

Special Issue

Nano/Microscale Thin-Film Photocathodes: Materials and Applications

Message from the Guest Editor

Thin-film photocathodes in typical nano/microscale form are prevalently utilized to provide electron beams of increasingly stringent requirements for interdisciplinary researches and practical applications. The design capabilities of photocathodes in electron sources/devices have become an enabling technology in diverse fields such as light sources and detectors, electron cooling, ultrafast electron diffraction, novel particle accelerators, radiology and radiation oncology, electron beam lithography, etc. This Special Issue (SI) aims to summarize recent advances in nano/microscale thin-film photocathode materials across (but not limited to) the above-stated application fields with a focus on cathode materials and performances for light sources and detectors, novel particle accelerators, and ultrafast electron diffraction.

Guest Editor

Dr. Ye Chen

Deutsches Elektronen-Synchrotron DESY, Notkestrasse 85, 22607 Hamburg, Germany

Deadline for manuscript submissions

closed (1 March 2022)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/72597

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

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





Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



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



About the Journal

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.

Editor-in-Chief

Prof. Dr. Ai-Qun Liu

Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China

Author Benefits

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)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).