Record Nr. UNINA9911020058903321 Laser imaging and manipulation in cell biology / / edited by Francesco **Titolo** S. Pavone Pubbl/distr/stampa Weinheim, : Wiley, 2010 **ISBN** 9786612774935 9783527632251 3527632255 9781282774933 128277493X 9783527632053 3527632050 9783527632060 3527632069 Descrizione fisica 1 online resource (262 p.) Altri autori (Persone) PavoneFrancesco S Disciplina 571.6028 Soggetti Imaging systems in biology Cytology Laser spectroscopy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Laser Imaging and Manipulation in Cell Biology; Contents; List of Contributors: Introduction: Part One: Multiphoton Imaging and Nanoprocessing; 1 Multiphoton Imaging and Nanoprocessing of Human Stem Cells; 2 In Vivo Nanosurgery; Part Two: Light-Molecule Interaction Mechanisms; 3 Interaction of Pulsed Light with Molecules: Photochemical and Photophysical Effects; 4 Chromophore-Assisted Light Inactivation: A Twenty-Year Retrospective; 5 Photoswitches; 6 Optical Stimulation of Neurons; Part Three: Tissue Optical Imaging; 7 Light-Tissue Interaction at Optical Clearing Part Four: Laser Tissue Operation8 Photodynamic Therapy - the Quest for Improved Dosimetry in the Management of Solid Tumors; 9 Laser Welding of Biological Tissue: Mechanisms, Applications and

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## Sommario/riassunto

Here, the editor has gathered a team of international experts to present the latest advances in the field of laser imaging and manipulation techniques. The result is broad coverage of the interactions with biological samples to perform novel optical manipulation operations, both on the cellular and tissue levels. Of interest to physicists working and researching laser tissue mechanisms, cell biologists investigating new imaging and manipulation operation on the cellular level, medical doctors working with new laser therapies and diagnostic tools, as well as engineers developing new technol