Special Issue

GaN-Based Power Electronic Devices and Their Applications, 2nd Edition

Message from the Guest Editors

Due to their excellent physical properties, gallium nitride (GaN) electric devices that can operate at a high switching frequency can drastically improve the energy conversion efficiency, reduce the volume of energy storage components, and scale down the system form factor. GaN has become one of the most promising materials in the area of high-power and hightemperature power electronics, and it is considered the material that will revolutionize the future of power electronics. Impressive progress has already been achieved in lateral and vertical GaN device technologies, from advanced epitaxial growth approaches to novel or cost-effective device structures as well as innovative processing methods, more indepth device physical analysis, and monolithic integration of GaN-based power electronic devices. The main aim of this Special Issue is to bring the latest and most important innovations in GaN-based power electronic devices and their applications, address recent breakthroughs in GaN power electronics, and provide an up-to-date picture of current challenges and future development.

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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