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Nota di contenuto	From the Contents: Introduction to Optical Coherence Tomography (OCT) -- Theory of OCT -- Modeling Light - Tissue Interaction in OCT Systems -- OCT Technology -- Optical Coherence Microscopy -- Contrast Enhanced, Functional and Multimodal OCT -- OCT Applications.
Sommario/riassunto	Optical coherence tomography (OCT) is the optical analog of ultrasound imaging and is a powerful imaging technique that enables non-invasive, <i>in vivo</i> , high resolution, cross-sectional imaging in biological tissue. Between 30 to 40 Million OCT imaging procedures are performed per year in ophthalmology. The overall market is estimated at more than 0.5 Billion USD. A new generation OCT technology was

developed, dramatically increasing resolution and speed, achieving *in vivo* optical biopsy, i.e. the visualization of tissue architectural morphology *in situ* and in real time. Functional extensions of OCT technology enable non-invasive, depth resolved functional assessment and imaging of tissue. The book introduces OCT technology and applications not only from an optical and technological viewpoint, but also from the biomedical and clinical perspective. This second edition is widely extended and covers significantly more topics than the first edition of this book. The chapters are written leading international research groups, in a style comprehensible to a broad audience. It will be of interest not only to physicists, scientists and engineers, but also to biomedical and clinical researchers from different medical specialties.
