Record Nr. UNINA9910450381503321 Plaque imaging [[electronic resource]]: pixel to molecular level // **Titolo** edited by Jasjit S. Suri ... [et al.] Amsterdam; ; Washington, DC, : IOS Press, c2005 Pubbl/distr/stampa **ISBN** 1-280-50483-8 9786610504831 1-4294-0243-1 1-60750-116-3 600-00-0521-0 1-60129-097-7 Descrizione fisica 1 online resource (488 p.) Collana Studies in health technology and informatics; ; v. 113 Altri autori (Persone) SuriJasjit S Disciplina 616.130754 Soggetti Blood-vessels - Ultrasonic imaging Blood-vessels - Magnetic resonance imaging Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Title page; Preface; The Editors; Acknowledgements; The Contributors; Contents; Plague Imaging Using Ultrasound, Magnetic Resonance and Computer Tomography: A Review; Medical Image Retrieval Based on Plague Appearance and Image Registration; MRI Plague Tissue Characterization and Assessment of Plaque Stability; Intravascular Ultrasound Elastography: A Clinician's Tool for Assessing Vulnerability and Material Composition of Plaques; Computer Vision Analysis of Collagen Fiber Bundles in the Adventitia of Human Blood Vessels: Image Based Biomechanics of Coronary Plaque Computed Tomographic Cardiovascular ImagingTomographic Plaque Imaging with CT; Absolute Measurement of Integrated Backscatter from Arterial Wall Structures; Ultrasound Imaging in the Analysis of Carotid Plaque Morphology for the Assessment of Stroke; On the Assessment of Texture Feature Descriptors in Intravascular Ultrasound Images: A Boosting Approach to a Feasible Plague Classification: Real-Time

Plaque Characterization and Visualization with Spectral Analysis of

Intravascular Ultrasound Data; Coronary Plaque Analysis by Multimodality Fusion

Imaging of Plaque Cellular Activity with Contrast Enhanced MRIInterand Intra-Observer Variability Assessment of in Vivo Carotid Plaque Burden Quantification Using Multi-Contrast Dark Blood MR Images; Three-Dimensional Volume Registration of Carotid MR Images; Characterization of Shear Stress on the Wall of the Carotid Artery Using Magnetic Resonance Imaging and Computational Fluid Dynamics; Numerical Modeling of Coronary Drug Eluting Stents; Author Index

Sommario/riassunto

This publication starts of with a review of plaque imaging techniques, with an introduction of the segmentation techniques for plaque classification and quantification. Many aspects of plaque imaging techniques are presented in this publication, such as; medical image retrieval and database management, MRI techniques to differentiate stable versus high risk atherosclerosis, composition and morphology of atherosclerotic plaque, analysis of the soft tissue based on computer vision techniques, modelling of coronary artery biomechanics, Cardiac CT for the assessment of cardiovascular pathology wit