



an Open Access Journal by MDPI

# Luminescent Rare-Earth Based Nanomaterials

Guest Editor:

### Dr. Anna M. Kaczmarek

Department of Chemistry, Universiteit Gent, Ghent, Belgium

Deadline for manuscript submissions: closed (30 September 2019)

### Message from the Guest Editor

Rare-earth-based nanomaterials exhibit important advantages over other available luminescent nanomaterials due to their low toxicity, photostability, high thermal and chemical stability, sharp emission bands, high luminescence quantum yields and relatively long luminescence decay times.

The Special Issue on "Luminescent rare-earth-based nanomaterials" will cover a wide range of research fields, including rare-earths and nanomaterials, nanofabrication, core–shell structures, nanosensors, bioprobes, and security devices in the form of reviews, communications, and academic articles.

Potential topics include, but are not limited to:

- 1. Development of core-shell up-conversion nanoparticles
- 2. Energy transfer in core-shell type nanoparticles
- 3. Novel ratiometric temperature nanosensors
- 4. Near-infrared emitting systems
- 5. Development of bioprobes based on rare-earthdoped nanoparticles
- 6. Rare-earth nanomaterials for anti-counterfeit applications
- 7. Applications of rare-earth-based nanomaterials









an Open Access Journal by MDPI

### **Editor-in-Chief**

#### Prof. Dr. Shirley Chiang

Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

### 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 nanometer-scale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metalorganic 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.

# **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)

# Contact Us

Nanomaterials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/nanomaterials nanomaterials@mdpi.com X@nano\_mdpi