

Special Issue

Development of Polymeric Scaffolds in Bone Regeneration

Message from the Guest Editor

Guided Bone Regeneration (GBR) techniques have become the most frequently used approach to regenerate bone defects. For the GBR process to take place, the presence of a bone graft material and a membrane is crucial. Different bone graft substitutes have been widely used for bone regeneration. However, the regeneration of moderate to severe bone defects has become one of the most challenging treatments in oral and periodontal surgery. Recently, novel strategies are being developed in order to promote and enhance cell growth and to achieve more satisfactory bone repair. Polymeric scaffolds may offer promising approaches to overcome the disadvantages of common bone graft materials and accelerate new bone formation at defect sites. Furthermore, 3D scaffolds act as a template that induces blood vessel formation and guides new bone formation.

The aim of this Special Issue is to gather the latest research studies on novel strategies in bone regeneration based on polymeric scaffolds to accelerate new bone formation and achieve more satisfactory bone repair.

Guest Editor

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Deadline for manuscript submissions

28 February 2026



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/215933

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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 4.9.

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

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