Record Nr. UNINA9910780882603321 **Titolo** Advances in multi-photon processes and spectroscopy. Volume 19 [[electronic resource] /] / edited by S.H. Lin, A.A. Villaeys, Y. Fujimura Pubbl/distr/stampa Hackensack, N.J., : World Scientific, 2010 **ISBN** 1-282-76206-0 9786612762062 981-4293-59-8 Descrizione fisica 1 online resource (250 p.) Collana Advances in multi-photon processes and spectroscopy;; v. 19 Altri autori (Persone) LinS. H VillaeysA. A **FujimuraY** Disciplina 543/.0858 Soggetti Molecular spectra Multiphoton processes Spectrum analysis Laser spectroscopy 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. Nota di contenuto Preface; CONTENTS; 1. Dynamics of the Vibrationally Excited Molecules and Clusters Studied by IR-UV and UV-IR Double Resonance Spectroscopy Takayuki Ebata; 2. Dynamics of a Liquid Droplet Excited by Infrared Multi-Photon Absorption Akira Terasaki; 3. Electron Spectroscopy of Molecules in Intense Laser Fields M. Okunishi, G. Prumper and K. Ueda; 4. Selective Bond Breaking in Dissociative Ionization of Ethanol Induced by Tailored Intense Laser Fields Ryuji Itakura, Kaoru Yamanouchi, and Fumihiko Kannari 5. Evolution of Transient Structures in Solids and Liquids by Means of Time Resolved X-ray Diffraction and X-ray Absorption Fine Structure Jie Chen and Peter M. Rentzepis6. Photonic Crystals: From Innovation to Applications D. Gamra, W. Aroua, F. AbdelMalek and H. Bouchriha; 7. Quantum Computing and Entanglement Generation Using Intramolecular Degrees of Freedom K. Mishima and K. Yamashita Sommario/riassunto In view of the rapid growth in both experimental and theoretical studies of multi-photon processes and multi-photon spectroscopy of atoms,

ions, and molecules in chemistry, physics, biology and materials science, it is timely to publish an advanced series that contains review papers readable not only by active researchers in these areas, but also by those who are non-experts but who wish to enter the field. This present volume attempts to serve this purpose. Each chapter is written in a self-contained manner by experts in their own area of expertise so that general readers can grasp the knowle