

1. Record Nr.	UNINA9910828037803321
Titolo	Advanced composite materials for automotive applications : structural integrity and crashworthiness // editor, Ahmed Elmarakbi
Pubbl/distr/stampa	Chichester, West Sussex, United Kingdom : , : John Wiley & Sons Inc., , 2014
ISBN	1-118-53526-X 1-118-53528-6 1-118-53527-8
Descrizione fisica	1 online resource (472 p.)
Collana	Automotive series
Altri autori (Persone)	ElmarakbiAhmed
Disciplina	629.2/32
Soggetti	Composite materials in automobiles Automobiles - Crashworthiness
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	part one. Fundamental background -- part two. Impact and crash analysis -- part three. Damage and failure -- part 4. Case studies and designs.
Sommario/riassunto	Advanced Composite Materials for Automotive Applications: Structural Integrity and Crashworthiness provides a comprehensive explanation of how advanced composite materials, including FRPs, reinforced thermoplastics, carbon-based composites and many others are designed, manufactured and utilized in vehicle structural components where structural integrity and crashworthiness are key. This book includes technical explanation of composite materials in vehicle design and analysis and covers all phases of composites design, modelling, testing and failure analysis. It also explores the perform