS-200 for SJ-9A satellite flight-test and for DFH-3B satellite NSSK were introduced. Secondly, the LIPS-300 for all station-keeping of DFH-5 platform and for all electric propulsion of DFH-4SP platform were described. Thirdly, the LIPS-200+ for near Earth body exploration and for station-keeping of DFH-4E platform were presented. Lastly, the LIPS-100 for drag-free LEO satellite and the LIPS-400 for deep-space mission were summarized.