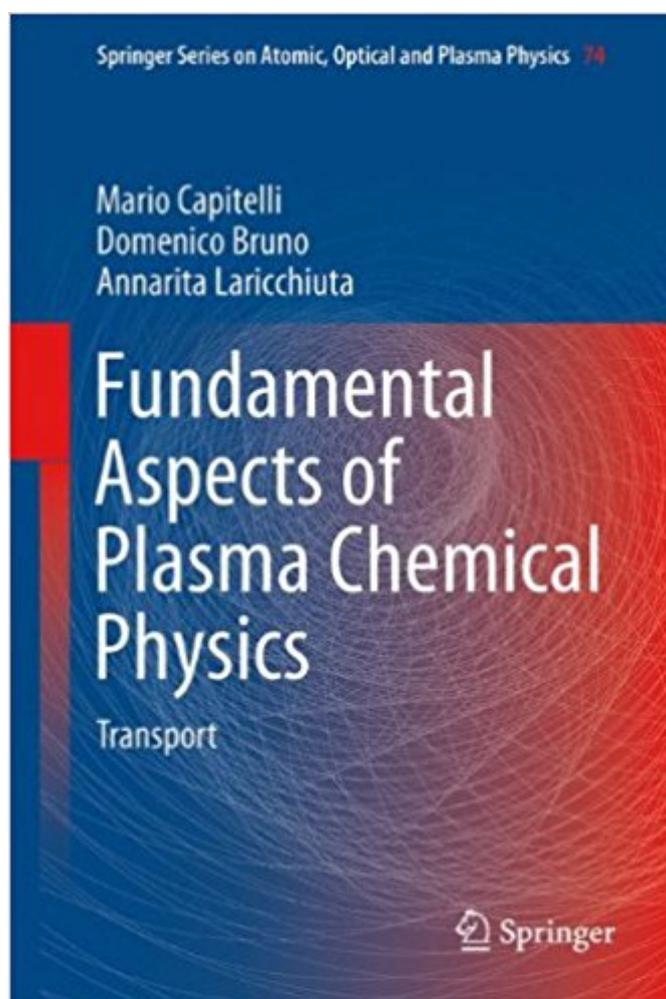


The book was found

Fundamental Aspects Of Plasma Chemical Physics: Transport (Springer Series On Atomic, Optical, And Plasma Physics)



Synopsis

Fundamental Aspects of Plasma Chemical Physics: Transport develops basic and advanced concepts of plasma transport to the modern treatment of the Chapman-Enskog method for the solution of the Boltzmann transport equation. The book invites the reader to consider actual problems of the transport of thermal plasmas with particular attention to the derivation of diffusion- and viscosity-type transport cross sections, stressing the role of resonant charge-exchange processes in affecting the diffusion-type collision calculation of viscosity-type collision integrals. A wide range of topics is then discussed including (1) the effect of non-equilibrium vibrational distributions on the transport of vibrational energy, (2) the role of electronically excited states in the transport properties of thermal plasmas, (3) the dependence of transport properties on the multitude of Saha equations for multi-temperature plasmas, and (4) the effect of the magnetic field on transport properties. Throughout the book, worked examples are provided to clarify concepts and mathematical approaches. This book is the second of a series of three published by the Bari group on fundamental aspects of plasma chemical physics. The first book, Fundamental Aspects of Plasma Chemical Physics: Thermodynamics, is dedicated to plasma thermodynamics; and the third, Fundamental Aspects of Plasma Chemical Physics: Kinetics, deals with plasma kinetics.

Book Information

Series: Springer Series on Atomic, Optical, and Plasma Physics (Book 74)

Hardcover: 352 pages

Publisher: Springer; 2013 edition (April 3, 2013)

Language: English

ISBN-10: 1441981713

ISBN-13: 978-1441981714

Product Dimensions: 6.3 x 1 x 9.2 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #4,824,057 in Books (See Top 100 in Books) #65 in Books > Science & Math > Chemistry > Chemical Physics #2062 in Books > Science & Math > Physics > Dynamics > Thermodynamics #3422 in Books > Science & Math > Physics > Nuclear Physics

[Download to continue reading...](#)

Fundamental Aspects of Plasma Chemical Physics: Transport (Springer Series on Atomic, Optical, and Plasma Physics) Pulsed Electrical Discharge in Vacuum (Springer Series on Atomic, Optical,

and Plasma Physics) Atomic Spectra and Radiative Transitions (Springer Series in Chemical Physics, Vol. 1) Reparando TV Plasma y LCD/ Repairing Plasma TV and LCD: Fundamentos, Ajustes y Soluciones (Spanish Edition) Electron Spectrometry of Atoms using Synchrotron Radiation (Cambridge Monographs on Atomic, Molecular and Chemical Physics) Advances in Chemical Physics, Volume 15: Stochastic Processes in Chemical Physics (v. 15) Optical Spectroscopies of Electronic ABS (World Scientific Series in Contemporary Chemical Physics) Free Energy Calculations: Theory and Applications in Chemistry and Biology (Springer Series in Chemical Physics) Roofing (Fundamental Series) (Passbooks) (Fundamental Passbooks) Photonics Rules of Thumb: Optics, Electro-Optics, Fiber Optics, and Lasers (Optical and Electro-Optical Engineering Series) Modeling Groundwater Flow and Contaminant Transport (Theory and Applications of Transport in Porous Media) Freight Forwarding and Multi Modal Transport Contracts (Maritime and Transport Law Library) ASTNA Patient Transport: Principles and Practice (Air & Surface Patient Transport: Principles and Practice) Transport Nursing (CTRN) Review (Certification in Transport Nursing Book 1) Optical Character Recognition: An Illustrated Guide to the Frontier (The Springer International Series in Engineering and Computer Science) Electron Holography (Springer Series in Optical Sciences) Tourism and Transport: Modes, Networks and Flows (Aspects of Tourism Texts) Handbook of Optical Fibers and Cables, Second Edition (Optical Science and Engineering) Fundamental Aspects of Electrometallurgy Introduction to Optical Communication, Lightwave Technology, Fiber Transmission, and Optical Networks

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)