



electronics



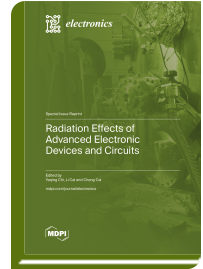
Special Issue Reprint

Radiation Effects of Advanced Electronic Devices and Circuits

www.mdpi.com/books/reprint/9448

Edited by
Yaqing Chi
Li Cai
Chang Cai

ISBN 978-3-7258-1481-7 (Hardback)
ISBN 978-3-7258-1482-4 (PDF)



As integrated circuit technologies continue to scale down and electronic devices become more complex, their susceptibility to ionizing radiation has introduced numerous exciting challenges, anticipated to drive research over the next decade. Consequently, new solutions are necessary to mitigate radiation sensitivity in advanced devices and integrated circuits. The aim of this reprint is to disclose the basic mechanisms of radiation effects for advanced devices and the breakthrough of new solutions to assess and mitigate radiation sensitivity in advanced devices and integrated circuits. This reprint presents new modeling approaches that predict how radiation impacts electronic devices and circuits. Accurate models are essential for designing devices that can tolerate radiation without significant performance degradation. We also focus on the innovative design and fabrication techniques that enhance the radiation tolerance of integrated circuits. Moreover, some discussions highlight new testing protocols and methodologies that provide more accurate and comprehensive evaluations of radiation hardness, as well as the latest advancements and trends that are of particular interest to researchers and professionals in the radiation effects community. Overall, this issue offers valuable insights into the challenges and opportunities in this rapidly evolving field, highlighting the critical importance of continued innovation and collaboration to address the complex problems posed by radiation in modern electronics.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/9448

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.