

## Quantum Theory of High-Energy Ion-Atom Collisions (Hardback)

By Dzevad Belkic

Taylor Francis Inc, United States, 2008. Hardback. Condition: New. Language: English . Brand New Book. 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...



## Reviews

This publication could be worthy of a study, and superior to other. it was writtern extremely perfectly and beneficial. I am just easily could possibly get a delight of reading through a published pdf.

## -- Prof. Bernie Torphy

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