1. Record Nr. UNINA9910778650903321

Titolo	Scientific rationale for mobility in planetary environments [[electronic resource] /] / Committee on Planetary and Lunar Exploration, Space Studies Board, Commission on Physical Sciences, Mathematics, and Applications, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1999
ISBN	0-309-17325-6 1-282-08372-4 9786612083723 0-309-51807-5 0-585-06858-5
Descrizione fisica	1 online resource (68 p.)
Collana	The compass series
Disciplina	629.2/95
Soggetti	Roving vehicles (Astronautics) Planets - Exploration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.

2. Record Nr. UNINA9910303439003321

Autore	Lund Tom
Titolo	Early Exploration of the Moon : Ranger to Apollo, Luna to Lunniy Korabl / / by Tom Lund
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-030-02071-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (404 pages)
Collana	Space Exploration
Disciplina	523.3
Soggetti	Technology Space sciences Aerospace engineering Astronautics Popular Science in Technology Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Aerospace Technology and Astronautics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Dedication -- Introduction -- Chapter 1:The Nature of the Moon -- Chapter 2: The Ranger Lunar Photography Mission -- Chapter 3: The Lunar Orbiter Mission -- Chapter 4: The Surveyor Lunar Landing Mission -- Chapter 5: The Apollo Manned Exploration of the Moon -- Chapter 6: The Apollo Command Module -- Chapter 7: The Apollo Service Module -- Chapter 8: The Apollo Lunar Module -- Chapter 9: Apollo Crew Personal Equipment -- Chapter 10: Lunar Roving Vehicle and Exploration of the Moon -- Chapter 11: Russian Launch Vehicles, Lunar Impactors and Flybys -- Chapter 12: Russian Soft Landers, Orbiters, and Rovers -- Chapter 13: Russian Manned Circumlunar Spacecraft -- Chapter 14: Russian Manned Lunar Landing Endeavours -- Bibliography -- Index.
Sommario/riassunto	Luna 2, launched by the USSR in 1959, was the first spacecraft from Earth to land on the moon. That first voyage was followed by increasingly capable lunar exploration spacecraft from Russia and the

United States. A total of 36 successful lunar exploration missions were conducted from 1959 to the last Apollo manned exploration in 1972 and the final travels of the Lunokhod lunar rover in 1973. Of all the missions, that of Apollo 17 was the pinnacle of manned space exploration. Apollo 17 astronauts traveled 21 miles on the lunar surface in a dune buggy-type vehicle, stopping frequently to explore and gather samples. The spacecraft that enabled lunar exploration were ingenious, and reflected the best efforts of talented people working with the technology of the day. This book showcases the engineering involved in those incredible machines. The spacecraft covered, and their missions, are listed below. From the United States: • Ranger – Photography en route to lunar impact • Lunar Orbiter – Photography of front and back side of moon • Surveyor – Soft landing, photography, and soil analysis • Apollo – Manned exploration. Lunar Rover expanded range From the USSR: • Luna 2 – Photography en route to lunar impact • Luna 3 – Photography of back side of moon on flyby • Luna 9 and 13 – Soft landing, photography, and soil analysis • Luna 10, 11, 12, 14 – Photography from lunar orbit • Luna 16, 20, 24 – Soft landing, return of soil sample to Earth • Lunokhod-1, -2 – Lunar roving vehicle driven from Earth • L1 – Planned manned lunar flyby but only flew unmanned • L3 – Planned manned lunar landing but never flew to moon To tell the story of these spacecraft, Tom Lund draws on over 40 years' work on aircraft and spacecraft systems. He was technical lead for the landing radars for the Surveyor and Apollo spacecraft, and his practical experience is augmented by master's degrees in electrical engineering, physics, and business administration.