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Titolo	Sustainability in the Textile and Apparel Industries : Sourcing Synthetic and Novel Alternative Raw Materials / / edited by Subramanian Senthilkannan Muthu, Miguel Angel Gardetti
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Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (VIII, 200 p. 97 illus., 59 illus. in color.)
Collana	Sustainable Textiles: Production, Processing, Manufacturing & Chemistry, , 2662-7108
Disciplina	363.731
Soggetti	Economic geography Sustainable development Textile industry Manufactures Motivation research (Marketing) Economic Geography Sustainable Development Textile Engineering Manufacturing, Machines, Tools, Processes Consumer Behavior
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter1: Important step in sustainability: polyethylene terephthalate recycling and the recent developments -- Chapter2: Thinking textile materials from their nature: ethical materials for fashion design with technological, social and aesthetic sense -- Chapter3: Sustainable green-based composites from renewable resources in textile; industrial cotton wastes -- Chapter4: Sustainability in regenerated textile fibers -- Chapter5: Use of Roselle (<i>Hibiscus Sabdariffa</i>) in composite materials for sustainability -- Chapter6: Recycling of marine litter and ocean plastics: a vital sustainable solution for increasing ecology and health problem -- Chapter7: Sustainability in polyurethane synthesis and bio-based polyurethanes -- Chapter8: Textile industry insights

towards impact of regenerated cellulosic and synthetic fibres on microfibre pollution -- Chapter9: Sustainable, renewable and biodegradable poly(lactic acid) fibers and their latest developments in the last decade.

Sommario/riassunto

This book is part of a five-volume set that explores sustainability in textile industry practices globally. Case studies are provided that cover the theoretical and practical implications of sustainable textile issues, including environmental footprints of textile manufacturing, consumer behavior, eco-design in clothing and apparels, supply chain sustainability, the chemistry of textile manufacturing, waste management and textile economics. The set will be of interest to researchers, engineers, industrialists, R&D managers and students working in textile chemistry, economics, materials science, and sustainable consumption and production. This volume explores some alternative synthetic raw materials resulting from the recycling and regeneration of renewable textile fibers, and how these sustainable green-based composites can contribute to improved ecological and human health. The book offers insights into the impacts of human-made fibers and microfiber pollution, and how biodegradable material sourcing can help to curb harmful environmental impacts from these practices and achieve clothing and apparel sustainability. .
