Record Nr. UNINA9910528873803321 Autore Markova Ivana Titolo Textile fiber microscopy: a practical approach / / Ivana Markova Pubbl/distr/stampa Hoboken, New Jersey:,: Wiley,, 2019 **ISBN** 1-5231-2854-2 1-119-32008-9 1-119-32007-0 1-119-32002-X Edizione [First edition] Descrizione fisica 1 online resource (243 pages): illustrations Collana THEi Wiley ebooks. Disciplina 677.02832 Textile fibers Soggetti Textile fibers - Microscopy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Natural cellulosic fibers -- Animal fibers -- Fur fibers -- Regenerated cellulosic and protein fibers -- Synthetic fibers -- Nanofibers --Recycled fibers -- Historic fibers. Sommario/riassunto A groundbreaking text to the study of textile fibers that bridges the knowledge gap between fiber shape and end uses Textile Fiber Microscopy offers an important and comprehensive guide to the study of textile fibers and contains a unique text that prioritizes a review of fibers' microstructure, macrostructure and chemical composition. The author – a noted expert in the field – details many fiber types and includes all the possible fiber shapes with a number of illustrative micrographs. The author explores a wealth of topics such as fiber end uses, fiber source and production, a history of each fiber and the sustainability of the various fibers. The text includes a review of environmentally friendly fibers and contains information on the most

current fiber science by putting the focus on fibers that have been mechanically or chemically recycled, for use in textile production. The author also offers an exploration of issues of textile waste and the lack of textile recycling that can help public policymakers with ways to inform and regulate post-industrial and post-consumer textile waste issues. This vital guide: Contains an accompanied micrograph for many

fibers presented Includes information on how fiber microstructure is connected to fabric properties and how it affects the end use of fabrics Offers a review of the sophistication of textile fibers from a scientific point of view Presents a comparative textile fiber review that is appropriate for both for students, textile experts and forensic scientists Written for students and professionals of apparel design and merchandising, and forensic scientists, Textile Fiber Microscopy presents an important review of textile fibers from a unique perspective that explores fibers' microstructure, macrostructure and chemical composition.