

1. Record Nr.	UNINA9910426043303321
Titolo	Date palm fiber composites : processing, properties and applications / / Mohamad Midani, Naheed Saba, Othman Y. Alothman, editors
Pubbl/distr/stampa	Singapore : , : Springer, , [2020] ©2020
ISBN	981-15-9339-6
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XV, 440 p. 263 illus., 206 illus. in color.)
Collana	Composites science and technology
Disciplina	620.192
Soggetti	Polymeric composites Fibrous composites Date palm fiber
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I: Date palm (Phoenix Dactylifera L.) -- Date Palm history of utilization and technical heritage -- Date Palm Population, geographic distribution, and cultivars -- Date Palm lignocellulosic residues, and annual availability -- Global Natural Fiber Composite Market -- Part II: Date Palm Fibers -- Date Palm Fiber Extraction Approaches -- Date Palm Fiber Treatment Methods -- Date Palm Fiber Characterization and Properties -- Date Palm Fiber Architecture for Composites -- Part III: Date Palm Fiber Composites -- Matrix materials for Date Palm Fiber Composites -- Processing of Date Palm Fiber Composites -- Date Palm Fiber Composite Characterization and Properties -- Design and Modeling of Date Palm Fiber Composites -- Date Palm Composite Applications. .
Sommario/riassunto	This book covers the recent research advances on the utilization of date palm fibers as a new source of cellulosic fibers that can be used in the reinforcement of polymer composites. It discusses the competitive mechanical, physical, and chemical properties which make date palm fibers stand out as an alternative to other fibers currently used in the natural fiber composites market. This volume will be useful to researchers working on natural fiber composites and fiber reinforced composites looking to develop green, biodegradable and sustainable

components for application in automotive, marine, aerospace,
construction, wind energy and consumer goods sectors. .
