

1. Record Nr.	UNINA9910451627503321
Autore	Lorenzo Jorge Ripoll
Titolo	Principles of diffuse light propagation [[electronic resource] ] : light propagation in tissues with applications in biology and medicine // Jorge Ripoll Lorenzo
Pubbl/distr/stampa	Singapore, : World Scientific Pub. Co., 2012
ISBN	1-280-66917-9 9786613646101 981-4293-86-5
Descrizione fisica	1 online resource (355 p.)
Disciplina	571.4/55
Soggetti	Light - Scattering Medicine Biology Electronic books.
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 and index.
Nota di contenuto	pt. 1. Light propagation in tissues -- pt. 2. Diffuse light.
Sommario/riassunto	The main idea behind this book is to present a rigorous derivation of the equations that govern light propagation in highly scattering media, with an emphasis on their applications in imaging in biology and medicine. The equations and formulas for diffuse light propagation are derived from the very beginning and all the necessary analytical expressions needed to complete a complex imaging or characterization problem are presented step by step. This book provides postgraduate and PhD students with the basic framework and sufficient knowledge in light transport and the related mathematical methods to solve most complex problems that may appear in biomedical applications involving multiple scattered light. All results presented are formal analytical derivations from the complete problem, presenting, in those cases which are relevant, approximations to these expressions.

2. Record Nr.	UNINA9911019505303321
Titolo	Chemical reactions and their control on the femtosecond time scale : XXth Solvay Conference on Chemistry // edited by Pierre Gaspard and Irene Burghardt
Pubbl/distr/stampa	New York, : Wiley, c1997
ISBN	9786612681981 9781282681989 1282681982 9780470141601 0470141603 9780470142134 0470142138
Descrizione fisica	1 online resource (984 p.)
Collana	Advances in chemical physics ; ; v. 101
Altri autori (Persone)	GaspardPierre <1959-> Burghardtlrene
Disciplina	541.305 541.39 541/.08
Soggetti	Chemical kinetics Chemical reactions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"An Interscience publication."
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Advances in CHEMICAL PHYSICS; CONTENTS; OPENING REMARKS; FEMTOCHEMISTRY: FROM ISOLATED MOLECULES TO CLUSTERS; FEMTOCHEMISTRY: CHEMICAL REACTION DYNAMICS AND THEIR CONTROL; COHERENT CONTROL WITH FEMTOSECOND LASER PULSES; GENERAL DISCUSSION ON FEMTOCHEMISTRY: FROM ISOLATED MOLECULES TO CLUSTERS; FEMTOCHEMISTRY: FROM CLUSTERS TO SOLUTIONS; SIZE-DEPENDENT ULTRAFAST RELAXATION PHENOMENA IN METAL CLUSTERS; FEMTOSECOND CHEMICAL DYNAMICS IN CONDENSED PHASES; FEMTOSECOND LASER CONTROL OF ELECTRON BEAMS FOR ULTRAFAST DIFFRACTION; GENERAL DISCUSSION ON FEMTOCHEMISTRY: FROM CLUSTERS TO SOLUTIONS

LASER CONTROL OF CHEMICAL REACTIONS  
PERSPECTIVES ON THE CONTROL OF QUANTUM MANY-BODY DYNAMICS: APPLICATION TO CHEMICAL REACTIONS; EXPERIMENTAL OBSERVATION OF LASER CONTROL: ELECTRONIC BRANCHING IN THE PHOTODISSOCIATION OF Na<sub>2</sub>; COHERENT CONTROL OF BIMOLECULAR SCATTERING; LASER HEATING, COOLING, AND TRANSPARENCY OF INTERNAL DEGREES OF FREEDOM OF MOLECULES; RAMIFICATIONS OF FEEDBACK FOR CONTROL OF QUANTUM DYNAMICS; THEORY OF LASER CONTROL OF VIBRATIONAL TRANSITIONS AND CHEMICAL REACTIONS BY ULTRASHORT INFRARED LASER PULSES  
TIME-FREQUENCY AND COORDINATE-MOMENTUM WIGNER WAVEPACKETS IN NONLINEAR SPECTROSCOPY  
GENERAL DISCUSSION ON LASER CONTROL OF CHEMICAL REACTIONS; INTRAMOLECULAR DYNAMICS; SOLVENT DYNAMICS AND RRKM THEORY OF CLUSTERS; HIGH-RESOLUTION SPECTROSCOPY AND INTRAMOLECULAR DYNAMICS; GENERAL DISCUSSION ON INTRAMOLECULAR DYNAMICS; REGULAR AND IRREGULAR FEATURES IN UNIMOLECULAR SPECTRA AND DYNAMICS; INTRAMOLECULAR DYNAMICS IN THE FREQUENCY DOMAIN; EMERGENCE OF CLASSICAL PERIODIC ORBITS AND CHAOS IN INTRAMOLECULAR AND DISSOCIATION DYNAMICS  
GENERAL DISCUSSION ON REGULAR AND IRREGULAR FEATURES IN UNIMOLECULAR SPECTRA AND DYNAMICS  
MOLECULAR RYDBERG STATES AND ZEKE SPECTROSCOPY; ZEKE SPECTROSCOPY; SEPARATION OF TIME SCALES IN THE DYNAMICS OF HIGH MOLECULAR RYDBERG STATES; GENERAL DISCUSSION ON MOLECULAR RYDBERG STATES AND ZEKE SPECTROSCOPY: PART I; FROM RYDBERG STATE DYNAMICS TO ION-MOLECULE REACTIONS USING ZEKE SPECTROSCOPY; QUANTUM DEFECT THEORY OF THE DYNAMICS OF MOLECULAR RYDBERG STATES; SUBPICOSECOND STUDY OF BUBBLE FORMATION UPON RYDBERG STATE EXCITATION IN CONDENSED RARE GASES  
GENERAL DISCUSSION ON MOLECULAR RYDBERG STATES AND ZEKE SPECTROSCOPY: PART II  
TRANSITION-STATE SPECTROSCOPY AND PHOTODISSOCIATION; PHOTODISSOCIATION SPECTROSCOPY AND DYNAMICS OF THE VINOXY (CH<sub>2</sub>CHO) RADICAL; RESONANCES IN UNIMOLECULAR DISSOCIATION: FROM MODE-SPECIFIC TO STATISTICAL BEHAVIOR; PHOTODISSOCIATING SMALL POLYATOMIC MOLECULES IN THE VUV REGION: RESONANCES IN THE 1E<sup>+</sup> - 1E<sup>+</sup> BAND OF OCS; PHASE AND AMPLITUDE IMAGING OF EVOLVING WAVEPACKETS BY SPECTROSCOPIC MEANS; GENERAL DISCUSSION ON TRANSITION-STATE SPECTROSCOPY AND PHOTODISSOCIATION; REACTION RATE THEOREMS  
RECENT ADVANCES IN STATISTICAL ADIABATIC CHANNEL CALCULATIONS OF STATE-SPECIFIC DISSOCIATION DYNAMICS

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Sommario/riassunto

Continuing the tradition of the Advances in Chemical Physics series, Volume 101: Chemical Reactions and Their Control on the Femtosecond Time Scale details the extraordinary findings reported at the XXth Solvay Conference on Chemistry, held at the Universite Libre de Bruxelles, Belgium, from November 28 to December 2, 1995. This new volume discusses the remarkable opportunities afforded by the femtosecond laser, focusing on the host of phenomena this laser has made it possible to observe. Examining molecules on the intrinsic time scale of their vibrations as well as their dissociative motions

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