Special Issue

High-Tech Metals—Overview, Microstructure, Properties and Recyclability (2nd Edition)

Message from the Guest Editors

High-tech metals, their alloys, such as In, Ge, Ga, Re, and Mg, and rare earth elements are increasingly becoming the focus of today´s applications. It is also important to record these material properties in different databases, allowing for their easier accessibility for use by other scientists, including, for example, their melting and boiling points, melt protection from oxidation, metallurgical melt purification/filtration for primary and secondary materials, casting and mold filling behavior, chemical resistance, tensile and elongation at break, corrosion rates, and standard electrode potentials (for both fused salt electrolysis and for rare earth elements or magnesium and aqueous electro-winning for gallium or indium).

On the basis that theory and practice belong together, this Special Issue aims to provide both a current overview of this and concrete examples, focusing on topics including the investigation of the technological synthesis of MgAlON to be used as a coating material on ceramic foam filters for the filtration of magnesium and other metal melts in future research.

Guest Editors

Prof. Dr. Christiane Scharf

Institut für NE-Metallurgie und Reinststoffe, TU Bergakademie Freiberg, Akademiestraße 6, 09599 Freiberg, Germany

Prof. Dr. Marek Sroka

Department of Engineering Materials and Biomaterials, Mechanical Engineering Faculty, Silesian University of Technology, ul. Konarskiego, 18a, 44-100 Gliwice, Poland

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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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