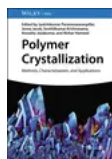


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Polymer Crystallization: Methods, Characterization, and Applications

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Description

Polymer Crystallization

Control the development of polymer crystals with this groundbreaking introduction

Polymer crystallization is a crucial component of polymer development that impacts processing, applications, presentation, and more. Intervention in the polymer crystallization process, in the form of nanofilters, compatibilizers, and more, has the potential to improve optical and chemical properties, improve degrees of crystallinity, and increase the hardness of polymer composites. The myriad applications of crystalline polymers make this one of the most exciting and fast-growing fields in polymer research.

Polymer Crystallization provides a comprehensive introduction to this field and its most important recent developments. It characterizes and analysis an expansive range of crystalline polymers and discusses possible mechanisms for influencing their crystallization processes to impact a variety of outcomes and applications. These applications include industries from food packaging to automotive parts to medical and aerospace materials.

Polymer Crystallization readers will also find:

- Detailed treatment of polymer morphology, rheology, modeling, and more
- Thorough introduction to the fundamentals of polymer crystallization
- Discussion of environmental safety issues and avenues for future research

Polymer Crystallization is a useful reference for materials scientists, polymer scientists, biomedical scientists, and advanced undergraduate and graduate students in these and related fields.

About the Author

Jyotishkumar Parameswaranpillai, PhD, is an Associate Professor in the Faculty of Science at Alliance University, Karnataka, India. He has published extensively on polymer crystallization and related subjects and his past awards and honors include the DSTs INSPIRE Faculty Award and the Kerala State Award for Best Young Scientist.

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