

1. Record Nr.	UNINA9910484839503321
Titolo	Biometric Identification Technologies Based on Modern Data Mining Methods / / edited by Stepan Bilan, Mohamed Elhoseny, D. Jude Hemanth
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-48378-9
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (x, 200 pages) : illustrations
Disciplina	006.4
Soggetti	Signal processing Biometric identification Security systems Signal, Speech and Image Processing Biometrics Security Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Image processing and recognition -- Intellectual technologies in systems of biometric identification -- Biometric scanners -- Methods and means of biometric identification by fingerprint -- Methods and means of biometric identification based on the iris of the eye -- Methods and means of biometric identification by hand geometry -- Methods and means of biometric identification based on retina pattern -- Methods and means of biometric identification through the veins of the fingers -- Voice authentication -- Handwriting authentication -- Identification by the handwriting on the keyboard -- Gait identification -- Finger micro-vibration identification -- Identification by the movement of the lips -- Identification through an electrocardiogram -- Conclusion.
Sommario/riassunto	This book emphasizes recent advances in the creation of biometric identification systems for various applications in the field of human activity. The book displays the problems that arise in modern systems of biometric identification, as well as the level of development and

prospects for the introduction of biometric technologies. The authors classify biometric technologies into two groups, distinguished according to the type of biometric characteristics used. The first group uses static biometric parameters: fingerprints, hand geometry, retina pattern, vein pattern on the finger, etc. The second group uses dynamic parameters for identification: the dynamics of the reproduction of a signature or a handwritten keyword, voice, gait, dynamics of work on the keyboard, etc. The directions of building information systems that use automatic personality identification based on the analysis of unique biometric characteristics of a person are discussed. The book is intended for professionals working and conducting research in the field of intelligent information processing, information security, and robotics and in the field of real-time identification systems. The book contains examples and problems/solutions throughout. Presents recent advances in the creation of biometric identification systems for various applications; Classifies biometrics into two groups - static and dynamic - and discusses developing for each; Relevant for students, researchers, and professionals in intelligent information processing, security, and robotics.
