1. Record Nr. UNISA996465351303316 Autore Uhl Andreas Titolo Handbook of vascular biometrics / / editors, Andreas Uhl [et al.] Pubbl/distr/stampa Cham, : Springer Nature, 2020 Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 3-030-27731-3 **ISBN** Edizione [1st edition 2020.] Descrizione fisica 1 online resource (XVIII, 533 p. 197 illus., 149 illus. in color.) Collana Advances in Computer Vision and Pattern Recognition, , 2191-6586 Disciplina 570.15195 Soggetti Biometric identification Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. State of the Art in Vascular Biometrics -- 2. A High Quality Finger Vein Dataset Collected using a Custom Designed Capture Device -- 3. Open Vein - An Open Source Modular Multi-Purpose Finger-vein Scanner Design -- 4. An Available Open Source Vein Recognition Framework -- 5. Use Case of Palm Vein Authentication -- 6. Evolution of Finger Vein Biometric Devices in Terms of Usability. 7. Towards Understanding Acquisition Conditions Influencing Finger-Vein Recognition -- 8. Improved CNN-Segmentation based Finger-Vein Recognition Using Automatically Generated and Fused Training Labels -- 9. Efficient Identification in Large-Scale Vein Recognition Systems using Spectral Minutiae Representations -- 10. Different Views on the Finger - Score Level Fusion in Multi-Perspective vein Recognition. Sommario/riassunto This open access handbook provides the first comprehensive overview of biometrics exploiting the shape of human blood vessels for biometric recognition, i.e. vascular biometrics, including finger vein recognition, hand/palm vein recognition, retina recognition, and sclera recognition. After an introductory chapter summarizing the state of the art in and availability of commercial systems and open datasets/open source software, individual chapters focus on specific aspects of one of the biometric modalities, including questions of usability, security, and privacy. The book features contributions from both academia and major industrial manufacturers.