Study and Analyze of Metallic Glasses for Biomedical Applications: From Soft to Bone Tissue Engineering

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Abstract : Metallic glasses (MGs) are newcomers in the field of metals that show great potential for soft and bone tissue engineering due to the amorphous structure that endows unique properties. Up to now, various MGs based on Ti, Zr, Mg, Zn, Fe, Ca, and Sr in the form of a ribbon, bulk, thin-film, and powder have been investigated for biomedical purposes. This article reviews the compositions and biomedical properties of MGs as well as analyzes results in order to guide new approaches and future development of MGs.

Keywords : metallic glasses, biomaterials, biocompatibility, biocorrosion

Conference Title : ICMBSC 2022 : International Conference on Metallic Biomaterials, Synthesis and Characterization

Conference Location : Amsterdam, Netherlands

Conference Dates : September 15-16, 2022