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Titolo	Classical Trajectory Perspective of Atomic Ionization in Strong Laser Fields : Semiclassical Modeling // by Jie Liu
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Tunneling ionization and classical trajectory model -- Single ionization in strong laser fields -- Double ionization in strong laser fields -- Partition of the linear photon momentum in atomic tunneling ionization -- Acceleration of neutral atoms with polarized intense laser fields -- Atomic ionization in relativistic intense laser fields.
Sommario/riassunto	The ionization of atoms and molecules in strong laser fields is an active field in modern physics and has versatile applications in such as attosecond physics, X-ray generation, inertial confined fusion (ICF), medical science and so on. Classical Trajectory Perspective of Atomic Ionization in Strong Laser Fields covers the basic concepts in this field and discusses many interesting topics using the semiclassical model of classical trajectory ensemble simulation, which is one of the most successful ionization models and has the advantages of a clear picture, feasible computing and accounting for many exquisite experiments quantitatively. The book also presents many applications of the model in such topics as the single ionization, double ionization, neutral atom

acceleration and other timely issues in strong field physics, and delivers useful messages to readers with presenting the classical trajectory perspective on the strong field atomic ionization. The book is intended for graduate students and researchers in the field of laser physics, atom molecule physics and theoretical physics. Dr. Jie Liu is a professor of Institute of Applied Physics and Computational Mathematics, China and Peking University.
