

1. Record Nr.	UNINA9910140789203321
Titolo	Astromineralogy // Thomas Henning (ed.)
Pubbl/distr/stampa	New York, : Springer, 2010
ISBN	9783642132599 3642132596
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (IX, 329 p. 111 illus.)
Collana	Lecture notes in physics, , 0075-8450 ; ; 815
Classificazione	540520
Altri autori (Persone)	HenningThomas
Disciplina	549.999
Soggetti	Astromineralogy
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.
Nota di contenuto	From Dust Astrophysics Towards Dust Mineralogy – A Historical Review -- Formation and Evolution of Minerals in Accretion Disks and Stellar Outflows -- The Mineralogy of Interstellar and Circumstellar Dust in Galaxies -- The Mineralogy of Cometary Dust -- The In-Situ Study of Solid Particles in the Solar System -- The Astromineralogy of Interplanetary Dust Particles -- The Most Primitive Material in Meteorites -- Laboratory Astrophysics of Cosmic Dust Analogues.
Sommario/riassunto	Astromineralogy deals with the science of gathering mineralogical information from the astronomical spectroscopy of asteroids, comets and dust in the circumstellar environments in general. This field has received a tremendous boost with the reliable identification of minerals by the Infrared Space Observatory. The first edition of this book, published in 2003, was the first comprehensive and coherent account of this exciting field. Data obtained in the meantime with the Spitzer Infrared Space Telescope, the stardust mission to the comet 81P / Wild 2, and with the Cassini mission, together with progress in ground-based observations and laboratory astrophysics form the basis for this updated and widely extended second edition. Beyond addressing the specialist in the field, the book is intended as a high-level but readable introduction to astromineralogy for both the nonspecialist researcher and the advanced student.