Special Issue

Advanced Alloys for Biomedical Applications

Message from the Guest Editor

Alloys are used in medicine for a wide range of applications, especially in cardiology, dentistry, and orthopedics: stents, catheters, wires, needles, implants and joint replacements. In spite of the very varied demands, there are only a few metallic alloys that meet the minimal requirements of nontoxicity and biocompatibility, for example, Ti(Nb, Ta), Mg(Zn), CoCr, and stainless steel. In the development of a novel biomedical use, materials scientists and technologists, as well as healthcare specialists, must attain the targeted bulk mechanical properties for the desired shapes and sizes and concomitantly confer the most suitable physicochemical properties to the surface, as the biomaterial surface is largely responsible for suitable interaction with the surrounding living tissue and fluids. The aim of this Special Issue is to offer researchers involved in the development of advanced medical materials a medium for presenting and disseminating original contributions in the field, especially novel approaches integrating added functionalities.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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