Space Propulsion Laboratory



Research People Publications Facilities UROP News Links

Spacecraft Systems Engineering

Click the images to access the corresponding publication!

Upcoming Flight Missions

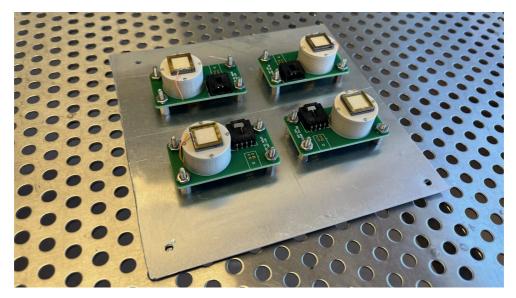
STEP-1 (STaged Electrospray Pathfinder – 1)





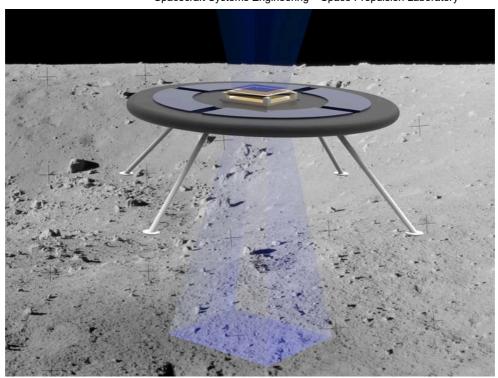
GPDM (Green Propulsion Dual Mode)



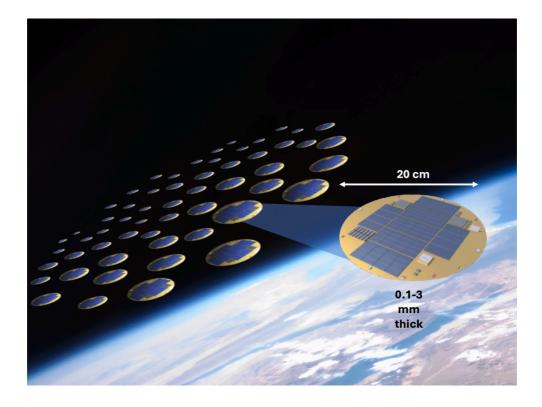


Advanced Mission Concepts

Electrostatic Levitation



Wafer-Scale Satellites



Relevant Publications

Pettersson, G. et al. "<u>Performance Measurement and Propellant Testing for the STEP-1 CubeSat Electrospray Thrusters</u>," 37th International Electric Propulsion Conference, 2022.

- Bruno, A., Schroeder, M., and Lozano, P. "<u>Characterization of Electrospray Thrusters with HAN-Based Monopropellants for Multimode Propulsion Applications</u>,"
 AIAA SciTech Forum, 2022.
- Jia-Richards, O., Hampl, S., and Lozano, P. "<u>Electrostatic Levitation on Atmosphere-Less Planetary Bodies with Ionic-Liquid Ion Sources</u>," Journal of Spacecraft and Rockets, Vol. 16, No. 4, 2021.
- Jia-Richards, O. and Lozano, P. "<u>Analytical Guidance for Circular Orbit Transfers with Staging of Space Propulsion Systems</u>," *Acta Astronautica*, Vol. 179, 2021.
- Jia-Richards, O. and Lozano, P. "<u>Analytical Framework for Staging of Space Propulsion Systems</u>," *Journal of Propulsion and Power*, Vol. 36, No. 4, 2020.
- Jia-Richards, O. et al. "<u>Feasibility of a Deep-Space CubeSat Mission with a Stage-Based Electrospray Propulsion System</u>," *IEEE Aerospace Conference*, 2020.



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