



Engineering of Oral Biofilms

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Message from the Guest Editors

The human oral cavity is one of the most diverse microbial ecosystems in the human body, harboring over 700 bacterial species and 100 fungal species as well as viruses and protozoa. It is unique because of its various niches where microbes colonize and form biofilms. Biofilm formation on the hard surfaces of the teeth and the soft tissue of the oral mucosa is a dynamic process of microbial colonization and extracellular polymeric matrix development. Complex polymicrobial interactions within the biofilm as well as the environmental factors determine the oral health outcomes. This Special Issue establishes a platform for discussions on the engineering of oral biofilms to enhance the advancement of its derived applications in dentistry and related oral biological disciplines, where interventional strategies for diagnosis, treatment, and prevention will be utilized to tackle detrimental biofilms and utilize beneficial biofilms in the oral cavity.

This Special Issue invites original research covering various fundamental and applied aspects of oral biofilm engineering and welcomes review articles reporting state-of-the-art developments, current limitations, and future perspectives.





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