

Special Issue

Molecular Mechanisms of Biomineralization in Healthy and Pathological Bone Tissues

Message from the Guest Editors

Biomineralization refers to the process by which living systems generate organized mineral crystals. Bone mineralization depends upon the complex crosstalk between osteoclasts, osteoblasts, and osteocytes. The degree of bone mineralization, assessed by the bone mineral density, the microarchitecture, and the characteristics of the mineral deposits, is a major determinant of bone quality. This whole set of determinants has to be taken into account and assessed if one intends to better understand and characterize bone “quality”. In that respect, further studies should be designed to characterize the molecular mechanisms involved in bone formation, repair, and remodeling. This Special Issue will be dedicated to “Molecular Mechanisms of Biomineralization in Healthy and Pathological Bone Tissues” with a focus on the mechanisms of bone formation and remodeling in both physiological and pathological conditions and the corresponding impact on bone quality. This Special Issue is intended to gather papers addressing various issues related to the assessment of bone quality in the fields of imaging, bioinformatics, cell differentiation, and regenerative medicine.

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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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