Special Issue

Damage Mechanics of 3D Printed Polymer Structures and Components

Message from the Guest Editor

Polymer structures and components are presently manufactured by additive manufacturing process. This process dominates the resultant microstructural properties of the manufactured part and, thus, influences its damage behaviour. This Special Issue requests research papers that incorporate this influence into the existing concepts of theoretical and applied solid mechanics of materials. Analytical, numerical and experimental studies that reveals how the damage is initiated, is propagated and leads to fracture in printed polymer structures and components are welcome.

Guest Editor

Dr. Muhammad Khan

Centre for Life-Cycle Engineering and Management, Cranfield University, College Road, Cranfield MK43 OAL, UK

Deadline for manuscript submissions

31 October 2025



Polymers

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.7 Indexed in PubMed



mdpi.com/si/224950

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



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)

