Special Issue

Materials for Drug Delivery and Medical Engineering

Message from the Guest Editors

The field of medical engineering has witnessed significant advancements, primarily driven by the need for effective drug delivery systems. These systems are essential in ensuring that therapeutic agents reach their intended targets in the body, maximizing efficacy while minimizing side effects. The materials employed in drug delivery and medical engineering must possess specific characteristics to fulfill these roles, including biocompatibility, biodegradability, and controlled release profiles. The selection of materials is paramount, as they must facilitate the appropriate release of drugs at the desired rate and location within the body. Common materials include polymers, metallic materials, ceramics, and nanomaterials, which have gained prominence due to their unique properties, such as facilitating enhanced drug delivery, implanting, supporting biological functions, and so on. The interplay between materials science and medical engineering is crucial for the development of innovative drug delivery systems. As research continues to evolve, the focus remains on creating advanced materials that enhance therapeutic outcomes, ultimately leading to improved patient care.

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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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