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Absorbing Boundary Conditions; 3.2.4 FDTD Formulation of the Light Scattering Properties from Single Cells; 3.2.5 FDTD Formulation of Optical Phase Contrast Microscopic (OPCM) Imaging; 3.3 FDTD Simulation Results of Light Scattering Patterns from Single Cells; 3.3.1 Effect of Extracellular Medium Absorption on the Light Scattering Patterns; 3.4 FDTD OPCM Nanobioimaging Simulation Results; 3.4.1 Cell Structure; 3.4.2 Optical Clearing Effect; 3.4.3 The Cell Imaging Effect of Gold Nanoparticles  
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Sommario/riassunto

A detailed look at the latest research in non-invasive in vivo cytometry and its applications, with particular emphasis on novel biophotonic methods, disease diagnosis, and monitoring of disease treatment at single cell level in stationary and flow conditions. This book thus covers the spectrum ranging from fundamental interactions between light, cells, vascular tissue, and cell labeling particles, to strategies and opportunities for preclinical and clinical research. General topics include light scattering by cells, fast video microscopy, polarization, laser-scanning, fluorescence, Raman,

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