



Micro- and Nanotechnology of Wide Bandgap Semiconductors

Guest Editors:

Prof. Dr. Anna B. Piotrowska

Lukasiewicz Research Network,
Institute of Microelectronics and
Photonics (SBL-IMiF), 02-668
Warszawa, Poland

Prof. Dr. Eliana Kamińska

Institute of High Pressure Physics
Unipress, Al. Prymasa Tysiąclecia
98, 01-142 Warsaw, Poland

Prof. Dr. Wojciech Wojtasiak

Institute of Radioelectronics and
Multimedia Techniques, Faculty
of Electronics and Information
Technology, Warsaw University of
Technology, 00-661 Warsaw,
Poland

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Message from the Guest Editors

Dear Colleagues,

Impressive progress in GaN technology over the last 25 years has been driven by a continuously growing need for more advanced systems and new challenges continue to arise and need to be solved. The lighting industry, RF defense industry, and 5G mmWave telecommunication systems are driving forces for further intense research in order to reach the full potential of GaN-based semiconductors.

The specific topics of this Special Issue include the following: GaN single crystalline substrates for electronic devices by ammonothermal and HVPE methods, drift layers by HVPE, MOVPE, and MBE, advances in ion implantation of GaN and related materials, high-pressure processing (lattice reconstruction) of ion-implanted GaN (Mg and Be), novel metallization schemes for ohmic contacts, thermal issues in GaN HEMTs, AlGaIn/GaN HEMTs on native substrates, laser diodes based on MOVPE and MBE epitaxy including vertically integrated devices with tunnel junctions, monolithic green-blue and red-green-blue LED structures for highly efficient displays, external cavity laser diodes for quantum technologies applications, porous GaN for supercondensators, and III-nitride nanowires for LEDs.





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Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and
Telecommunications,
Politecnico di Torino, 10129
Torino, Italy

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.

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