

Special Issue

Memristor Devices: Models, Developments and Applications

Message from the Guest Editors

This Special Issue is dedicated to these memristor devices and especially to their modelling, development and applications. The list of possible topics includes, but is not limited to:

- Emerging memristors, including ReRAM, MRAM, PCRAM, FeRAM and associated selectors, from the demonstration of novel device concepts to fully integrated memory arrays
- Memristor architectures and process development from product prototyping to manufacturing-related challenges and solutions (integration schemes, novel circuit design schemes and novel memory architectures that enhance memory performance)
- Use and reliability of memristive devices for artificial intelligence and design architectures for in-memory and neuromorphic computing (neural networks)
- Memristor devices physics and theoretical approaches including analytical, numerical and statistical approaches applied to structures with dimensions ranging from atomistic over device dimensions to full-chip dimensions, including physics-based compact modeling
- Security and radiation effects on memristor devices (measurements, simulation, modelling, etc.)

Guest Editors

Dr. J  r  my Postel-Pellerin

CNRS, Institut Mat  riaux Micro  lectronique Nanosciences de Provence, Aix-Marseille University, 13451 Marseille, France

Prof. Dr. Pierre Canet

CNRS, Institut Mat  riaux Micro  lectronique Nanosciences de Provence, Aix-Marseille University, F-13453 Marseille, France

Deadline for manuscript submissions

closed (31 July 2023)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/144518

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

[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)



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 (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).