Special Issue

Green Chemistry and Nanomaterials: Applications in Drug Delivery and Biomedical Engineering

Message from the Guest Editor

In recent years, medicine has faced a revolution due to the introduction of novel, advanced, and smart biomaterials for different applications: from controlled and targeted drug delivery to regenerative tissue engineering to theranostics. For this reason, both the scientific community and industry are working on this challenging research topic, with special focus on the types of processes involved. For this Special Issue, we kindly invite authors to contribute their original research articles and review papers describing novel, green approaches applied to the design of biomaterials, ranging from the nano- to the macro-scale. Potential topics include, but are not limited to, the following:

- Green processes for biomaterials production;
- Supercritical CO2;
- Freeze-drying;
- Nanoparticles;
- Nanosomes;
- Nanomedicine;
- Aerogels;
- Modeling of drug release from nanocarriers;
- Machine learning applied to the biomedical field.

Guest Editor

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Deadline for manuscript submissions

closed (20 January 2026)

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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.

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