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Collana	Advances in Multi-Photon Processes and Spectroscopy ; ; v.16
Altri autori (Persone)	LinS. H VillaeysA. A FujimuraY
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Nota di contenuto	CONTENTS ; Preface ; 1 Ultrafast Photochemical Dynamics in Solution Studied by Femtosecond Time-Resolved Fluorescence Spectroscopy: Involvement of Highly Excited States ; 1. Introduction ; 2. Apparatus and Analysis ; 3. Tetracene: A Prototype 4. Retinal: Cascaded Electronic Relaxation 5. 7-Azaindole Dimer: Excited-State Double Proton Transfer ; 6. trans-Azobenzene: Ultrafast Photoisomerization ; 7. Concluding Remarks ; Acknowledgment ; References ; 2 Spectral Selective Studies of Molecular Doped Solids and Applications 1. Introduction 2. Historical Overview ; 2.1 Before 1960: the pre-laser age ; 2.2 1960-1990: entering molecular solid intimacy ; 2.3 Since 1990: to the ultimate limits ; 3.

Spectrally Selective Molecular Materials for Science and Applications

3.1 Molecular crystals and molecular doped crystals

3.2 Molecular doped polymers ; 3.3 Molecular doped organic solid solutions ; 3.4

Molecular doped inorganic solid solutions

; 3.5 Molecular doped inorganic xerogels ;

3.6 Molecular doped cryogenic matrices

4. Basic Concepts for Understanding Molecular Doped Solids

Spectroscopy 4.1 One

molecule interacting with light ; 4.2

Molecules in a crystal ; 4.3 Molecules in disordered solid ; 5. Removing Inhomogeneous

Broadening: Inhomogeneous-free Spectroscopies

; 5.1 Ordered and disordered hosts

5.2 Frequency domain inhomogeneous-free spectroscopies

Sommario/riassunto

In view of the rapid growth in both experimental and theoretical studies of multiphoton processes and multiphoton spectroscopy of atoms, ions and molecules in chemistry, physics, biology, material sciences, etc., it is desirable to publish an Advanced Series that contains review papers readable not only by active researchers in these areas, but also by those who are not experts in the field but who intend to enter the field. The present series attempts to serve this purpose. Each review article is written in a self-contained manner by the experts in the area so that the readers can grasp the
