



applied sciences



Special Issue Reprint

Recent Advances in Space Debris

www.mdpi.com/books/reprint/8973

Edited by

Lorenzo Olivieri

Kanjuro Makihara

Leonardo Barilaro



ISBN 978-3-7258-0436-8 (Hardback)

ISBN 978-3-7258-0435-1 (PDF)

The near-Earth space debris environment represents an existing hazard for human activities in space. The increasing number of man-made objects resident in orbit leads to a growing risk of collisions involving active spacecraft, which could cause anything from the loss of important functionalities to vehicle break-up and, in parallel, the fragmentation of satellites that are no longer operational. The scientific community worries that such a process may lead to large fragmentation events and a cascade effect that may prevent safe access to, and the exploitation of, entire orbital regions.

Addressing the space debris problem and finding potential mitigation solutions is a challenge that requires the collaboration of all involved stakeholders. In this Special Issue, three of the main investigative lines concerning space debris are presented: (1) understanding the physical processes behind in-orbit fragmentation; (2) assessing the in-orbit population of space debris; and (3) developing mitigation strategies and enabling technologies that are used to remove end-of-life satellites.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/8973

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.