Special Issue

Advanced Biomaterials for Cancer Sonodynamic Therapy

Message from the Guest Editor

Sonodynamic therapy (SDT), which leverages sonosensitizers exposed to low-intensity ultrasound for tumor ablation, has recently emerged as a research hotspot in the field of cancer treatment. The intrinsic, excellent tissue-penetrating capability of ultrasound endows SDT with unparalleled superiorities over phototherapies in terms of therapeutic depth, enabling tumor eradiation in deep tissue where phototherapies cannot reach. Sonosensitizers play crucial roles in causing cytotoxic effects and augmenting SDT efficiency. A plethora of innovative and promising biomaterials with sonodynamic properties have been discovered or developed at an increasing rate, which will improve therapeutic outcomes. Moreover, the flexibility of biomaterials allows for the combination of SDT with other cancer treatments for synergistic therapeutic effects. This Special Issue of *Materials* aims to cover recent advancements in the preparation and design strategies of biomaterials developed for SDT and to highlight their progress in combinational cancer therapy, precise therapy, imaging-guided therapy, and state-of-the-art clinical trials.

Guest Editor

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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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