

1. Record Nr.	UNINA9910786434403321
Autore	Galimov Erik M
Titolo	Origin of the moon [[electronic resource]] : new concept, geochemistry, and dynamics // by Erik M. Galimov and Anton M. Krivtsov
Pubbl/distr/stampa	Berlin ; ; Boston, : De Gruyter, c2012
ISBN	1-283-85708-1 3-11-028640-8
Descrizione fisica	1 online resource (180 p.)
Altri autori (Persone)	KrivtsovAnton M
Disciplina	523.3
Soggetti	Lunar geology Moon Origin
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 (p. [145]-162) and index.
Nota di contenuto	Front matter -- Contents -- Introduction -- Part I. Geochemistry -- Chapter 1. The Moon as a celestial body -- Chapter 2. The history of the study of the Moon -- Chapter 3. The Moon as a geological body -- Chapter 4. Similarity and difference in composition of Earth and Moon -- Chapter 5. Hypotheses on the origin of the Moon -- Chapter 6. The model of evaporative accretion -- Chapter 7. Geochemical constraints and how the giant impact and evaporative accretion concepts satisfy them -- Part II. Dynamics -- Chapter 8. Dynamical modeling of fragmentation of the gas-dust cloud -- Chapter 9. Dynamic modeling of accretion -- Conclusions -- References -- Index
Sommario/riassunto	The origin of the Moon remains an unsolved problem of the planetary science. Researchers engaged in celestial dynamics, geophysics, and geochemistry are still discussing various models of creation of our closest cosmic neighbour. The most popular scenario, the impact hypothesis involving a collision early in the Earth's history, has been substantially challenged by the new data. The birth and development of a planet-moon system always plays a role in the formation of an entire planetary system around our Sun or around another star. This way, the story of our Moon acquires broader ramifications for one of the hottest topics of the modern scholarship. All this has motivated the authors of this book to consider a new concept and to compare the currently discussed theories, analyzing their advantages and shortcomings in

explaining the experimental data.
