

Special Issue

Periodontal Disease: From Molecular Pathogenesis to Precision Diagnostics and Innovative Therapeutics

Message from the Guest Editor

Periodontal diseases represent one of the most prevalent inflammatory conditions worldwide, affecting nearly half of the adult population and serving as a significant source of oral health burden. The paradigm shift in our understanding of periodontal diseases—from a simple bacterial infection to a complex dysbiotic condition influenced by host immune responses, genetic factors, and environmental modifiers—has opened new avenues for research and clinical applications. Modern periodontal medicine embraces a multidisciplinary approach that integrates molecular biology, immunology, microbiology, genetics, and computational sciences. This Special Issue aims to compile cutting-edge research on various aspects of periodontal diseases, from fundamental molecular mechanisms to advanced diagnostic approaches and innovative therapeutic strategies. By bringing together diverse perspectives and methodologies, this Special Issue aims to foster interdisciplinary dialogue and collaboration toward a more comprehensive understanding of periodontal diseases and the development of more effective preventive and therapeutic interventions.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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