



materials



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Titania-Based Materials for Medical Applications

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Message from the Guest Editors

Dear Colleagues,

Intense works in searching for new biomaterials and improvements of currently used ones are the response to the modern medicine demand for materials with new physicochemical, mechanical properties and appropriate bioactivity. Titania based-materials are an important group of biomaterials, in addition to their beneficial mechanical properties are high biocompatibility. Their type of materials can be used to modify titanium or titanium alloys medical devices surface. The preparation of ceramic titanium materials with high chemical purity, specific physical and mechanical properties is an interesting issue. The strictly defined nano- or microarchitecture allows their enrichment in anti-inflammatory agents, which can be gradually released, e.g., after a surgical procedure. It is also interesting to note that titania-based materials, due to their properties—surface morphology, structure, and reactivity—can affect human body in different ways. Knowledge of the properties and synergistic effects is very important for optimal applications of these materials in various fields of medicine.

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Guest Editors



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Special Issue



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Message from the Editor-in-Chief

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