Special Issue

Functional Materials for Dental Restorations

Message from the Guest Editors

Functional materials have recently been used for various applications in the biomedical field and are expected to be used in dentistry as well. Since enamel and dentin do not have regenerative capabilities, decaying tissue must be restored with direct and indirect restorative materials such as resin composites, glass ionomers, ceramicbased materials, alloys, and ceramics. Some of these materials may have functional properties. In particular, functional materials can be expected to ensure the survivability and longevity of restorations due to their adaptation and interaction with dental tissues. Their capabilities include the inhibition of biofilm formation, the promotion of remineralization, the inhibition of the enzymatic degradation of collagen, adaptability and biocompatibility without the side effects of toxic therapeutic agents, and the reinforcement of prosthetic materials. This Special Issue of the Journal of Functional Biomaterials highlights the latest research on the development of novel functional materials and advanced applications of restorative dental materials.

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Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the Journal of Functional Biomaterials (JFB) is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. JFB seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

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