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## Advances in Titanium Alloy: Surface Modification and Biomedical Applications

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Deadline for manuscript  
submissions:

**closed (20 June 2024)**

### Message from the Guest Editors

Dear Colleagues,

*Metals* is launching a new Special Issue entitled "Advances in Titanium Alloy: Surface Modification and Biomedical Application". This Special Issue will offer an opportunity to showcase the most recent experimental and theoretical progress in this progressive field.

Metallic materials constitute approximately three-quarters of biomedical implant materials. Thanks to their excellent combination of chemical, mechanical, and electrochemical properties, starting from the middle of the last century, Ti and its alloys have been widely used for various biomedical applications, along with a wide range of industries and applications. Despite the numerous advantages of titanium-based biomaterials, several clinical issues remain, including low tribocorrosion resistance resulting in the release of metallic ions and wear debris, an elastic modulus mismatch between implants and bone leading to bone resorption, bio-inertness that can hinder osteointegration, and lack of antimicrobial activity that can increase the risk of infection.



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# Special Issue



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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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