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Titolo	Lignocellulosic Fibers : Sustainable Biomaterials for Green Composites / / by Khubab Shaker, Yasir Nawab
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Descrizione fisica	1 online resource (73 pages) : (xiii, 65 pages) : illustrations (some color)
Collana	SpringerBriefs in Materials, , 2192-1105
Disciplina	620.118 620.1180286
Soggetti	Composite materials Biomaterials Materials Sustainability Industrial engineering Production engineering Agricultural biotechnology Composites Materials Engineering Industrial and Production Engineering Agricultural Biotechnology
Lingua di pubblicazione	Inglese
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Nota di contenuto	Green Composite Solutions -- Lignocellulosic Fiber Structure -- Fruit, Seed and Leaf Fibers -- Bast and Grass Fibers -- Wood and Agriculture Waste Fibers -- Performance of Green Composites.
Sommario/riassunto	The book is primarily focused on natural plant (lignocellulosic) fibers as sustainable reinforcement material for green composites. It begins with a brief introduction to common plant-based reinforcements, their extraction techniques, the structure of plant fibers, and describes novel fibers extracted from fruit, seeds, leaf, bast, and agricultural waste. The book then focuses on the application of these fibers as reinforcements

for composite materials, covering reinforcement and composite fabrication techniques, as well as their performance evaluation. Overall, the book provides a unique and comprehensive look at lignocellulosic fibers for use in green composites, appealing to both researchers in the area of sustainable materials and industry professionals and entrepreneurs interested in their utilization in value-added composite products.
