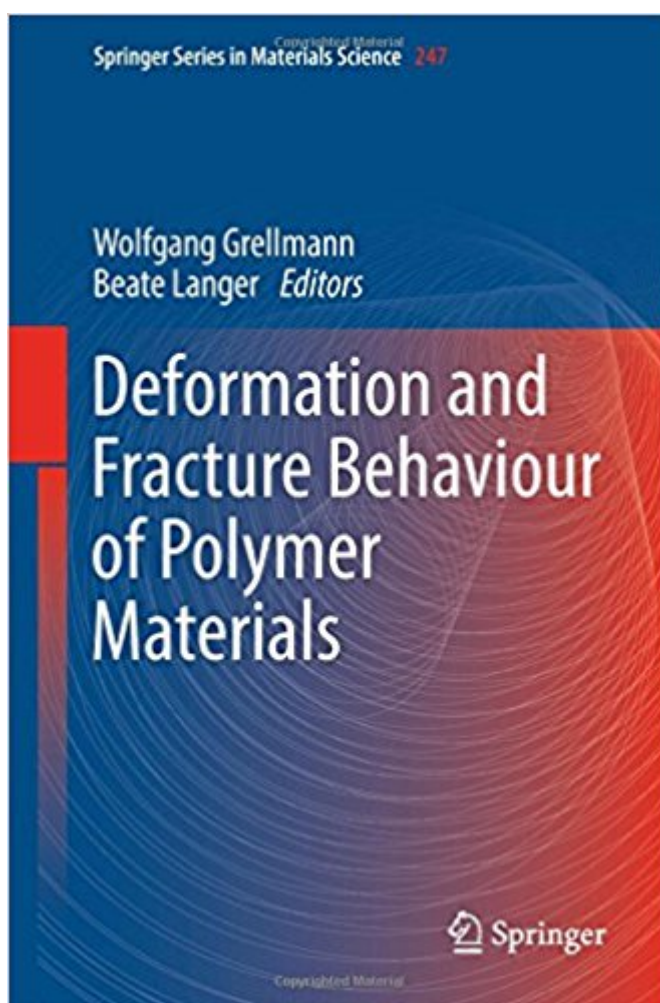


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# Deformation And Fracture Behaviour Of Polymer Materials (Springer Series In Materials Science)



## Synopsis

This book covers the most recent advances in the deformation and fracture behaviour of polymer material. It provides deeper insight into related morphology “property correlations of thermoplastics, elastomers and polymer resins. Each chapter of this book gives a comprehensive review of state-of-the-art methods of materials testing and diagnostics, tailored for plastic pipes, films and adhesive systems as well as elastomeric components and others. The investigation of deformation and fracture behaviour using the experimental methods of fracture mechanics has been the subject of intense research during the last decade. In a systematic manner, modern aspects of fracture mechanics in the industrial application of polymers for bridging basic research and industrial development are illustrated by multifarious examples of innovative materials usage. This book will be of value to scientists, engineers and in polymer materials science.

## Book Information

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From the reviews of the first edition: "This book is published in the "Engineering Materials"™ series intended to provide materials to scientists and engineers in research and development with topical information on structure, properties, manufacturing, and applications. | Although the book is a conference/workshop proceeding, the lectures are thoughtfully re-written with some additional contributions and well produced to give the book a longer shelf life. | It will | serve as a valuable

reference because it provides a snapshot of the current status of the field." (N. Sanjeeva Murthy, Polymer News, Vol. 27 (11), 2002) "The book under review is composed of lectures presented at the Merseburg Discussion Conference with several additional contributions. The present book is definitely a reference book. This reviewer sees two different audiences to which the book will be of interest: practical engineers designing and researching structures using polymeric materials, and theoreticians working in fracture mechanics. The quality of publication is good. Deformation and Fracture Behavior of Polymers is recommended to all large technical libraries." (G. Barenblatt, Applied Mechanics Reviews, Vol. 56 (1), 2003) "The book describes recent progress in basic and applied research into the deformation and fracture behaviour of polymers, blends, copolymers, composites and biocompatible materials. Taking into account recent trends in this field, the contribution of a large number of specialists from Germany, Austria, Poland and Czechia collected in one volume can be very useful for further developments and information, thus stimulating the theoretical activity in different branches of mechanics, and especially in fracture and damage analysis, in plasticity, viscoplasticity, etc." (M. Misicu, Zentralblatt MATH, Vol. 978, 2002) --This text refers to the Digital edition.

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