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Sommario/riassunto	Demonstrating through examples, this book presents a mechanism-based perspective on the broad range of deformation and fracture response of solid polymers. It draws on the results of probing experiments and considers the similar mechanical responses of

amorphous metals and inorganic compounds to develop advanced methodology for generating more precise forms of modelling. This, in turn, provides a better fundamental understanding of deformation and fracture phenomena in solid polymers. Such mechanism-based constitutive response forms have far-reaching application potential in the prediction of structural responses and in tailoring special microstructures for tough behaviour. Moreover, they can guide the development of computational codes for deformation processing of polymers at any level. Applications are wide-ranging, from large strain industrial deformation texturing to production of precision micro-fluidic devices, making this book of interest to both advanced graduate students and to practising professionals.