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 high-temperature 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 in-depth 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.

Guest Editors

Dr. Kai Fu

Department of Electrical and Computer Engineering, The University of Utah, Salt Lake City, UT 84112, USA

Dr. Houqiang Fu

School of Electrical, Computer and Energy Engineering, Arizona State University, Tempe City, AZ 85281, USA

Deadline for manuscript submissions

closed (15 March 2024)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/181299

Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

mdpi.com/journal/electronics

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/journal/electronics

MDPI

About the Journal

Message from the Editor-in-Chief

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

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the second half of 2024).