

1. Record Nr.	UNIORUON00433038
Titolo	Literatur
Pubbl/distr/stampa	Bonn, : Inter Nationes
Lingua di pubblicazione	Non definito
Formato	Materiale a stampa
Livello bibliografico	Collezione
2. Record Nr.	UNINA9911020079003321
Titolo	Lasers, molecules, and methods // edited by Joseph O. Hirschfelder, Robert E. Wyatt, Rob D. Coalson
Pubbl/distr/stampa	New York, : Wiley, c1989
ISBN	9786612346781 9781282346789 1282346784 9780470141229 0470141220 9780470141830 0470141832
Descrizione fisica	1 online resource (1042 p.)
Collana	Advances in chemical physics, , 0065-2385 ; ; v. 73
Altri autori (Persone)	CoalsonRob D (Rob Duncan) HirschfelderJoseph O. <1911-1990.> WyattRobert E (Robert Eugene)
Disciplina	541 s 542
Soggetti	Lasers in physics Molecules
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Based on papers presented at a symposium held at the Los Alamos Center for Nonlinear Studies on July 7-11, 1986.
Nota di bibliografia	Includes bibliographies and indexes.
Nota di contenuto	LASERS, MOLECULES, AND METHODS; INTRODUCTION; PREFACE;

CONTENTS; CHAPTER I WHERE ARE LASER-MOLECULE INTERACTIONS HEADED?; MATHEMATICAL METHODS; CHAPTER II MULTIPLE SCALING AND A RELATED EXPANSION METHOD, WITH APPLICATIONS; CHAPTER III APPLICATIONS OF THE METHOD OF MULTIPLE SCALES TO NONLINEARLY COUPLED OSCILLATORS; CHAPTER IV NUMERICAL TREATMENT OF LINEAR AND NONLINEAR PERIODIC SYSTEMS, WITH APPLICATIONS; CHAPTER V THE RECURSIVE RESIDUE GENERATION METHOD; CHAPTER VI PRECONDITIONING EIGENVALUE PROBLEMS; CHAPTER VII STATIONARY PHASE MONTE CARLO METHODS; SPECTROSCOPY AND RELAXATION
CHAPTER VIII APPLICATIONS OF THE RIEMANN PRODUCT INTEGRAL METHOD TO SPECTROSCOPIC PROBLEMS
CHAPTER IX ANALYTIC SOLUTIONS AND DYNAMIC SYMMETRIES IN LASER-DRIVEN ATOMIC EXCITATIONS; CHAPTER X SPIN RELAXATION AND MOTIONAL DYNAMICS; CHAPTER XI DENSITY MATRIX METHODS AND RELAXATION PHENOMENA IN LASER-EXCITED POLYATOMIC MOLECULES; CHAPTER XII REDUCED EQUATIONS OF MOTION FOR MOLECULAR LINESHAPES AND SEMICLASSICAL DYNAMICS IN LIOUVILLE SPACE; CHAPTER XIII TIME-DEPENDENT WAVEPACKET APPROACH TO OPTICAL SPECTROSCOPY INVOLVING NONADIABATICALLY COUPLED POTENTIAL SURFACES
CHAPTER XIV LOCAL MODE OVERTONES AND MODE SELECTIVITY
CHAPTER XV INTERACTION OF AN ADSORBED ATOM WITH A LASER; CHAPTER XVI TELEGRAPHIC ATOMIC FLUORESCENCE; CHAPTER XVII GENERALIZED FLOQUET THEORETICAL APPROACHES TO INTENSE-FIELD MULTIPHOTON AND NONLINEAR OPTICAL PROCESSES; CHAPTER XVIII QUANTUM OPTICS AT VERY HIGH LASER INTENSITIES: ESSENTIAL STATES AND ABOVE-THRESHOLD IONIZATION; CHAPTER XIX COUPLED-EQUATION METHOD FOR MULTIPHOTON TRANSITIONS IN DIATOMIC MOLECULES: BRIDGING THE WEAK- AND INTENSE-FIELD LIMITS; CHAPTER XX SQUEEZED STATES OF LIGHT
CHAPTER XXI NOTES ON CLASSICAL AND QUANTUM THEORIES OF DRIVEN NONLINEAR SYSTEMS
CHAPTER XXII CLASSICAL CHAOS VERSUS QUANTUM DYNAMICS: KAM-TORI AND CANTORI AS DYNAMICAL BARRIERS; CHAPTER XXIII ADIABATIC SWITCHING: A TOOL FOR SEMICLASSICAL QUANTIZATION AND A NEW PROBE OF CLASSICALLY CHAOTIC PHASE SPACE

Sommario/riassunto

Based on a symposium on lasers, molecules, and methods held at the Los Alamos Center for Nonlinear Studies held in July 1986. Contributors present recent advances in theoretical and experimental research on a diversity of dynamical and optical phenomena resulting from the interactions of laser beams with molecules. They describe the predictive results of sophisticated mathematical models, the equipment involved in experiments, and reveal new insights into molecular structure and behavior.
