

1. Record Nr.	UNINA9910437821203321
Titolo	Astrochemistry and astrobiology / / Ian W.M. Smith, Charles S. Cockell, Sydney Leach, editors
Pubbl/distr/stampa	Hedielberg ; ; New York, : Springer, c2013
ISBN	1-283-74198-9 3-642-31730-8
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (352 p.)
Collana	Physical chemistry in action
Altri autori (Persone)	Smith Ian W. M Cockell Charles Leach Sydney <1924->
Disciplina	523 523.02 523/02
Soggetti	Cosmochemistry Exobiology
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 index.
Nota di contenuto	Aspects of Physical Chemistry -- The Molecular Universe -- Chemical Processes in the Interstellar Medium -- Astrochemistry: Synthesis and Modelling -- Planetary Atmospheres and Chemical Markers for Extraterrestrial Life -- The Importance of Water -- Life, Metabolism and Energy -- Life: The Physical Underpinnings of Replication -- Physical Chemistry.
Sommario/riassunto	Astrochemistry and Astrobiology is the debut volume in the new series Physical Chemistry in Action. Aimed at both the novice and experienced researcher, this volume outlines the physico-chemical principles which underpin efforts to understand astrochemistry and predict astrobiology. An introductory chapter includes fundamental aspects of physical chemistry required for understanding the field. Eight further chapters address specific topics, encompassing basic theory and models, up-to-date research and an outlook on future work. The last chapter examines each of the topics addressed from a different angle. Written and edited by international experts, this text is accessible for those entering the field of astrochemistry and astrobiology, whilst still

providing new information and insights for experienced researchers.

---