Record Nr. UNINA9910140789203321 **Titolo** Astromineralogy / / Thomas Henning (ed.) New York, : Springer, 2010 Pubbl/distr/stampa **ISBN** 3-642-13259-6 Edizione [2nd ed.] Descrizione fisica 1 online resource (IX, 329 p. 111 illus.) Lecture notes in physics, , 0075-8450;; 815 Collana Classificazione 540520 Altri autori (Persone) HenningThomas 549.999 Disciplina Soggetti Astromineralogy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references. From Dust Astrophysics Towards Dust Mineralogy - A Historical Review Nota di contenuto -- 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. Astromineralogy deals with the science of gathering mineralogical Sommario/riassunto 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 groundbased 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.