

1. Record Nr.	UNISA996466679703316
Titolo	Small Bodies in Planetary Systems [[electronic resource] /] / edited by Ingrid Mann, Akiko Nakamura, Tadashi Mukai
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2009
ISBN	3-540-76935-8
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (XI, 329 p.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 758
Classificazione	UD 8220
Disciplina	523.2
Soggetti	Astrophysics Space sciences Observations, Astronomical Astronomy—Observations Astrophysics and Astroparticles Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Astronomy, Observations and Techniques Solar system
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	From Protoplanetary Disks to Planetary Disks: Gas Dispersal and Dust Growth -- Dynamics of Small Bodies in Planetary Systems -- Asteroids and Their Collisional Disruption -- On the Strength and Disruption Mechanisms of Small Bodies in the Solar System -- Meteoroids and Meteors #x02014; Observations and Connection to Parent Bodies -- Optical Properties of Dust -- Evolution of Dust and Small Bodies: Physical Processes -- Observational Studies of Interplanetary Dust -- Six Hot Topics in Planetary Astronomy -- Detection of Extrasolar Planets and Circumstellar Disks.
Sommario/riassunto	The small bodies in planetary systems are indicative of the material evolution, the dynamical evolution and the presence of planets in a system. Recent astronomical research, space research, laboratory research and numerical simulations have brought a wealth of new and exciting findings on extra-solar planetary systems and on asteroids,

comets, meteoroids and trans-Neptunian objects in our solar system. Progress in astronomical instrumentation has led to the discovery and investigation of small bodies in the outer solar system and to observations of debris disks related to the small bodies in extra-solar planetary systems. Space research allowed for close studies of some of the small solar system bodies from spacecraft. This class-tested lecture set is intended as an introduction to the latest research results and to the key issues of future research.
