

1. Record Nr.	UNINA9910784002103321
Autore	Vladimirov Sergey V
Titolo	Physics and applications of complex plasmas [[electronic resource] /] / S.V. Vladimirov, K. Ostrikov, A.A. Samarian
Pubbl/distr/stampa	London, : Imperial College Press, 2005
ISBN	1-281-86702-0 9786611867027 1-86094-738-7
Descrizione fisica	1 online resource (456 p.)
Altri autori (Persone)	OstrikovK (Kostya) SamarianA. A (Alex A.)
Disciplina	530.44
Soggetti	Dusty plasmas Plasma (Ionized gases)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface; Contents; 1. Introduction; 2. Basics of Plasma-Dust Particle Interactions; 3 . Production and Diagnostics of Complex Plasmas; 4. Particle Dynamics in a Complex Plasma; 5. Structures and Phase Transitions in Complex Plasmas; 6. Waves and Instabilities in Complex Plasmas; 7. Fine Particles in Industrial Applications; Conclusions; Bibliography; Index
Sommario/riassunto	At the frontiers of physics and chemistry lies the new and rapidly emerging area of complex plasma systems. The study of complex plasma systems that contain colloid nano/microscopic particles is now actively pursued in a diverse range of scientific fields - from plasma and gas discharge physics, to astrophysics, materials science and engineering. This book highlights, in a systematic, insightful, and perceptive way, the fundamental physics and industrial applications of complex plasmas, with emphasis on the conditions relevant to laboratory gas discharges and industrial plasma reactors. It pro