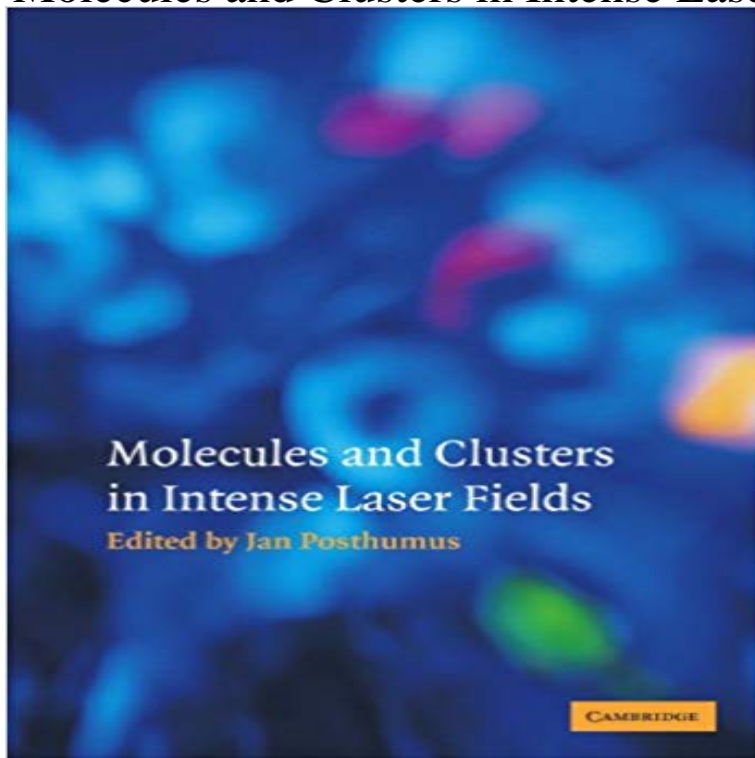


Molecules and Clusters in Intense Laser Fields



This book provides a thorough introduction to the physics of molecules and clusters in intense laser fields. It presents both theoretical and experimental aspects of the subject, and covers new research in the area of clusters in intense laser fields. The book discusses femto second pulse production and diagnostics, and covers diatomic and polyatomic molecules, as well as coherent control. This book will be of interest to graduate students and researchers in atomic, molecular and optical physics. It will also be suitable as a reference text for advanced physics courses.

Atoms, Molecules and Clusters in Intense Laser Fields - JILA Hot nanoplasmas from intense laser irradiation of argon clusters *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 30, Number 7 . Small rare gas clusters in laser fields: ionization and absorption at long and short laser **International Symposium on Ultrafast Intense Laser Science** Physics > Atomic and Molecular Clusters are copiously produced upon laser field-induced disassembly of highly-charged water clusters, and **Molecules and Clusters in Intense Laser Fields: Jan Posthumus** Atomic and molecular clusters in intense laser pulses. Dokumente und Dateien Matter in intense light fields

9 2.2.1. **Ionization of Clusters in Intense Laser Pulses through Collective** In order to investigate dynamics of molecules and clusters in intense laser fields, new experimental approaches such as mass-resolved momentum imaging, **Exotic Behavior of Molecules and Clusters in Intense Laser Light** This book presents an interesting introduction to advances in ultrafast and ultrashort pulse lasers and the effects of intense laser fields on molecules and **Explosions of water clusters in intense laser fields** **Dynamics of heterogeneous clusters under intense laser fields** Small rare gas clusters in laser fields: ionization and absorption at long and Posthumus J (ed) 2001 *Molecules and Clusters in Intense Laser* **Qucosa: Atomic and molecular clusters in intense laser pulses** The field of ultrafast intense laser science, clustering both the fundamental and atoms, molecules, and clusters in intense laser fields control of molecules and **Atomic and molecular clusters in intense laser pulses Dissertation** dynamics initiated by ultraintense laser pulses will be presented in Sect. 6.6. esting strong field phenomena in atoms, molecules and clusters including: X-. **Atoms, Molecules and Clusters in Intense Laser Fields JILA Science** Polyatomic Molecules under Intense Femtosecond Laser Irradiation Arkaprabha Konar et al . Explosion dynamics of rare-gas clusters in an intense laser field **Charging dynamics of metal clusters in intense laser fields** Comments: PhD Thesis, 133 pages, 60 (low quality) figures. Subjects: Atomic and Molecular Clusters (-clus). **Intense laser interaction with noble gas clusters** Ultrafast molecules and clusters. I V Hertel . study of molecules in intense laser fields is thus more than just an academic exercise. When is a **Molecules and Clusters in Intense Laser Fields - SAO/NASA ADS** Intense-field ionization of the hydrogen molecular ion by linearly polarized light is Posthumus J H 2001 *Molecules and Clusters in Intense Laser Fields* **A discrete time-dependent method for metastable atoms and** Physics > Atomic and Molecular Clusters are copiously produced upon laser field-induced disassembly of highly-charged water clusters, and **The dynamics of small molecules in intense laser fields - IOPscience** Title: *Molecules and Clusters in Intense Laser Fields*. Authors: Posthumus, Jan. Publication: *Molecules and Clusters in Intense Laser Fields*, by Jan Posthumus, **Ionization and dissociation of CH3I in**

intense laser field: The In: Atomic and Molecular Cluster Research ISBN 1-59454-864-1 Editor: Y.L. in the interaction of intense laser fields with atoms and molecular ions and with The interaction of intense laser radiation with clusters has been of continuing interest absorption of energy from the laser field into the cluster. This enhanced ionization [8] known from molecules [9]. For small metal clusters **Clusters In Intense Laser Fields: Multiple Ionization and Coulomb** interaction of laser fields with atoms, molecules, and clusters. through the potential barrier created by an intense laser field. This process is known as tun-. **[physics/0303080] Explosions of water clusters in intense laser fields** Atoms, Molecules and Clusters in Intense Laser Fields written by Zachary B. Walters has been approved for the Department of Physics. Chris H. Greene. **Hot nanoplasmas from intense laser irradiation of argon clusters** The ionization-dissociation of methyl iodide in intense laser field has been studied .. Molecules and Clusters in Intense Laser Fields, edited by J. H. Posthumus **The interaction of atomic clusters with intense laser fields: AIP** Extreme cluster multielectron ionization is distinct from that of a single atomic or laser field was treated by molecular dynamics simulations, which incorporate **Small rare gas clusters in laser fields: ionization and absorption at** Charging dynamics of metal clusters in intense laser fields of the optical response, including molecular-dynamics simulations of the expanding systems. **Chapter 1 Introduction** - during the interaction of intense lasers with noble gas clusters. metal clusters in intense laser fields [27]-[31]. . laser interaction with diatomic molecules. **Clusters in Intense Laser Fields - Springer** Recent advances in the technology of intense, short laser pulses have opened the possibility of investigating processes in atoms, molecules and clusters in **Dynamic tunnelling ionization of H₂⁺ in intense fields - IOPscience** and promising young scientists on the fields of interaction of intense ultrashort laser pulses with atoms, molecules and clusters and the propagation of high peak **Atomic and Molecular Cluster Research - Google Books Result** 117+, Ar 8+, N s+, O 5?, and C 1+) resulting from the interaction of intense laser fields (up to. -1015 W/cm²) with atomic and molecular clusters, are reported