



an Open Access Journal by MDPI

# Spacecraft Vibration Suppression and Measurement Sensor Technology

Guest Editors:

#### Prof. Dr. Minglong Xu

School of Aeronautics and Astronautics, Xi'an Jiaotong University, Xi'an 710049, China

#### Dr. Jian Zhou

School of Aeronautics and Astronautics, Xi'an Jiaotong University, Xi'an 710049, China

Deadline for manuscript submissions: **30 January 2025** 



**Message from the Guest Editors** 

With the development of space technology, microvibrations have become a restriction for improving the imaging quality and pointing accuracy of in-orbit satellites. In order to weaken or eliminate the impact of microvibrations, effective micro-vibration suppression methods must be adopted. Due to the very small vibration magnitude of space vehicles, broadband and low-noise measurement sensor technologies need to be developed. Furthermore, the verification of micro-vibration suppression on the ground is a challenge due to the influence of gravity.

Topics of interest for this Special Issue include, but are not limited to, the following:

- 1. Micro-vibration suppression to space optical payloads;
- 2. Micro-vibration suppression to solar wing;
- 3. Isolation of CMG;
- 4. Micro-vibration suppression to space antenna;
- 5. Micro-vibration measurement sensor technology;
- 6. Ground testing technology;
- Design and broadband control of fast-reflection mirrors (FSM);
- 8. Image stabilization technology;
- 9. High-precision pointing;
- 10. Advanced sensing technology.



mdpi.com/si/198350





an Open Access Journal by MDPI

### **Editor-in-Chief**

### Message from the Editor-in-Chief

#### **Prof. Dr. Vittorio M. N. Passaro** Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

## **Author Benefits**

**Open Access :** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE,

PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases. Journal Rank: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

### **Contact Us**

Sensors Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/sensors sensors@mdpi.com X@Sensors\_MDPI