



an Open Access Journal by MDPI

# **Microwave-Assisted Synthesis of Nanocrystals and Nanostructures**

Guest Editors:

## Prof. Dr. Cristina Leonelli

Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia, 41125 Modena, Italy

#### Prof. Dr. Witold Łojkowski

Laboratory of Nanostructures and Nanomedicine, Institute of High Pressure Physics, Polish Academy of Sciences, Sokolowska 29/37, 01-142 Warsaw, Poland

Deadline for manuscript submissions: closed (31 October 2018)

#### Message from the Guest Editors

The properties of nanoparticles and nanostructures depend strongly on their size and morphology, as well as their chemical composition and crystalline structure, it is crucial to ensure precise control of these structural factors. Thus, it appears crucial to control their nucleation and growth from atomic/molecular to a distinctive nano-object, where at least one dimension is less than 100 nm.

Papers that demonstrate that microwave technology is advantageous in producing well reproducible and controlled nanostructures will be preferentially selected for publication. Thus, only papers where synthesis reactors, ensuring a controlled and reproducible synthesis processes, are used will be accepted. Examples of advantageous properties of the produced nano-objects are solicited.

In this Special Issue, we aim to collect contributions dealing with studies on nucleation and growth in microwave-irradiated environments of nanoparticles (NPs), and various nanostructures: Nanoclusters, nanocomposites, core-shell NPs, decorated NPs, nanowires, etc., for different applications.



**Special**sue





an Open Access Journal by MDPI

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

**Prof. Dr. Alessandra Toncelli** Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

#### Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

# **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), Inspec, CAPlus / SciFinder, and other databases. **Journal Rank:** JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

#### **Contact Us**

*Crystals* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/crystals crystals@mdpi.com X@Crystals\_MDPI