Special Issue

Corrosion and Mechanical Performance of Magnesium Alloys

Message from the Guest Editors

Magnesium and its alloys can be used in a wide range of applications, from lightweight structures to medical implants, but there are always concerns about resistance to corrosion. This is particularly significant in the use of magnesium-based materials for medical applications where dissolution is considered desirable. There is also a significant difference here, usually speaking of the desired targeted degradation rates for the degradable implants rather than undesirable corrosion rates for structural applications. In the case of structural applications for lightweight construction, a greater number of components are coated in order to increase the service life for performance and sustainability reasons. Cleaning and coating are also important for applications in medical technology. Therefore, the aim of this Special Issue is to understand the complex relationships to enable the development of a more targeted and sustainable alloy processing, cleaning and coating. In addition to the classical empirical research and development methods, modelling and simulation approaches are also very welcome. We look forward to receiving your submissions.

Guest Editors

Dr. Björn Wiese

Dr. Mert Celikin

Prof. Dr. Norbert Hort

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Crystals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
crystals@mdpi.com

mdpi.com/journal/crystals

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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