Special Issue

Advances in Nanoscale Materials and Devices

Message from the Guest Editor

The advent of technological advancements has consumed the world entirely, ranging from low-dimensional devices for neuromorphic computing to devices functional at higher temperatures for space exploration. The advances in nanoscale materials and devices become relevant in the present scenario where researchers are working towards developing novel materials and devices suitable for the current needs.

The topics covered in this Special Issue include, but are not limited to, the design and synthesis of novel nanomaterials with excellent optical and electronic properties suitable for semiconductors and optoelectronic devices, novel structures, and devices with efficient charge-transport behavior. Using defects engineering, strain tunability, mechanosensitivity, plasmonics and photonics, as well as temperature sensitivity to achieve low-power operation, broadband and narrowband functional, robust, reliable, durable, flexible, and stretchable devices suitable for industrial needs. We invite researchers, experimentalists, and theoreticians to submit their high-quality manuscripts for publication in this Special Issue.

Guest Editor

Dr. Monika Kataria

Department of Applied Physical Sciences, University of North Carolina at Chapel Hill, Chapel Hill, NC 27514, USA

Deadline for manuscript submissions

closed (20 October 2023)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/162364

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



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 guestedited 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 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

