

Special Issue

Emerging Materials and Technologies for Advanced Semiconductor Packaging

Message from the Guest Editors

This Special Issue addresses emerging semiconductor packaging technologies, covering design, structure, materials, processing, and testing of electronic and photonic devices. A key focus is soft design and engineering for soft electronic devices. With growing demands for high computing, low power, miniaturization, and multi-functionality in IC chips and integrated systems, advanced packaging bridges design and function, becoming a core driver of future semiconductor technologies. Smart electronics have become extensions of the human body. Soft electronic packaging offers promising approaches for creating imperceptible, comfortable human-device interfaces. Thus, research on advanced soft materials, structures, and design is in high demand for developing soft electronic devices. We welcome original papers on all advanced packaging technologies involving designs, structures, materials, processing, and testing. Recent developments in soft materials, structures, processes, and devices are of particular interest. Articles and reviews on packaging in wearable electronics and photonic devices are also welcome.

Guest Editors

Dr. Yue Gu

Department of Neurosurgery, Yale University, New Haven, CT 06520, USA

Dr. Yongjun Huo

School of Materials Science and Engineering, Beijing Institute of Technology, Beijing, China

Deadline for manuscript submissions

20 December 2026



Materials

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 7.0
Indexed in PubMed



mdpi.com/si/276544

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

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





Materials

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 7.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editors-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Materials Science, Multidisciplinary) / CiteScore - Q1 (Condensed Matter Physics)