

Special Issue

Advances in Micro-/Nanotechnologies and Smart Systems for Healthcare (CAS 2025–2026)

Message from the Guest Editors

The integration of electronics, physics, and mechanical engineering at the micro- or nano scale into medicine and healthcare has become increasingly vital. The purpose of this Special Issue is to provide a comprehensive overview of the latest advancements in devices and smart systems for biomedical and health applications, aligning with the new research track introduced at the International Semiconductor Conference (CAS)—editions 2025 and 2026. Papers should focus on the design and development of sensors, electronic devices, and systems involving micro-/nanotechnologies (not only those used in biological data collection), treatment delivery, and monitoring. Areas of interest include, but need not be limited to, the following topics:

- Sensors and electronic devices (e.g., wearables, implantables);
- Instrumentation and micro-/nanotechnologies (e.g., microfluidics, biomaterials);
- Point-of-care and health monitoring systems (intra-/post-therapeutic, home monitoring, smart homes);
- Medical big data, data mining, and deep/machine learning (DL and ML) models;
- Medical decision support systems and medical digital twins;
- Medical data security, privacy, and scaling-up for real-life clinical contexts.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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