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   Nota di contenuto Preface -- Chapter 1: Introduction -- Chapter 2: Overview: 3D Fingerprints -- Chapter 3: 3D Fingerprint Generation -- Chapter 4: 3D Fingerprint Authentication -- Chapter 5: Applications of 3D Fingerprints -- Chapter 6: Overview: High Resolution Fingerprints -- Chapter 7: High Resolution Fingerprint Acquisition -- Chapter 8 : Fingerprint Pore Extraction -- Chapter 9: Pore-Based Partial Fingerprint Alignment -- Chapter 10: Fingerprint Pore Matching -- Chapter 11: Quality Assessment of High Resolution Fingerprints -- Chapter 12: Fusion of Extended Fingerprint Features -- Chapter 13: Book Review and Future Work.

   Sommario/riassunto Fingerprints are among the most widely used biometric modalities and have been successfully applied in various scenarios. For example, in forensics, fingerprints serve as important legal evidence; and in civilian applications, fingerprints are used for access and attendance control as well as other identity services. Thanks to advances in three-dimensional (3D) and high-resolution imaging technology, it is now feasible to capture 3D or high-resolution fingerprints to provide extra information and go beyond the traditional features such as global ridge

patterns and local ridge singularities used in conventional fingerprint recognition tasks. This book presents the state of the art in the acquisition and analysis of 3D and high-resolution fingerprints. Based on the authors' research, this book focuses on advanced fingerprint recognition using 3D fingerprint features (i.e., finger shape, level 0 features) or high-resolution fingerprint features (i.e., ridge detail, level 3 features). It is a valuable resource for researchers, professionals and graduate students working in the field of computer vision, pattern recognition, security/biometrics practice, as well as interdisciplinary researchers.