Record Nr. UNINA9910451137603321 Autore **Baer Tomas** Titolo Unimolecular reaction dynamics [[electronic resource]]: theory and experiments / / Tomas Baer and William L. Hase New York,: Oxford University Press, 1996 Pubbl/distr/stampa 0-19-756029-6 **ISBN** 1-280-52620-3 9786610526208 0-19-536059-1 1-4294-1537-1 Descrizione fisica 1 online resource (447 p.) Collana The international series of monographs on chemistry;; 31 Altri autori (Persone) HaseWilliam L Disciplina 541.3/93 Soggetti Unimolecular reactions Chemistry Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Previously issued in print: 1996. Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Contents; 1. Introduction; 2. Vibrational/Rotational Energy Levels; 3. Potential Energy Surfaces; 4. State Preparation and Intramolecular Vibrational Energy Redistribution; 5. Experimental Methods in Unimolecular Dissociation Studies; 6. Theory of Unimolecular Decomposition-The Statistical Approach; 7. Applications and Extensions of Statistical Theories: 8. Dynamical Approaches to Unimolecular Rates; 9. Product Energy Distributions; 10. The Dissociation of Small and Large Clusters; Appendix; Author Index; Subject Index The book provides a penetrating and comprehensive description of Sommario/riassunto energy selected reactions from a theoretical as well as experimental point of view. It presents three major aspects of unimolecular reactions involving the preparation of the reactants in selected energy states, the rate of dissipation of the activated molecule, and the partitioning of the excess energy among the final products.