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Research Progress on Mechanical Behavior of Polymers

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Message from the Guest Editors

Dear Colleagues,

Polymers offer a wide range of mechanical behaviours that profoundly affect their performance and determine their application in transforming healthcare, consumer goods, automotive, or aerospace industries, among others. Moreover, additive manufacturing has revolutionized polymer applications, allowing the creation of complex components with reduced waste and customized mechanical properties that depend on the materials used, process parameters, printing strategies, and postprocessing. Therefore, prominent thermoplastics are now widely employed for prototyping and making functional parts of consumer products, e.g., for biomedical, aerospatial, oil, and gas applications.

Hence, a thorough understanding of the mechanical properties of this class of engineering materials is crucial for designing durable polymer components.

In this Special Issue, we invite researchers and practitioners to contribute their expertise and insights to further our understanding of topics such as the yield strength, tensile strength, hardness, ductility, fracture toughness, fatigue, creep deformation, and failure mechanisms of recently developed or newly applied polymers.







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Message from the Editor-in-Chief

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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.

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