1.	Record Nr.	UNINA9910809739303321
	Titolo	From fossils to astrobiology : records of life on Earth and the search for extraterrestrial biosignatures / / edited by Joseph Seckbach and Maud Walsh
	Pubbl/distr/stampa	[Dordrecht], : Springer, 2009
	ISBN	1-281-87117-6 9786611871178 1-4020-8837-X
	Edizione	[1st ed. 2008.]
	Descrizione fisica	1 online resource (576 p.)
	Collana	Cellular origin, life in extreme habitats and astrobiology ; ; v. 12
	Altri autori (Persone)	SeckbachJ (Joseph) WalshMaud
	Disciplina	551 576.839
	Soggetti	Exobiology Paleontology
	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 indexes.
	Nota di contenuto	pt. 1. Fossils and fossilization pt. 2. Stromatolites, microbial mats, and biofilms pt. 3. Terrestrial microbes as analogs for life elsewhere in the universe pt. 4. Evolution and astrobiology pt. 5. Astronomical and cosmological considerations in astrobiology pt. 6. The search for evidence of life on Mars.
	Sommario/riassunto	From Fossils to Astrobiology reviews developments in paleontology and geobiology that relate to the rapidly-developing field of Astrobiology, the study of life in the Universe. Many traditional areas of scientific study, including astronomy, chemistry and planetary science, contribute to Astrobiology, but the study of the record of life on planet Earth is critical in guiding investigations in the rest of the cosmos. In this varied book, expert scientists from 15 countries present peer- reviewed, stimulating reviews of paleontological and astrobiological studies. The overviews of established and emerging techniques for studying modern and ancient microorganisms on Earth and beyond, will be valuable guides to evaluating biosignatures which could be found in the extraterrestrial surface or subsurface within the Solar

System and beyond. This volume also provides discussion on the controversial reports of "nanobacteria" in the Martian meteorite ALH84001. It is a unique volume among Astrobiology monographs in focusing on fossil evidence from the geological record and will be valuable to students and researchers alike.