



# Introduction to Dusty Plasma Physics (Series in Plasma Physics)

By P.K Shukla, A.A Mamun

Download now

Read Online 

**Introduction to Dusty Plasma Physics (Series in Plasma Physics)** By P.K Shukla, A.A Mamun

Introduction to Dusty Plasma Physics contains a detailed description of the occurrence of dusty plasmas in our Solar System, the Earth's mesosphere, and in laboratory discharges. The book illustrates numerous mechanisms for charging dust particles and provides studies of the grain dynamics under the influence of forces that are common in dusty plasma environments.

 [Download Introduction to Dusty Plasma Physics \(Series in Pl ...pdf](#)

 [Read Online Introduction to Dusty Plasma Physics \(Series in ...pdf](#)

# **Introduction to Dusty Plasma Physics (Series in Plasma Physics)**

*By P.K Shukla, A.A Mamun*

## **Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun**

Introduction to Dusty Plasma Physics contains a detailed description of the occurrence of dusty plasmas in our Solar System, the Earth's mesosphere, and in laboratory discharges. The book illustrates numerous mechanisms for charging dust particles and provides studies of the grain dynamics under the influence of forces that are common in dusty plasma environments.

## **Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun**

### **Bibliography**

- Sales Rank: #3851081 in Books
- Published on: 2001-11-15
- Original language: English
- Number of items: 1
- Dimensions: 9.25" h x 6.25" w x .75" l, .0 pounds
- Binding: Hardcover
- 450 pages



[Download](#) Introduction to Dusty Plasma Physics (Series in Pl ...pdf



[Read Online](#) Introduction to Dusty Plasma Physics (Series in ...pdf

## **Editorial Review**

### **Review**

"This book is an excellent and timely introduction to the fastest developing branch of plasma physics. While the emphasis is on collective processes in dusty plasmas, an area where the authors are leading authorities, the basic processes of dust charging and their physical and dynamical consequences are discussed in considerable detail. The material is well organized and the writing style is lucid. I consider this book essential reading to anyone who desires an authoritative introduction to this fascinating area of research."

Prof D A Mendis, University of California San Diego "This text presents a timely and pertinent introduction to the new area of dusty plasma physics by one of the major contributors to the field and one of his close collaborators. The book begins by indicating the ubiquity and importance of charged dust in plasma environments. The book then develops the physics of dusty plasmas, with particular emphasis on waves, instabilities and nonlinear structures. I am sure that this work will stimulate an already rapidly growing area of physics. It will be useful to both experimentalists and theoreticians who wish to acquire a broad and solid introduction to the field of dusty plasmas."

J T Mendonca, Instituto Superior Tecnico, Portugal "The book . . . was written by authors who directly participated in the development of dusty plasma theory. It addresses current knowledge about dusty plasmas and summarizes more than 20 years of research in this rapidly evolving subject with its own wide range of topics . . . A useful discussion of the electrodynamics of a dusty plasma containing nonspherical dust particles finalizes the large coverage of collective phenomena . . . Overall, the book gives a comprehensive analysis of basic dusty plasma physics, combining in an original way laboratory and space plasma topics. There is no doubt that the book will find a well-deserved place on the shelves of all the plasma physicists and astrophysicists with an interest in space and laboratory dusty plasmas."

Victoria Yaroshenko, Max-Planck-Institut fur Extraterrestrische Physik "This book is an excellent and timely introduction to the fastest developing branch of plasma physics. While the emphasis is on collective processes in dusty plasmas, an area where the authors are leading authorities, the basic processes of dust charging and their physical and dynamical consequences are discussed in considerable detail. The material is well organized and the writing style is lucid. I consider this book essential reading to anyone who desires an authoritative introduction to this fascinating area of research."

Prof D A Mendis, University of California San Diego "This text presents a timely and pertinent introduction to the new area of dusty plasma physics by one of the major contributors to the field and one of his close collaborators. The book begins by indicating the ubiquity and importance of charged dust in plasma environments. The book then develops the physics of dusty plasmas, with particular emphasis on waves, instabilities and nonlinear structures. I am sure that this work will stimulate an already rapidly growing area of physics. It will be useful to both experimentalists and theoreticians who wish to acquire a broad and solid introduction to the field of dusty plasmas."

J T Mendonca, Instituto Superior Tecnico, Portugal "The book . . . was written by authors who directly participated in the development of dusty plasma theory. It addresses current knowledge about dusty plasmas and summarizes more than 20 years of research in this rapidly evolving subject with its own wide range of topics . . . A useful discussion of the electrodynamics of a dusty plasma containing nonspherical dust particles finalizes the large coverage of collective phenomena . . . Overall, the book gives a comprehensive analysis of basic dusty plasma physics, combining in an original way laboratory and space plasma topics. There is no doubt that the book will find a well-deserved place on the shelves of all the plasma physicists and astrophysicists with an interest in space and laboratory dusty plasmas."

Victoria Yaroshenko, Max-Planck-Institut fur Extraterrestrische Physik

## Users Review

### From reader reviews:

#### **Byron Jorgensen:**

Throughout other case, little individuals like to read book Introduction to Dusty Plasma Physics (Series in Plasma Physics). You can choose the best book if you appreciate reading a book. Given that we know about how is important a new book Introduction to Dusty Plasma Physics (Series in Plasma Physics). You can add understanding and of course you can around the world with a book. Absolutely right, due to the fact from book you can realize everything! From your country till foreign or abroad you may be known. About simple matter until wonderful thing you are able to know that. In this era, we are able to open a book or even searching by internet gadget. It is called e-book. You need to use it when you feel bored stiff to go to the library. Let's study.

#### **Pamela Bradley:**

What do you in relation to book? It is not important along with you? Or just adding material when you need something to explain what the ones you have problem? How about your time? Or are you busy man? If you don't have spare time to try and do others business, it is make one feel bored faster. And you have extra time? What did you do? Everybody has many questions above. They need to answer that question since just their can do that will. It said that about guide. Book is familiar on every person. Yes, it is appropriate. Because start from on guardería until university need this specific Introduction to Dusty Plasma Physics (Series in Plasma Physics) to read.

#### **Jeremy Brown:**

Nowadays reading books be than want or need but also be a life style. This reading addiction give you lot of advantages. The advantages you got of course the knowledge the rest of the information inside the book which improve your knowledge and information. The information you get based on what kind of book you read, if you want drive more knowledge just go with schooling books but if you want sense happy read one with theme for entertaining including comic or novel. The actual Introduction to Dusty Plasma Physics (Series in Plasma Physics) is kind of reserve which is giving the reader erratic experience.

#### **Patricia Little:**

This Introduction to Dusty Plasma Physics (Series in Plasma Physics) usually are reliable for you who want to become a successful person, why. The explanation of this Introduction to Dusty Plasma Physics (Series in Plasma Physics) can be one of several great books you must have is usually giving you more than just simple examining food but feed a person with information that probably will shock your before knowledge. This book is usually handy, you can bring it everywhere you go and whenever your conditions throughout the e-book and printed ones. Beside that this Introduction to Dusty Plasma Physics (Series in Plasma Physics) forcing you to have an enormous of experience including rich vocabulary, giving you tryout of critical thinking that we realize it useful in your day task. So , let's have it and revel in reading.

**Download and Read Online Introduction to Dusty Plasma Physics  
(Series in Plasma Physics) By P.K Shukla, A.A Mamun  
#BK3MPCHWY9L**

## **Read Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun for online ebook**

Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun books to read online.

### **Online Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun ebook PDF download**

**Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun Doc**

**Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun Mobipocket**

**Introduction to Dusty Plasma Physics (Series in Plasma Physics) By P.K Shukla, A.A Mamun EPub**