

1. Record Nr.	UNINA9910299814203321
Titolo	Inner Solar System : Prospective Energy and Material Resources // edited by Viorel Badescu, Kris Zacny
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-19569-7
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (515 p.)
Disciplina	620
Soggetti	Energy systems Aerospace engineering Astronautics Energy Planetary science Astronomy Astrophysics Energy Systems Aerospace Technology and Astronautics Energy, general Planetology Astronomy, Astrophysics and Cosmology
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 at the end of each chapters and indexes.
Nota di contenuto	Inner Planets: Origins, Interiors, Commonality and Differences -- Mercury and Venus: Significant Results from MESSENGER and Venus Express Missions -- Mercury - the Sunshine Planet -- Accessing the Venus Lower Atmosphere and Surface- from Venera and Pioneer Venus to VISE and VITaL -- Special Orbits for Mercury observation -- Low-thrust Earth-Venus Trajectories -- Estimation of the Fuel Consumption for Space Trip to Venus and Mercury -- Drilling and Sample Transfer Mechanisms for Potential Missions to Venus -- Pneumatic Drilling and Excavation in Support of Venus Science and Exploration -- Power System Options for Venus Exploration Missions: Past, Present and

Future -- Production of Energy for Venus by Electron Wind Generator
-- Photovoltaic power resources on Mercury and Venus -- Flight
Apparatuses and Balloons in Venus Atmosphere -- Mercury, Venus and
Titan -- Deployable Structures for Venus Surface and Atmospheric
Missions -- A Systems Approach to the Exploration and Resource
Utilization of Venus and Mercury -- Artificial Magnetic Field for Venus
-- Business Modalities of the Inner Solar System: Planets with Potential?
-- Economic Development of Mercury: A Comparison with Mars
Colonization -- Terraforming Mercury -- Terraforming Mercury and
Venus -- Cloud Ten.

Sommario/riassunto

This book investigates Venus and Mercury prospective energy and material resources. It is a collection of topics related to exploration and utilization of these bodies. It presents past and future technologies and solutions to old problems that could become reality in our life time. The book therefore is a great source of condensed information for specialists interested in current and impending Venus and Mercury related activities and a good starting point for space researchers, inventors, technologists and potential investors. Written for researchers, engineers, and businessmen interested in Venus and Mercury exploration and exploitation.
