



Quantum Dots and Applications

Guest Editor:

Prof. Dr. Heesun Yang

Department of Materials Science
and Engineering, Hongik
University, Seoul 04066, Korea

Deadline for manuscript
submissions:

closed (31 December 2019)

Message from the Guest Editor

This Special Issue aims to provide recent, informative, QD-related resources for readers by addressing a broad range of topics from QD materials chemistry and characterization to processing and device fabrication. It will focus on not only the synthesis of colloidal QD materials with various semiconductor compositions such as II-VI, III-V, I-III-VI, and halide perovskite families; core/shell heterostructural engineering; and surface functionalization/encapsulation and photophysical investigation, but on their versatile applications such as down-conversion-, electroluminescence-based light-emitting diodes for display/lighting devices, luminescent solar concentrators, and biological labels.

We firmly believe that this collection will provide an opportunity to circulate innovative ideas and technologies on these emerging topics and contribute to the dissemination of expertise for young and leading researchers in the QD-related field.

Keywords

- colloidal quantum dots
- emissive materials
- materials chemistry
- optoelectronic





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)