Special Issue

Preparation, Application, and Performance of Hydrogels

Message from the Guest Editors

Hydrogels, three-dimensional networks capable of absorbing a significant amount of water, have emerged as a versatile material with growing applications in various scientific fields. This Special Issue aims to showcase cutting-edge research that advances the development, characterization, and application of hydrogels. Research on hydrogels has a rich history, with significant advancements in polymer design, crosslinking strategies, and functionalization techniques over past decades. Recent progress highlights the development of stimulus-responsive hydrogels, hydrogels with tailored functionalities, and in silico modeling approaches for optimizing hydrogel properties. This Special Issue seeks original research papers that explore novel strategies for hydrogel preparation, address performance limitations, and demonstrate innovative applications in drug delivery, tissue engineering, environmental remediation, and other areas. We look forward to receiving your high-quality manuscripts that contribute to the advancement of hydrogel research.

Guest Editors

Dr. Thamires Andrade Lima

Dr. Nicolas Javier Alvarez

Prof. Dr. Fabio Furlan Ferreira

Deadline for manuscript submissions

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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.

Editor-in-Chief

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