

1. Record Nr.	UNINA9910583076603321
Titolo	Handbook of properties of textile and technical fibres // edited by Anthony R. Bunsell
Pubbl/distr/stampa	Duxford, Kidlington, England ; ; Cambridge, Massachusetts : , : Woodhead Publishing, , 2018 ©2018
ISBN	0-08-101886-X
Edizione	[Second edition.]
Descrizione fisica	1 online resource (1,054 pages) : illustrations
Collana	Textile Institute Book Series
Disciplina	677.4
Soggetti	Textile fibers, Synthetic
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1. Introduction to the science of fibers / Anthony R. Bunsell -- 2. Testing and characterization of fibers / Anthony R. Bunsell, Sebastien Joannes Marcellan -- Part One. Animal fibres -- 3. Properties of wool / Michael G. Huson -- 4. Physical, chemical, and tensile properties of cashmere, mohair, alpaca, and other rare animal fibers / Bruce A. McGregor -- 5. Silk: fibers, films, and compositesdtypes, processing, structure, and mechanics / Philippe Colomban, Vincent Jauzein -- 6. Engineering properties of spider silk / Frank K. Ko, Lynn Y. Wan -- Part Two. Plant fibres -- 7. Tensile properties of cotton fibers: importance, research, and limitations / Yehia Elmoghazy, Ramsis Farag -- 8. Tensile properties of flax fibers / Christophe Baley, Antoine Le Duigou, Claudine Morvan, Alain Bourmaud -- 9. Hemp, jute, banana, kenaf, ramie, sisal fibers / Manickam Ramesh -- Part Three. Regenerated fibres -- 10. Regenerated cellulosic fibers / Avinash P. Manian, Tung Pham, Thomas Bechtold -- 11. Structure and behavior of collagen fibers / Frederick H. Silver, Michael Jaffe, Ruchit G. Shah -- 12. The chemistry, manufacture, and tensile behavior of polyamide fibers / Jiri Militky, Mohanapriya Venkataraman, Rajesh Mishra -- 13. Tensile failure of polyester fibers / Jiri Militky -- 14. Tensile properties of polypropylene fibers / Emmanuel Richaud, Bruno Fayolle, Peter Davies -- 15. Polyacrylonitrile fibers / Bhupender S. Gupta, Mehdi Afshari --

16. Tensile fatigue of thermoplastic fibers / Anthony R. Bunsell, J. Martin Herrera Ramirez, Christophe Le Clerc -- Part Four High performance reinforcing synthetic fibres -- 17. Liquid crystalline organic fibers and their mechanical behavior / Alessandro Pegoretti, Matteo Traina -- 18. The manufacture, properties, and applications of high-strength, high-modulus polyethylene fibers / Martin Vlasblom -- 19. The structure and properties of glass fibers / Frank R. Jones, Norman T. Huff -- 20. Basalt fibers / Jiri Militky, Rajesh Mishra, Hafsa Jamshaid -- 21. The properties of carbon fibers / Bradley A. Newcomb, Han G. Chae -- 22. Small-diameter silicon carbide fibers / Anthony R. Bunsell -- 23. Continuous oxide fibers / David Wilson -- 24. Fibers made by chemical vapor deposition / Xian Luo, Na Jin.
