1. Record Nr. UNINA9910298578803321 Autore Persico Maurizio Titolo Photochemistry [[electronic resource]]: A Modern Theoretical Perspective // by Maurizio Persico, Giovanni Granucci Pubbl/distr/stampa Cham: .: Springer International Publishing: .: Imprint: Springer. . 2018 **ISBN** 3-319-89972-4 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XII, 263 p. 53 illus., 35 illus. in color.) Collana Theoretical Chemistry and Computational Modelling, , 2214-4714 Disciplina 541.35 Soggetti Chemistry, Physical and theoretical Physical chemistry Inorganic chemistry Theoretical and Computational Chemistry Physical Chemistry Inorganic Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1. Introduction -- Chapter 2. Molecular states -- Chapter 3. Nota di contenuto Electronic excitation and decay -- Chapter 4. Fast nonadiabatic dynamics -- Chapter 5. Charge and energy transfer -- Chapter 6. Femtochemistry. Sommario/riassunto This book offers an introduction to photochemistry for students with a minimal background in physical chemistry and molecular quantum mechanics. The focus is from a theoretical perspective and highlights excited state dynamics. The authors, experienced lecturers, describe the main concepts in photochemical and photophysical processes that are used as a basis to interpret classical steady-state experimental results (essentially product branching ratios and quantum yields) and the most advanced time-resolved techniques. A significant portion of the content is devoted to the computational techniques present in quantum chemistry and molecular dynamics. With its short summaries, questions and exercises, this book is aimed at graduate students, while its theoretical focus differentiates it from most introductory textbooks

on photochemistry.