Special Issue

Advanced Research of Silicon Photonics and Optoelectronics Devices

Message from the Guest Editors

Silicon Photonics has finally been able to achieve a wide diffusion, making it one of the major technologies of the future. Several products have hit the market in many fields, from communication devices to interconnect, optical computing, sensors, and biosensors. However, many challenges are still holding back Silicon Photonics from expressing its full potential: laser integration, component density, power consumption, limited bandwidth, non-linearities, and integration are among those challenges. Research in this field has never stopped proposing new solutions, such as looking for new materials, novel devices and circuits, and new architectures that leverage the potential of working with photons. With this Special Issue on *Advanced Research of Silicon Photonics and Optoelectronics Devices,* we want to share and highlight the most recent results for Silicon Photonics and Optoelectronic devices, ranging from designs, fabrication, and experimental demonstrations. Original research work, letters, and review papers based on theoretical, numerical, and experimental data are welcome in this Special Issue.

Guest Editors

Dr. Nicola Peserico

Department of Electrical and Computer Engineering, Florida Semiconductor Institute, University of Florida, Gainesville, FL 32603, USA

Dr. Martin Thomaschewski

Department of Electrical and Computer Engineering, The George Washington University, 800 22nd Street, Washington, DC 20052, USA

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

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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