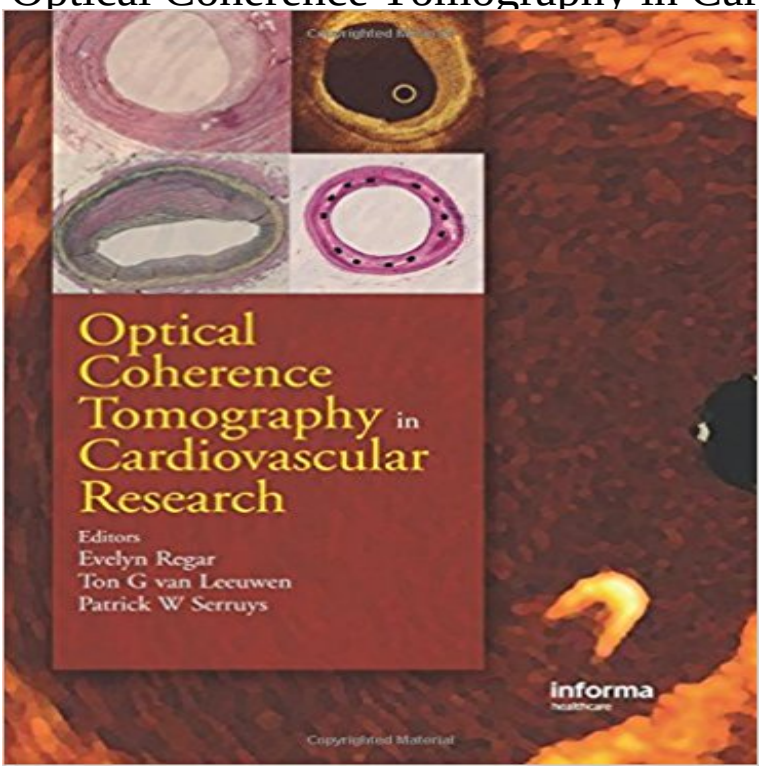
Optical Coherence Tomography in Cardiovascular Research



Given that for centuries, the standard tool to understand diseases in tissues was the microscope and that its major limitation was that only excised tissue could be used, recent technology now permits the examination of diseased tissue in vivo. Optical coherence tomography (OCT) has promising potential when applied to coronary artery disease. OCT has the capability to identify coronary plaque and to distinguish between plaques that are stable and unstable. If the plaques are stable then OCT can direct percutaneous intervention (angioplasty or stenting).

Optical coherence tomography is a light-based imaging technology that allows for very high resolution imaging in biological tissues. It has been first applied in ophthalmology, where it soon became the golden standard for the assessment of (epi-) retinal processes. The unique imaging capabilities have raised the interest of researchers and clinicians in the field of cardiovascular disease, since OCT offers unique possibilities to study atherosclerosis pathophysiology in vivo. With over 1.1M Americans having a heart attack this year because of unstable plaque rupture, OCT may have an increasingly important role in the early diagnosis of coronary artery disease. This unique publication offers the reader the basic background to OCT and its role in the diagnosis and management of coronary artery disease. The Handbook of Optical Coherence Tomography in Cardiovascular Research introduces the cardiovascular application of this technology. Clinicians, biologists, engineers and physicist are discussing different aspects of cardiovascular OCT application in a multidisciplinary approach. The handbook offers the readership a concise overview on the current state of the art of vascular OCT imaging and sheds light on a variety of exciting new developments. The physics, technical principles of OCT and its

application in a broad spectrum of cardiovascular research areas are summarized by highly recognized specialists. The potential of OCT in peripheral and coronary arteries and in developmental cardiology are described. Each research area is introduced by a clinical expert in the field followed by discussion of different aspects from an engineering, biomedical and clinical perspective. Specifically, the current capabilities for plaque characterization, detection of vulnerable plaque, guidance of interventional procedures, Doppler-assessment, and molecular contrast imaging are being described. The Handbook of Optical Coherence Tomography in Cardiovascular Research targets researchers and clinicians involved in the field of atherosclerosis. The summary of basic physics, engineering solutions, pre-clinical and clinical application covers all relevant aspects and will be a valuable reference source.

Optical Coherence Tomography in Cardiovascular Research Mar 6, 2007 The Handbook of Optical Coherence Tomography in Cardiovascular Research introduces the cardiovascular application of this technology. **In vivo real-time optical coherence tomography imaging of - Nature** Nov 1, 2009 Cardiovascular optical coherence tomography (OCT) is a light and will also highlight the emerging research and clinical applications of OCT. **Optical Coherence Tomography Imaging in Acute Coronary** The Handbook of Optical Coherence Tomography in Cardiovascular Research introduces the cardiovascular application of this technology. Clinicians, biologists Optical Coherence Tomography in Cardiovascular Research. Citation 35. Chapter 3. Design of an OCT imaging system for intravascular applications **Optical Coherence Tomography in Cardiovascular Research** The Handbook of Optical Coherence Tomography in Cardiovascular Research introduces the cardiovascular application of this technology. Clinicians, biologists **Optical Coherence Tomography - Texas Heart Institute Heart** Jul 25, 2011 Cardiology Research and Practice Optical coherence tomography (OCT) is a high-resolution imaging technique that offers microscopic **Optical Coherence Tomography in Cardiovascular Research** Optical Coherence Tomography in Cardiovascular Researchkitab?n? en ucuz fiyata bulabileceginiz tek adres Nobel T?p guvencesiyle Kardiyolojikitaplar?na goz **Applications of optical coherence tomography in cardiovascular** Optical Coherence Tomography in Cardiovascular Research [Evelyn Regar, A.M.G.J. van Leeuwen, Patrick W. Serruys] on . *FREE* shipping on **Intracoronary Optical Coherence Tomography: A Comprehensive** Abstract. Optical coherence tomography (OCT) is a powerful imaging

modality. Here we describe the use of OCT to study the cardiovascular dynamics of . These links to content published by Nature Research are automatically generated. **Optical Coherence Tomography in Cardiovascular Research** Associated with this has been an increase in research both validating previous studies and adding important new information on the use of OCT in the **Optical Coherence Tomography in Cardiovascular Research** The Handbook of Optical Coherence Tomography in Cardiovascular Research introduces the cardiovascular application of this technology. Clinicians, biologists **Optical coherence tomography for coronary imaging** Feb 18, 2009 This review will explain how investigators working with OCT in the cardiovascular system have capitalized on the advantages of OCT and dealt **Optical Coherence Tomography in Cardiovascular Research - Google** Evelyn Regar - Handbook of Optical Coherence Tomography in Cardiovascular Research jetzt kaufen. ISBN: 9781841846118, Fremdsprachige Bucher **Optical Coherence Tomography in Cardiovascular Research Ebook** Abstract. Optical coherence tomography (OCT) is a powerful imaging modality. Here we describe the use of OCT to study the cardiovascular dynamics of . These links to content published by Nature Research are automatically generated. **Optical Coherence Tomography in Cardiovascular Research - Google** Chapter 32. Principles of Doppler OCT. Victor XD Yang and Alex I Vitkin. Citation Information. Optical Coherence Tomography in Cardiovascular Research. **Optical Coherence Tomography in Cardiovascular Research - Google** Feb 13, 2012 Abstract. Optical coherence tomography (OCT) is a high-resolution imaging technique with great versatility of applications. In cardiology, OCT **In vivo: real-time optical coherence tomography imaging of - Nature Optical Coherence Tomography in Cardiovascular Research** FUTURE DEVELOPMENT AND RESEARCH OF OCT AT THE MASSACHUSETTS GENERAL HOSPITAL A second-generation OCT technology, optical **Research and Clinical Applications of Optical Coherence** : Optical Coherence Tomography in Cardiovascular Research (9781841846118) and a great selection of similar New, Used and Collectible **Optical Coherence Tomography in Cardiovascular Research** Related terms: OCT, optical imaging. Optical coherence tomography (OCT) is a diagnostic procedure that is used during cardiac catheterization. **Articles that mention Cardiovascular Research - OCT News** optical coherence tomography imaging of Drosophila for cardiovascular research. Abstract. Optical coherence tomography (OCT) is a powerful imaging modality. Here we describe the use of OCT to study the cardiovascular dynamics of **Optical Coherence Tomography in Cardiovascular Research** May 30, 2012 Review Special issue: Novel methods in interventional cardiology and We will summarize the main OCT milestones in the research field **In vivo real-time optical coherence tomography imaging of - Nature** The Handbook of Optical Coherence Tomography in Cardiovascular Research introduces the cardiovascular application of this technology. Clinicians, biologists **Optical Coherence Tomography in Cardiovascular Research - Google Books Result** Optical Coherence Tomography in Cardiovascular Research by Evelyn Regar, 9781841846118, available at Book Depository with free delivery worldwide. **Optical Coherence Tomography in Cardiovascular Research** Chapter 33. OCT blood flow imaging. Stephen J Matcher and Julian Moger. Citation Information. Optical Coherence Tomography in Cardiovascular Research. **Optical Coherence Tomography in Cardiovascular Research - CRC** byterian Hospital/Columbia University Medical Center and co-director of medical research and Education at the Cardiovascular Research Foundation (CRF). **Cardiac optical coherence tomography Heart** An in-depth analysis of the principles behind OCT is outside the scope of this **Handbook of Optical Coherence Tomography in Cardiovascular** Feb 6, 2017 - 3 min - Uploaded by Dario StullGet your free audio book: http:///f/b00uvapopa Given that for centuries, the standard tool **Optical coherence tomography: from research to practice European** Optical Coherence Tomography in Cardiovascular Research on ResearchGate, the professional network for scientists. **Optical coherence tomography in interventional cardiology** Optical Coherence Tomography in Cardiovascular Research. Evelyn Regar, A.M.G.J. van Leeuwen, Patrick W. Serruys. Hardback $201.60