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Nota di contenuto	Dynamic Studies in Biology Phototrigger, Photoswitches and Caged Biomolecules; Contents; Foreword; Preface; List of Authors; 1 Photoremovable Protecting Groups Used for the Caging of Biomolecules; 1.1 2-Nitrobenzyl and 7-Nitroindoline Derivatives; 1.1.1 Introduction; 1.1.1.1 Preamble and Scope of the Review; 1.1.1.2 Historical Perspective; 1.1.2 Synthetic Considerations; 1.1.3 Survey of Individual Caged Compounds and Caging Groups; 1.1.3.1 2-Nitrobenzyl Cages; 1.1.3.1.1 Mechanistic Aspects of Photocleavage and By-Product Reactions of 2-Nitrobenzyl Cages 1.1.3.1.2 Representative Survey of Nitrobenzyl-Caged Compounds 1.1.3.2 7-Nitroindoline Cages; 1.1.3.2.1 Mechanistic and Structural Aspects of Photochemical Cleavage of 1-Acyl-7-nitroindolines; 1.1.3.2.2 Survey of 7-Nitroindoline Caged Compounds; 1.1.4 Conclusion; References; 1.2 Coumarin-4-ylmethyl Phototrigger; 1.2.1

Introduction; 1.2.2 Spectroscopic and Photochemical Properties; 1.2.2.1 Overview; 1.2.2.2 Phototriggers; 1.2.2.2.1 MCM Groups: 7-Alkoxy-Substituted Coumarins; 1.2.2.2.2 DMCM Groups: 6,7-Dialkoxy-Substituted Coumarins; 1.2.2.2.3 Bhc Groups: 6-Bromo-7-alkoxy-Substituted Coumarins  
1.2.2.2.4 DEACM Groups: 7-Dialkylamino-Substituted Coumarins  
2.2.3 Target Molecules; 1.2.2.3.1 Phosphates; 1.2.2.3.2 Carboxylates and Sulfates; 1.2.2.3.3 Amines; 1.2.2.3.4 Alcohols and Phenols; 1.2.2.3.5 Carbonyl Compounds; 1.2.3 Synthesis; 1.2.3.1 Synthesis of Precursor Molecules (Caging Agents); 1.2.3.1.1 Phosphates; 1.2.3.1.2 Carboxylates; 1.2.3.1.3 Amines; 1.2.3.1.4 Alcohols and Phenols; 1.2.4 Applications; 1.2.5 Conclusion and Perspective; References; 1.3 p-Hydroxyphenacyl: a Photoremovable Protecting Group for Caging Bioactive Substrates; 1.3.1 Introduction and History  
1.3.2 p-Hydroxyphenacyl  
1.3.2.1 General Physical and Spectroscopic Properties; 1.3.2.2 Synthesis of pHP-Caged Substrates; 1.3.3 Mechanistic Studies; 1.3.3.1 A Triplet "Photo-Favorskii" Rearrangement; 1.3.3.2 Role of the Triplet Phenol; 1.3.3.3 Correlation of the (3)pK(a) with the Quantum Efficiency; 1.3.4 Applications; 1.3.4.1 Neurotransmitter Release; 1.3.4.2 Peptide Release; 1.3.4.3 Nucleotide Release; 1.3.4.4 Enzyme Photoswitches; 1.3.5 Advantages and Limitations; References; 1.4 Caging of ATP and Glutamate: a Comparative Analysis; 1.4.1 Introduction  
1.4.2 General Properties for Caging Groups  
1.4.3 Caged-ATP; 1.4.3.1 Introduction; 1.4.3.2 Syntheses of the P(3)-caged ATP Derivatives; 1.4.3.3 General Properties of the Caged-ATP Molecules; 1.4.3.4 Conclusion; 1.4.4 Caged Glutamate; 1.4.4.1 Introduction; 1.4.4.2 Syntheses of the Caged Glutamate Derivatives; 1.4.4.3 General Properties of the Caged-Glutamate Molecules; 1.4.4.4 Conclusion; Abbreviations; References; 2 Mechanistic Overview of Phototriggers and Cage Release; 2.1 Introduction; 2.2 Major Photoremovable Protecting Groups; 2.2.1 2-Nitrobenzyl (2-NB); 2.2.1.1 The Reactive Excited State  
2.2.1.2 The aci-Nitro Intermediate

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## Sommario/riassunto

With contributions by more than 30 expert researchers, this handbook covers the whole spectrum from chemistry to cell biology and from theory to application. In so doing, it deals with a broad range of topics from the chemistry and biophysics of caged compounds to their application in time-resolved studies, comparing the properties of different caging groups. The authors describe in detail light-activation of proteins as well as nucleic acids, while a special section is devoted to multiphoton phototriggers. A must-have for every biochemist, biophysicist and molecular biologist developing an

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