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Corrosion and Degradation Phenomena in Biomaterials

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Message from the Guest Editors

Dear Colleague,

Corrosion and tribocorrosion resistance properties are important characteristics of implanted biomaterials, strictly related to biocompatibility. In fact, high concentrations of metals ions and the formation of corrosion products and wear debris can cause adverse health effects, and may contribute to implant failures.

In recent years, new materials (e.g., biocompatible high-entropy alloys, advanced ceramics, and composites) with potential applications in the biomedical field have been developed and innovative fabrication technologies (e.g., additive manufacturing techniques) favor the processing of both traditional and new alloys, producing materials with new microstructural characteristics. In association with the current strict European requirements in the biomedical field, these developments offer new relevant outlooks that need to be explored and studied.

This Special Issue aims to collect relevant research papers or reviews reporting significant progresses in the assessment and comprehension of biomaterial corrosion and degradation phenomena, also in the presence of wear and constant and variable loads.





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Message from the Editorial Board

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