Special Issue

Advanced Systems in Targeted Alpha Particle Therapy

Message from the Guest Editor

It has now been almost 30 years of research and development efforts in the rediscovered field of targeted alpha particle therapy. Many novel isotope production methods, new targeting molecules, and nanocarriers together with preclinical or clinical trials and first-in-patient studies have moved this field forward by leaps and bounds. This successful progress has resulted in the global acceptance of alpha emitters, like the 223RaCl2 or 225Ac-PSMA-617, powerful tools in clinical praxis, and experimental cancer treatment. Targeted alpha particle therapy (*TAT*) has become a regular therapeutic modality in the treatment of cancer. This Special Issue focuses on the latest innovations and studies in the field of *TAT*, including the preparation and testing of novel carriers, targeting systems, and medical devices, particularly those exploiting or suppressing the nuclear recoil effect in so-called in vivo radionuclide generators. In vitro stability and in vivo biodistribution studies, dosimetric studies, therapeutic efficacy determinations in various models, clinical trials, and other related research are welcome as full papers, communications, or reviews.

Guest Editor

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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.

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