

1. Record Nr.	UNINA9910567791503321
Autore	Hund Jonas
Titolo	Characterisation and modelling of PC/ABS blends
Pubbl/distr/stampa	Karlsruhe, : KIT Scientific Publishing, 2022
ISBN	1000141093
Descrizione fisica	1 online resource (240 p.)
Collana	Schriftenreihe des Instituts für Mechanik, Karlsruher Institut für Technologie
Soggetti	Civil engineering, surveying & building
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The present work deals with the characterisation and multi-scale modelling of the large-strain response of ternary polymer blends. In a homogenised constitutive modelling approach, particularly the deformation behaviour featuring plastic dilatancy is investigated. Concerning the micromechanical modelling, constitutive models are proposed for the blends' individual phases and compared regarding their capabilities to capture the composition-dependent fracture toughness in unit cell models.