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Altri autori (Persone)	ShahidMohammad AdivarekarRavindra V
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Nota di contenuto	1. Dyes and dyeing of textiles: An overview of sustainability issues -- 2. Sustainable Innovations in Textile Coloration Machinery and Process Enhancements -- 3. Waterless dyeing of textiles – A sustainable alternative to conventional wet processing -- 4. Emerging Trends in Solvent-Based Textile Dyeing -- 5. Ultrasound-Assisted Dyeing: Efficiency, Performance and Environmental Advantages.
Sommario/riassunto	This book highlights advanced sustainable techniques and innovations in textile coloration. It begins with an extensive overview of sustainability issues in textile dyeing, addressing environmental and ethical challenges. The book explores cutting-edge advancements in coloration machinery and process enhancements, offering innovative solutions for pre-treatment and dyeing processes. It presents waterless dyeing as a sustainable alternative to conventional wet processing and discusses solvent-based dyeing trends and their eco-conscious applications. Emerging technologies like ultrasound-assisted dyeing, electrochemical dyeing, and supercritical-fluid technology are examined for their efficiency, performance, and environmental advantages. The book also covers sustainable techniques such as salt-

free dyeing and micelle dyeing using green chemistry principles. Additionally, it explores bio-derived dyes and mordants, highlighting their role in greener textile coloration, and introduces biosurfactants as eco-friendly substitutes to synthetic auxiliaries in wet processing. The book concludes with exploring recent advances in sustainable textile printing techniques. Catering to researchers, students, and industry professionals, this comprehensive reference offers innovative solutions to address sustainability challenges in the textile sector.
