

Special Issue

Large Area Solar Cells, LEDs and Photodetectors Based on Organometal Halide Perovskite

Message from the Guest Editor

Organometal halide perovskites have attracted widespread interest in the research community thanks to their tunable optoelectronic properties. These semiconductors have found applications in solar cells, LEDs, and light detectors for visible light, as well as x-rays. In this SI, we aim to collect experimental and review papers on the scaling up of fabrication and on the large area characterization of perovskite-based devices. Particular focus will be given to the industrialization of the deposition of the perovskite layer itself, from ink formulation to fabrication via industrially viable techniques such as slot die, spray coating, ink-jet printing, blade coating, and thermal evaporation. Other relevant topics are the characterization and mapping of large-area samples that can be instrumental for inline metering during production and the patterning of the perovskite layer via laser patterning, digital printing, lithography or through novel methods. We welcome all papers that provide advancements towards the industrialization and automation of the production of perovskite-based devices by developing new deposition processes or new ink formulation that are industrially compatible.

Guest Editor

Dr. Francesco Di Giacomo

Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering, University of Rome Tor Vergata, Via del Politecnico 1, 00133 Rome, Italy

Deadline for manuscript submissions

closed (31 October 2020)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/44983

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

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

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).