Special Issue

Polymeric Self-Healing Materials

Message from the Guest Editors

A self-healing material has the ability to restore lost or degraded performance using resources inherently available in the material itself. Ideally, this ability should be fast and be able to occur for an infinite number of cycles without any external stimuli. Unfortunately, persistent irreversible mechanisms, low chemical stability, and weak mechanical performance mean that the present systems are far from having these capabilities. Polymers are the materials most broadly used in daily life. The incorporation of self-healing mechanisms in polymeric materials promises to further expand their use by extending the lifetime of structural and functional polymer-based systems. This Special Issue aims to represent the state of the art and provide systematic information on self-healing mechanisms, characterization techniques, and structure–property relationships. We hope to provide the community with new ideas and perspectives, as we are firmly convinced that these bioinspired materials can be applied in most modern engineering applications.

Guest Editors

Dr. Marialuigia Raimondo

Department of Industrial Engineering, University of Salerno, Via Giovanni Paolo II, 132, 84084 Fisciano, Italy

Dr. Andrea Sorrentino

Institute of Polymers, Composites and Biomaterials (IPCB), National Research Council of Italy (CNR), Via Previati 1/C, 23900 Lecco, Italy

Deadline for manuscript submissions

closed (31 August 2022)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/26367

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

mdpi.com/journal/polymers

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/journal/polymers

MDPI

About the Journal

Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

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, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)