

## Special Issue

# Advanced Thermal Management of Integrated Electronic Devices

### Message from the Guest Editors

With the rising power density and ever-shrinking size of electronic devices, thermal issues related to the high junction temperature of chips are becoming rather severe. Thermal management is essential for boosting both the performance and stability of integrated electronic devices. This Special Issue is intended to present research papers and review articles that report on the recent advances in thermal management of integrated electronic devices, including thermal materials, heat dissipation system designs, thermal characterizations, thermal transport analysis, and thermal modeling. The topics covered in this Special Issue include, but are not limited to:

- Emerging thermal interfacial materials
- Advanced thermal characterization techniques
- New concepts in thermal management of electronic devices
- Forced air and liquid cooling techniques
- Phase change materials
- Thermal modeling and simulations
- Thermal reliability analysis of integrated electronic devices
- Chip-level thermal management
- Liquid Metal and its system design
- Energy conversion and management

***You are welcome to contribute!!!***

---

### Guest Editors

Dr. Bin Xie

School of Mechanical Science and Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Dr. Bofeng Shang

School of Physics, Zhengzhou University, Zhengzhou 450001, China

---

### Deadline for manuscript submissions

closed (15 December 2023)



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/133484](https://mdpi.com/si/133484)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto: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).