Special Issue

Quantum Dots and Applications

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

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2019)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/20841

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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.

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