

1. Record Nr.	UNINA9910557729603321
Autore	Osswald Tim
Titolo	Discontinuous Fiber Composites, Volume II
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 electronic resource (380 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Discontinuous fiber-reinforced polymers have gained importance in transportation industries due to their outstanding material properties, lower manufacturing costs and superior lightweight characteristics. One of the most attractive attributes of discontinuous fiber-reinforced composites is the ease with which they can be manufactured in large numbers, using injection and compression molding processes. The main aim of this Special Issue is to collect various investigations focused on the processing of discontinuous fiber-reinforced composites and the effect that processing has on fiber orientation, fiber length and fiber density distributions throughout the final product. Papers presenting investigations on the effect that fiber configurations have on the mechanical properties of the final composite products and materials were welcome in the Special Issue. Researchers who model and simulate processes involving discontinuous fiber composites as well as those performing experimental studies involving these composites were welcomed to submit papers. The authors were encouraged to present new models, constitutive laws, and measuring and monitoring techniques to provide a complete framework on these groundbreaking materials and to facilitate their use in different engineering applications.</p>