

Special Issue

Space Environment Effects on Spacecraft Systems and Subsystems

Message from the Guest Editors

This Special Issue aims to collect contributions from scientists around the world regarding the effects of the space environment on space systems and subsystems, and in particular, those relating to the LEO operational environment. The LEO environment includes severe hazards, such as atomic oxygen (AO), ultraviolet (UV) radiation, ionizing radiation, strong vacuums, plasma, micrometeoroids, and debris, severe temperature cycles and, for some systems, the re-entry environment. It is important to note that these environmental characteristics do affect spacecrafts at the same time, with a remarkable synergistic effect. In order to understand these synergistic effects, both experimental or theoretical and numerical approaches are of great importance. Analyzing and comprehending the operative environment becomes a key point in extending the operative life of space systems.

Keywords

- space environment
- spacecraft systems
- subsystems
- re-entry systems and subsystems

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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