

Special Issue

Advances in Microreactor Devices for Biomedicine, Nanoparticle Synthesis, Catalysis and Energy Processes

Message from the Guest Editor

Over the past decade, microreactor technology has evolved from simple devices for basic chemical transformations to more complex systems for a great number of applications in the fields of catalysis, energy processes, nanomaterial production, biomedicine and sensors. The use of microreactor devices enables us to perform reactions with an unprecedented control over mixing, mass- and heat-transfer, safety, reaction residence time and other process parameters, which results in enhanced reproducibility.

The articles presented in this Special Issue will cover various topics, ranging from the application of microreactor devices in biomedicine (drug delivery, nanovector production, tissue engineering, and diagnostics), nanomaterial production (inorganic, organic, and hybrid nanomaterials), catalysis (new reaction approaches and flow chemistry) and energy processes (process intensification and new microreactor designs). In this context, the research published in this issue will offer a unique glimpse of what has been achieved and what remains to be explored in microreactor technology.

Guest Editor

Dr. Victor Sebastian

1. Department of Chemical and Environmental Engineering, University of Zaragoza, 50018 Zaragoza, Spain

2. Aragon Nanoscience Institute, University of Zaragoza, 50018 Zaragoza, Spain

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

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

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