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Nota di contenuto	Single Cell Analysis: Technologies and Applications; Contents; Foreword; Preface; List of Contributors; Part I Single Cell Analysis: Imaging; 1 Single Molecule Fluorescence Monitoring in Eukaryotic Cells: Intranuclear Dynamics of Splicing Factors; 1.1 Motivation; 1.2 Experimental Approach; 1.3 Single Particle Tracking within Living Cells; 1.4 Pre-Messenger RNA Splicing; 1.5 Intranuclear Splicing Factor Tracking; 1.6 Intranuclear U1 snRNP Splicing Factor Binding; 1.7 Events in Speckles; 1.8 Intranuclear U1 snRNP Mobility; 1.9 Perspectives of Single Molecule Microscopy; References 2 Gene Classification and Quantitative Analysis of Gene Regulation in Bacteria using Single Cell Atomic Force Microscopy and Single Molecule Force Spectroscopy2.1 Introduction; 2.2 AFM on Paracrystalline Cell Surface Layers of C. glutamicum: Protein Sequence Information and Morphology; 2.3 Imaging of Living C. glutamicum Cells with Molecular Resolution: Genes, Transcriptional Regulation and Morphology; 2.4 Single Molecule Force Spectroscopy on Specific Protein-DNA

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Sommario/riassunto

The first-ever comprehensive overview of the methods used in this key technology in modern biology provides the latest working knowledge needed by every scientist entering this growing field. It covers all the current technology and application areas, from microscopy and spectroscopy to proteomics and microfluidics.
