

Title: Solar all-electric propulsion system

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Solar electric propulsion combines solar panels on spacecraft and one or more electric thrusters, used in tandem. There are many different types of electric thrusters, including a so-called ion thruster, a term that is often incorrectly used to describe all types of electric thrusters. It is also possible to generate electricity from the Sun without using photovoltaic panels, such as with solar concentrators and a Stirling engine.

High-power solar electric propulsion (HPSEP), which combines advancements in solar array and electric propulsion technologies, enables spacecraft injection into a low Earth orbit (LEO) with HPSEP used ...

Solar Electric Propulsion (SEP) is an advanced technology ideally suited for long-duration space missions requiring high efficiency and low-thrust propulsion. SEP systems generate propulsion ...

Advanced Electric Propulsion System (AEPS) is a solar electric propulsion system for spacecraft that is being designed, developed and tested by NASA and Aerojet Rocketdyne for large-scale science ...

The Power and Propulsion Element is managed out of NASA's Glenn Research Center in Cleveland and built by Maxar Space Systems in Palo Alto, California. An artist's rendering of the ...

An electric propulsion system uses energy collected by either solar arrays (solar electric propulsion) or a nuclear reactor (nuclear electric propulsion) to generate thrust, eliminating many of ...

L3Harris is developing advanced electric propulsion systems that will enable humans to go back to the Moon and on to Mars. SEP will play a critical role in the efficient transfer of cargo and payloads to ...

With SEP, the spacecraft collects energy from the Sun via solar arrays to generate thrust, eliminating many of the needs and limitations of storing propellants onboard. That solar energy is ...

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