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	ISBN	3-319-61545-9
	Edizione	[1st ed. 2018.]
	Descrizione fisica	1 online resource (336 pages) : illustrations
	Disciplina	006.4
	Soggetti	Signal processing Image processing Speech processing systems Biometrics (Biology) Biomedical engineering Signal, Image and Speech Processing Biometrics Biomedical Engineering and Bioengineering
	Lingua di pubblicazione	Inglese
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	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
	Nota di contenuto	OVERVIEW -- High Resolution Partial Fingerprint Alignment using Pore-Valley Descriptors -- Adaptive Fingerprint Pore Modeling and Extraction -- A Reference High Resolution using Minutiae and Pores -- Online Finger-Knuckle-Print Verification for Personal Authentication -- Phase Congruency Induced Local Features for FKP Verification -- Ensemble of Local and Global Information for Finger-Knuckle-Print Verification -- Reconstruction based FKP Verification with Score Level Adaptive Binary Fusion -- 3D Fingerprint Reconstruction and Recognition -- Multi-Spectral Backhand Authentication.
	Sommario/riassunto	This book describes a range of new biometric technologies, such as high-resolution fingerprint, finger-knuckle-print, multi-spectral backhand, 3D fingerprint, tongueprint, 3D ear, and multi-spectral iris technologies. Further, it introduces readers to efficient feature extraction, matching and fusion algorithms, in addition to developing

potential systems of its own. These advanced biometric technologies and methods are divided as follows: 1. High-Resolution Fingerprint Recognition; 2. Finger-Knuckle-Print Verification; 3. Other Hand-Based Biometrics; and 4. New Head-Based Biometrics. Traditional biometric technologies, such as fingerprint, face, iris, and palmprint, have been extensively studied and addressed in many research books. However, all of these technologies have their own advantages and disadvantages, and there is no single type of biometric technology that can be used for all applications. Many new biometric technologies have been developed in r ecent years, especially in response to new applications. The contributions gathered here focus on how to develop a new biometric technology based on the requirements of essential applications, and how to design efficient algorithms that yield better performance.