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Titolo	Fluorescent Methods for Molecular Motors / / edited by Christopher P. Toseland, Natalia Fili
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ISBN	3-0348-0856-9
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (306 p.)
Collana	Experientia Supplementum, , 1664-431X ; ; 105
Disciplina	574.19245 572.64
Soggetti	Proteins Cell biology Biophysics Biological physics Protein Science Cell Biology Biological and Medical Physics, Biophysics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Fluorescence and Labelling: How to choose and what to do -- Fluorescent biosensors: design and application to motor proteins -- Rapid Reaction Kinetic Techniques -- Fluorescence to study the ATPase mechanism of Motor Proteins -- Use of pyrene labelled actin to probe actin myosin interactions; kinetic and equilibrium studies -- Fluorescent methods to study transcription initiation and transition into elongation -- Single-molecule and single-particle imaging of molecular motors in vitro and in vivo -- Fluorescence methods in the investigation of the DEAD-box helicase mechanism -- Use of Fluorescent Techniques to Study the In Vitro Movement of Myosins -- Fluorescence Tracking of Motor proteins in vitro -- Measuring Transport of Motor Cargos -- Measuring two at the same time: Combining Magnetic Tweezers with Single-Molecule FRET -- Using fluorescence to study actomyosin in yeasts.
Sommario/riassunto	This book focuses on the application of fluorescence to study motor proteins (myosins, kinesins, DNA helicases and RNA polymerases). It is

intended for a large community of biochemists, biophysicists and cell biologists who study a diverse collection of motor proteins. It can be used by researchers to gain an insight into their first experiments, or by experienced researchers who are looking to expand their research to new areas. Each chapter provides valuable advice for executing the experiments, along with detailed background knowledge in order to develop own experiments.