



an Open Access Journal by MDPI

## Flame Synthesis and Characterization of Oxide Nanoparticles

Guest Editor:

### Dr. Silvana De Iuliis

Institute of Condensed Matter  
Chemistry and Technologies for  
Energy, Milano Unit – National  
Research Council (CNR), Milano,  
Italy

Deadline for manuscript  
submissions:

**closed (20 May 2022)**

### Message from the Guest Editor

Dear Colleagues,

Although flame synthesis is the commercially used method for nanoparticle production, a lot of work is still needed to understand the chemical and physical processes of nanoparticle synthesis in relation to the properties required in a specific application. In this context, it is of particular interest to develop and apply diagnostic techniques for the investigation and monitoring of the synthesis process. Characterization of the oxide nanoparticles during and after the synthesis is important for the specific application considered. Moreover, the development of modeling and simulation tools will help to gain a whole comprehension of the processes involved.

This Special Issue on “Flame Synthesis and Characterization of Oxide Nanoparticles” will publish high-quality research articles on the broad area of synthesis, modeling, and characterization of oxide nanoparticles produced in flames.

The topics of interest include but are not limited to the following:

- Oxide nanoparticles formation and grow in flames
- Diagnostics
- Modeling
- Applications



[mdpi.com/si/40158](https://mdpi.com/si/40158)

# Special Issue



an Open Access Journal by MDPI

## Editors-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

### Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

## Message from the Editorial Board

*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](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)