



electronics



Special Issue Reprint

Wide-Bandgap Device Application: Devices, Circuits, and Drivers

www.mdpi.com/books/reprint/10528

Edited by
Yimeng Zhang
Lejia Sun
Yuming Zhang

ISBN 978-3-7258-3216-3 (Hardback)
ISBN 978-3-7258-3215-6 (PDF)



(1) As SiC and GaN devices are increasingly being applied in power electronics, the excellent performance of these devices is required. Therefore, how to design the devices, how to drive them, and what other fields these devices can be applied in are attractive research issues.

(2) This Special Issue aims to exhibit the research progress of the application of wide-bandgap semiconductor devices, including the novel structures of devices, new topology of circuits for the high performance of wide-bandgap devices, and integrated circuit application of wide-bandgap semiconductors.

(3) In this Special Issue, original research articles and reviews are presented. Research areas are the following: high-efficiency SiC MOSFET-based DC/DC converters for EV applications, high-voltage SiC-based DC/DC converters for HVDC applications, SiC-based AC/DC for EV charging station applications, high-power density power converters based on GaN devices, integrated circuits based on SiC material for harsh environment applications, and integrated circuits based on GaN material for high-frequency applications.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/10528

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.