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Recent Advances and Trends in Smart Biomaterials, Nanobiomaterials and Biodegradable Materials

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Deadline for manuscript submissions:

closed (20 February 2023)

Message from the Guest Editors

Dear Colleagues,

Recent advances in biomaterial have attracted growing attention. This includes but is not limited to smart biomaterials that can sense and respond to environmental changes, nanobiomaterials that adopt nanotechnology for biomedical applications, and biodegradable materials with a focus on tunable degradability in biological conditions. The development of such biomaterials requires innovative material chemistry, new stimuli mechanisms, advanced engineering technologies, and a dynamic biointerface design.

Given the latest advances in the field, we invite you to submit your work to this Special Issue. Full research papers, comprehensive reviews, and communications are welcomed on, but not limited to, the following topics: Natural and synthetic biomaterial: preparation, self-assembly behavior and applications; Smart biomaterial of new stimuli-response mechanisms, intriguing properties, and promising applications in biomedical engineering, catalysis, energy storage, and others; Nanobiomaterial with a focus on their mechanics, chemistries, surface, etc. Manuscripts on biodegradable materials synthesis and application are also encouraged.



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Special Issue



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Editor-in-Chief

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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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