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 micoreactor technology.

Guest Editor

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Deadline for manuscript submissions

closed (15 December 2021)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
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Message from the Editor-in-Chief

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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