

1. Record Nr.	UNINA9910810942403321
Autore	Krishna Swamy K. S
Titolo	Physics of comets // K.S. Krishna Swamy
Pubbl/distr/stampa	Singapore ; ; Hackensack, N.J., : World Scientific, c2010
ISBN	1-283-14403-4 9786613144034 981-4291-12-9
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (500 p.)
Collana	World Scientific series in astronomy and astrophysics ; ; v. 12
Disciplina	523.6
Soggetti	Comets
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	Foreword; Preface; Contents; 1. General Introduction; 2. Dynamics; 3. Physical Aspects; 4. Spectra; 5. Spectra of Coma; 6. Gas Production Rates in Coma; 7. Dust Tails; 8. Light Scattering Theory; 9. The Nature of Dust Particles; 10. Ion Tails; 11. Nucleus; 12. Origin; 13. Relation to Other Solar System Studies; 14. Problems and Prospects; Index
Sommario/riassunto	This revised edition places a unique emphasis on all the new results from ground-based, satellites and space missions - detection of molecule H <sub>2</sub> and prompt emission lines of OH for the first time; discovery of X-rays in comets; observed diversity in chemical composition among comets; the puzzle of the constancy of spin temperature; the well-established mineralogy of cometary dust; extensive theoretical modeling carried out for understanding the observed effects; and, the similarity in the mineralogy of dust in circumstellar shell of stars, comets, meteorites, asteroids and IDPs, thus indicatin