Special Issue

Coarse-Grained Models for Polymers

Message from the Guest Editors

To cope with the large spectrum of characteristic length and time scales characterizing structure and dynamics in polymers, an approach that is often invoked is coarse-graining. In coarse-graining, collections of atoms are lumped into a new type of entities, referred to as super-atoms or particles or beads or even blobs (implying a cruder representation). Coarse-graining is accompanied by a significant reduction in the number of degrees of freedom, and can be realized by a variety of schemes for mapping atoms or repeat units to larger groups, depending on the properties of interest. Recognizing the importance of coarse-graining in polymer science, this Special Issue of Polymers invites contributions highlighting several recent developments and applications of the method in addressing a variety of systems: entangled polymers, polymers with nonlinear architectures, polymer blends and copolymers, semiconducting conjugated polymers, polymer networks, polymer hydrogels, polymer nanocomposites, ring polymers, polymers for biological or medical applications, and many others.

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Deadline for manuscript submissions

closed (30 November 2022)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/85502

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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 4.7.

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

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