Special Issue

Magnetic Scaffolds for Biomedical Applications

Message from the Guest Editors

The innovative use of magnetic fields in biomedical applications has experienced an exponential increase in recent years. Among the applications of magnetism in medicine, there are diagnostic (e.g., MRI, NMR), surgical (e.g., electrosurgical cutting), and therapeutic applications (e.g., hyperthermia).

The magnetic components of biomaterials are exploited as remotely controlled tools with potential for diagnostic and therapeutic actions (theranostic applications). Also, magnetic fields can be used as exogenous stimuli to induce changes in the physical, chemical, and structural properties of biomaterials. In this context, multifunctional magnetic scaffolds are objects of particular interest, because they can be imagined as bioactive materials that can be manipulated directly in situ.

This Special Issue is aimed to point out the evolution and new potential biomedical applications of this new research field, encouraging original contributions related to any aspect of the new magnetic materials, including how they perform in physiological environments and, possibly, in tissue regeneration.

Guest Editors

Dr. Stefania Nardecchia

Department of Applied Physics, University of Granada, 18071 Granada, Spain

Dr. Wagner O. Rosa

PerkinElmer Inc., Waltham, MA 02451, USA

Deadline for manuscript submissions

closed (31 July 2021)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/31677

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)