



Quantum Theory Of High-Energy Ion-Atom Collisions

Author : Dževad Belkić / **Category :** Science / **Total Pages :** 432 pages

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Summary : Free quantum theory of high-energy ion-atom collisions pdf download - one of the top selling physics books according to ybp library services suitable for graduate students experienced researchers and experts this book provides a state-of-the-art review of the non-relativistic theory of high-energy ion-atom collisions special attention is paid to four-body interactive dynamics through the most important theoretical methods available to date by critically analyzing their foundation and practical usefulness relative to virtually all the relevant experimental data fast ion-atom collisions are of paramount importance in many high-priority branches of science and technology including accelerator-based physics the search for new sources of energy controlled thermonuclear fusion plasma research the earth's environment space research particle transport physics therapy of cancer patients by heavy ions and more these interdisciplinary fields are in need of knowledge about many cross sections and collisional rates for the analyzed fast ion-atom collisions such as single ionization excitation charge exchange and various combinations thereof these include two-electron transitions such as double ionization excitation or capture as well as simultaneous electron transfer and ionization or excitation and the like all of which are analyzed in depth in this book quantum theory of high-energy ion-atom collisions focuses on multifaceted mechanisms of collisional phenomena with heavy ions and atoms at non-relativistic high energies

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