Special Issue

Nuclear Magnetic Resonance (NMR) in Polymers

Message from the Guest Editors

Nowadays, nuclear magnetic resonance (NMR) spectroscopy is widely recognized as a powerful technique for the comprehensive characterization of chemical structures, and has been essential in advancing polymer research. Depending on the polymer, solution NMR spectroscopy has been applied in a diverse range of studies, including the determination of structure and analysis of the tacticity and stereochemistry of homopolymers, cis–trans isomerism in polydienes, and dynamic and diffusion studies for understanding complex aggregation and dissociation process. Furthermore, NMR analysis is unique in being able to determine the composition and sequence distribution of comonomers in copolymers for the analysis of chain defects, chain end groups, and branching polymers. Currently, multidimensional NMR spectroscopy is widely and routinely used in spectral assignments and structural studies for the analysis and characterization of polymers. Potential topics include but are not limited to: NMR characterization of synthetic polymers

NMR characterization of natural polymers

Non-covalent interactions

Aggregation/disaggregation studies

Intra- and intermolecular H-bonding

Guest Editors

Dr. Antonella Caterina Boccia
Institute for Chemical Sciences and Technologies-SCITEC "G. Natta", CNR, Via Corti, 12, 20133 Milano, Italy

Dr. Erika Kozma
Institute for Chemical Sciences and Technologies-SCITEC "G. Natta", CNR, Via Corti, 12, 20133 Milano, Italy

Deadline for manuscript submissions

closed (31 October 2020)

Materials

MDPI

About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)