Special Issue

The Research Related to Nanomaterial Cold Cathode

Message from the Guest Editor

Nanomaterial cold cathodes have potential applications in various vacuum microelectronic devices, including microwave tubes, X-ray sources, detectors, and energy-conversion devices. This Special Issue aims to encourage researchers to submit reviews or original articles related to the research studies related to field emission from 1-D or 2-D nanomaterials and its applications as cold cathode in devices. The scope of the Special Issue includes: 1) Preparation of 1-D and 2-D nanomaterials for field emission cold cathode application; 2) Field electron emission properties of nanomaterials; 3) Application of nanomaterials as cold cathode in vacuum nanoelectronic or optoelectronic devices. See more information in https://www.mdpi.com/si/76886

Guest Editor

Prof. Dr. Jun Chen

School of Electronics and Information Technology, Sun Yat-sen University, Guangzhou 510006, China

Deadline for manuscript submissions

closed (15 January 2023)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.4
CiteScore 8.5
Indexed in PubMed



mdpi.com/si/76886

Nanomaterials MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 nanomaterials@mdpi.com

mdpi.com/journal/ nanomaterials





Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.4 CiteScore 8.5 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometerscale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Shirley Chiang
Department of Physics, University of California Davis, One Shields
Avenue, Davis, CA 95616-5270, USA

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Multidisciplinary) / CiteScore - Q1 (General Chemical Engineering)

