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| Titolo | Cotton science and processing technology : gene, ginning, garment and green recycling / / Hua Wang, Hafeezullah Memon, editors |
| Pubbl/distr/stampa | Singapore : , : Springer, , [2020] ©2020 |
| ISBN | 981-15-9169-5 |
| Edizione | [1st ed. 2020.] |
| Descrizione fisica | 1 online resource (XII, 565 p. 314 illus., 238 illus. in color.) |
| Collana | Textile science and clothing technology |
| Disciplina | 633.51 |
| Soggetti | Cotton Plant fibers Genetics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Introduction to cotton and its seed -- Classification and genetic diversity of cotton (Gossypium) -- Genomic tools to study phylogeny and diversity (in the US and China) -- Agricultural and planting of cotton -- Harvesting and storage of cotton -- Cotton ginning technology (background economics and industry) -- Cotton contamination -- Physical structure, properties and quality of cotton -- Cotton fiber testing (HVI and AFIS) -- Recent advancement in cotton Spinning -- Cotton melange yarn industry -- Cotton and weaving Technology -- Knitting technology for cotton -- Pre-treatment of cotton -- Cotton fiber and yarn dyeing -- Cotton Based Clothing -- Chemical Modification of Cotton for advanced applications -- Cotton as Bio-Materials -- Recycling and LCA of cotton. |
| Sommario/riassunto | This book summarizes all different fields of cotton fiber, including genetics, fiber chemistry, soft materials, textile, and fashion engineering. It also contains some new applications such as biomaterials, nanocoated smart fabrics, and functional textiles. Moreover, the significant improvement recently in gene modification and gene technology is introduced. This book discusses all these aspects in a more straightforward way, and new illustrations will help readers to understand the contents. It is intended for undergraduate |

and graduate students who are interested in cotton science and processing technologies, researchers investigating the updated applications of cotton in various fields as well as industrialists who want to have a quick review of the cotton and its different stages.
