



an Open Access Journal by MDPI

Intravascular Ultrasound (IVUS) System Design, Catheter Design, Beamforming Algorithm Development, Imaging Optimization and Clinical Applications

Guest Editors:

Dr. Hsiao-Chuan Liu

Department of Ophthalmology,
University of Southern California,
Los Angeles, CA 90033, USA

Prof. Dr. K. Kirk Shung

Biomedical Engineering,
University of Southern California,
Los Angeles, CA 90089, USA

Dr. Hyoung-Ki Lee

Department of IVUS, Philips Inc.,
San Diego, CA 92130, USA

Deadline for manuscript
submissions:
closed (31 January 2025)

Message from the Guest Editors

Dear Colleagues,

Intravascular ultrasound (IVUS) is a powerful imaging technique used primarily in the field of cardiology to visualize the inside of blood vessels. It provides detailed images of the vessel walls and can help in the diagnosis and treatment of various cardiovascular conditions. By providing real-time, high-resolution images from within the vessel lumen, IVUS plays a crucial role in diagnosing and guiding the treatment of various vascular diseases. We welcome ultrasound experts to submit the latest research and innovations in IVUS technology, highlighting significant research trends and breakthroughs.

Dr. Hsiao-Chuan Liu
Prof. Dr. K. Kirk Shung
Dr. Hyoung-Ki Lee
Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Nam-Trung Nguyen

Queensland Quantum and
Advanced Technologies Research
Institute, Griffith University, West
Creek Road, Nathan, QLD 4111,
Australia

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

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, dblp, and other databases.

Journal Rank: JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

Contact Us

Micromachines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/micromachines
micromachines@mdpi.com
[X@micromach_mdpi](https://twitter.com/micromach_mdpi)