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

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Message from the Guest Editor

Dear Colleagues,

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.



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Special Issue



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Message from the Editor-in-Chief

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