Record Nr. UNINA9910765538603321 Autore Papadakis Raffaello Titolo Fluorescence Imaging - Recent Advances and Applications / / Raffaello **Papadakis** London:,:IntechOpen,,2023 Pubbl/distr/stampa **ISBN** 1-80355-184-4 Descrizione fisica 1 online resource Disciplina 535.35 Soggetti Fluorescence spectroscopy Fluorescence - Periodicals Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. Fluorescent Dextran Applications in Renal Intravital Microscopy -- 2. Application of Excitation-Emission Matrix Fluorescence (EEMF) in the Wastewater Field -- 3. Fluorescence Imaging Enhanced by Members of the Graphene Family: A Review -- 4. Optical Chemosensors: Principles. Chemistry, Strategies, and Applications -- 5. Lifetime Determination Algorithms for Time-Domain Fluorescence Lifetime Imaging: A Review. Sommario/riassunto Fluorescence imaging is widely used in scientific fields ranging from biology to biomedicine and even materials science. The development of novel fluorescent labels and microscopy techniques has rendered fluorescence imaging profoundly useful. Particularly in bioscience, fluorescence imaging empowers the study of the intracellular distribution, dynamics, gene expression, protein-protein interactions. and protein localization and enables the identification and tracking of lysosomes. Fluorescence imaging is applicable in cells and tissues and is constantly gaining attention in medicine too, in the fields of fluorescence-guided surgery and robotic-assisted fluorescence surgery. Acknowledging all these important new trends, this book provides an overview of the recent advances and applications in fluorescence imaging.