



Discontinuous-Fibre Reinforced Composites : Fundamentals of Stress Transfer and Fracture Mechanics /

Goh, Kheng Lim

Springer London :
Imprint: Springer,
2017

Libros electrónicos

Recursos electrónicos

Monografía

This book provides a simple and unified approach to the mechanics of discontinuous-fibre reinforced composites, and introduces readers as generally as possible to the key concepts regarding the mechanics of elastic stress transfer, intermediate modes of stress transfer, plastic stress transfer, fibre pull-out, fibre fragmentation and matrix rupture. These concepts are subsequently applied to progressive stages of the loading process, through to the composite fractures. The book offers a valuable guide for advanced undergraduate and graduate students attending lecture courses on fibre composites. It is also intended for beginning researchers who wish to develop deeper insights into how discontinuous fibre provides reinforcement to composites, and for engineers, particularly those who wish to apply the concepts presented here to design and develop discontinuous-fibre reinforced composites

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMTg1NjA5OTg>

Título: Discontinuous-Fibre Reinforced Composites Fundamentals of Stress Transfer and Fracture Mechanics by Kheng Lim Goh

Editorial: London Springer London Imprint: Springer 2017

Descripción física: 1 recurso en línea XXIV, 190 p. 88 il

Mención de serie: Springer eBooks Engineering Materials and Processes 1619-0181

Contenido: Reinforcing by fibres -- Physical properties of fibres and matrix -- Mechanics of elastic stress transfer -- Fibre debonding, matrix yielding and cracks -- Mechanics of plastic stress transfer -- Composite fracture -- Composite design -- Appendix A Convergence to continuous-fibre composites -- Appendix B Mechanical properties of materials

Detalles del sistema: Modo de acceso: World Wide Web

ISBN: 9781447173052

Materia: Materials science Computer simulation Continuum mechanics Structural materials Materials Science Ceramics, Glass, Composites, Natural Methods Continuum Mechanics and Mechanics of Materials Structural Materials Simulation and Modeling Química

Entidades: SpringerLink (Online service)

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es