1. Record Nr. UNINA9910969460603321

Titolo	Biosphere origin and evolution / / Nikolay Dobretsov ... [et al.], editors
Pubbl/distr/stampa	New York, : Springer, 2008
ISBN	1-281-13977-7 9786611139773 0-387-68656-8
Edizione	[1st ed. 2008.]
Descrizione fisica	1 online resource (445 p.)
Altri autori (Persone)	DobretsovN. L (Nikolai Leontevich)
Disciplina	577
Soggetti	Biosphere Life - Origin Evolution (Biology)
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	pt. I. Problems of biosphere evolution and origin of life -- pt. II. Prebiological stages of evolution and RNA world on the earth and in the space -- pt. III. Archaen-proterozoic ecosystems : their interaction and contemporary analogous -- pt. IV. Coevolution of geological and biological events in phanerozoe -- pt. V. Ecosystems and molecular genetic factors of organism evolution -- pt. VI. Biosphere and human being.
Sommario/riassunto	Modern natural science shows that the infancy of life on Earth experienced prebiotic evolution and included the emergence of primitive self-reproducing biologic forms and their systems. The subsequent coevolution of inorganic environment and biologic systems resulted in global propagation of life over the Earth and its enormous diversification. Diverse living organisms colonized the land, water, and atmosphere, as well as upper layers of the lithosphere, thereby forming the biosphere. The book covers notions by scientists of various branches on the evolutionary relationship between the biosphere and geosphere, evolution features at various levels of living matter organization, and problems of prebiotic evolution and life origin. The data were collected in the course of the RAS program "Biosphere origin and evolution" (subprogram II) in 2003–2006. The objectives of this

subprogram were (1) generalization of data related to problems of biosphere origin and evolution accumulated by geneticists, molecular biologists, zoologists, botanists, paleontologists, microbiologists, geologists, chemists, and archaeologists; (2) search for new interdisciplinary approaches to biosphere origin and evolution; (3) development of a "lingua franca" understandable by experts in various fields, which would allow apprehension of results concerning the topic obtained in allied sciences.