Mars Gravity: High-Resolution Results from Viking Orb

Science 203, 1006-1010 DOI: 10.1126/science.203.4384.1006

Citation Report

#	ARTICLE	IF	CITATIONS
1	Gravity Field of Venus: A Preliminary Analysis. Science, 1979, 205, 93-96.	12.6	20
2	Comments on the gravity and topography of Mars. Journal of Geophysical Research, 1979, 84, 6241-6247.	3.3	20
3	Development and analysis of a twelfth degree and order gravity model for Mars. Journal of Geophysical Research, 1979, 84, 7943-7953.	3.3	48
4	The subglacial birth of Olympus Mons and its aureoles. Journal of Geophysical Research, 1979, 84, 8061-8074.	3.3	66
5	Viking radio occultation measurements of the atmosphere and topography of Mars: Data acquired during 1 Martian year of tracking. Journal of Geophysical Research, 1979, 84, 8443-8456.	3.3	153
6	The planet Mars as seen at the end of the Viking Mission. Journal of Geophysical Research, 1979, 84, 8487-8519.	3.3	35
7	Planetary geodesy. Reviews of Geophysics, 1979, 17, 1437-1442.	23.0	1
8	Planetary seismology and interiors. Reviews of Geophysics, 1979, 17, 1641-1655.	23.0	28
9	Planetary geodesy. Reviews of Geophysics, 1979, 17, 1663-1677.	23.0	18
10	Gravity anomalies on Venus. Journal of Geophysical Research, 1980, 85, 8295-8302.	3.3	57
11	Gravity fields of the terrestrial planets: Longâ€wavelength anomalies and tectonics. Reviews of Geophysics, 1980, 18, 27-76.	23.0	160
12	Lunar Mascon Basins: Lava filling, tectonics, and evolution of the lithosphere. Reviews of Geophysics, 1980, 18, 107-141.	23.0	301
13	A postâ€Viking view of Martian geologic evolution. Reviews of Geophysics, 1980, 18, 565-603.	23.0	48
14	Implications of regional gravity for state of stress in the Earth's crust and upper mantle. Journal of Geophysical Research, 1980, 85, 6377-6396.	3.3	124
15	Topography of Martian central volcanoes. Icarus, 1981, 45, 87-112.	2.5	39
16	The Tempe volcanic province of Mars and comparisons with the Snake River Plains of Idaho. Icarus, 1981, 45, 586-601.	2.5	30
17	Mars: Hellas Planitia gravity analysis. Icarus, 1981, 45, 331-338.	2.5	22
18	Viking bistatic radar experiment: Summary of first-order results emphasizing north polar data. Icarus, 1981, 46, 361-389.	2.5	26

TION REI

ARTICLE IF CITATIONS # Tectonic Evolution of the Terrestrial Planets. Science, 1981, 213, 62-76. 19 12.6 101 Mars: Stratigraphy and gravimetry of Olympus Mons and its aureole. Journal of Geophysical Research, 1982, 87, 9905-9915. 3.3 23 Tharsis volcanoes: Separation distances, relative ages, sizes, morphologies, and depths of burial. 21 3.3 8 Journal of Geophysical Research, 1982, 87, 9829-9838. Syrtis major: A lowâ€relief volcanic shield. Journal of Geophysical Research, 1982, 87, 9852-9866. Evolution of the Tharsis Province of Mars: The importance of heterogeneous lithospheric thickness 23 3.3 125 and volcanic construction. Journal of Geophysical Research, 1982, 87, 9755-9774. Mars: Gravity data analysis of the Crater Antoniadi. Geophysical Research Letters, 1982, 9, 739-742. 4.0 Aureole deposits of the Martian volcano Olympus Mons. Journal of Geophysical Research, 1982, 87, 25 3.3 119 1164-1178. Ignimbrites of Amazonis Planitia Region of Mars. Journal of Geophysical Research, 1982, 87, 1179-1190. 3.3 26 200 27 Thick plate flexure. Geophysical Journal International, 1983, 72, 101-113. 2.4 41 Bouguer gravity profiles across the highland-lowland escarpment on Mars. The Moon and the Planets, 1983, 28, 55-67. Gravity, topography, and crustal evolution of Venus. Icarus, 1983, 56, 345-371. 29 20 2.5 The geology of the terrestrial planets. Reviews of Geophysics, 1983, 21, 160-172. Planetary geodesy. Reviews of Geophysics, 1983, 21, 528-537. $\mathbf{31}$ 23.0 18 Investigation of the isostatic state of the Elysium dome on Mars by gravity models. Physics of the Earth and Planetary Interiors, 1983, 32, 132-145. The Olympus Mons Aureole: Formation by gravitational spreading. Journal of Geophysical Research, 33 3.3 54 1983, 88, 8333-8344. Elysium planitia, mars: Regional geology, volcanology, and evidence for volcano-ground ice interactions. Earth, Moon and Planets, 1984, 30, 149-173. Mars: Thickness of the lithosphere from the tectonic response to volcanic loads. Reviews of 35 23.0 115 Geophysics, 1985, 23, 61-92. Elysium Region, Mars: Tests of lithospheric loading models for the formation of tectonic features. 3.3 Journal of Geophysical Research, 1986, 91, 11377-11392.

CITATION REPORT

ARTICLE IF CITATIONS # Density of Martian north polar layered deposits: Implications for composition. Geophysical Research 37 4.0 36 Letters, 1986, 13, 444-447. The stratigraphy of Mars. Journal of Geophysical Research, 1986, 91, E139. 3.3 484 39 Structure and evolution of the terrestrial planets. Surveys in Geophysics, 1986, 8, 107-186. 4.6 7 Planetary geodesy. Reviews of Geophysics, 1987, 25, 833-839. Geopotential orbit variations: Applications to error analysis. Journal of Geophysical Research, 1987, 41 3.3 18 92, 8136-8146. Igneous processes and closed system evolution of the Tharsis region of Mars. Journal of Geophysical Research, 1988, 93, 10225-10235. 3.3 Buried topography of Utopia, Mars: Persistence of a giant impact depression. Journal of Geophysical 43 3.3 117 Research, 1989, 94, 2753-2759. Sequence and mechanisms of deformation around the Hellas and Isidis Impact Basins on Mars. Journal 3.3 44 146 of Ġeophysical Research, 1989, 94, 17333-17357. 45 The physics of the moon and mars. Advances in Space Research, 1990, 10, 17-24. 2.6 1 Volcanic flow development at Alba Patera, Mars. Icarus, 1990, 83, 453-493. 2.5 Origin of the Martian global dichotomy by crustal thinning in the Late Noachian or Early Hesperian. 47 3.3 91 Journal of Geophysical Research, 1990, 95, 12595-12605. A new survey of multiring impact basins on Mars. Journal of Geophysical Research, 1990, 95, 14175-14189. 3.3 Speculations on the origin and evolution of the Utopiaâ€Elysium Lowlands of Mars. Journal of 49 3.3 19 Geophysical Research, 1990, 95, 14203-14213. Planetary Geodesy. Reviews of Geophysics, 1991, 29, 182-188. 23.0 Origin of the Martian crustal dichotomy: Evaluating hypotheses. Icarus, 1991, 93, 386-393. 51 2.553 Gravity studies of the Tharsis area on Mars. Earth, Moon and Planets, 1991, 53, 217-232. Radio science investigations with Mars Observer. Journal of Geophysical Research, 1992, 97, 7759-7779. 53 3.3 61 54 The crustal dichotomy of Mars. Earth, Moon and Planets, 1995, 69, 249-269.

CITATION REPORT

CITATION REPORT

#	Article	IF	CITATIONS
55	Long-term rotation and mantle dynamics of the Earth, Mars, and Venus. Journal of Geophysical Research, 1996, 101, 2253-2266.	3.3	27
56	An inversion of gravity and topography for mantle and crustal structure on Mars. Journal of Geophysical Research, 1996, 101, 9239-9252.	3.3	35
57	The isostatic state of Martian topography revisited. Geophysical Research Letters, 1996, 23, 721-724.	4.0	7
58	The Shape of Mars and the Topographic Signature of the Hemispheric Dichotomy. Science, 1996, 271, 184-188.	12.6	99
59	Strength of Martian lithosphere beneath large volcanoes. Journal of Geophysical Research, 2000, 105, 26713-26732.	3.3	20
60	Gravity field of Mars: A 75th Degree and Order Model. Journal of Geophysical Research, 2001, 106, 23377-23401.	3.3	103
61	Radio science observations with Mars Global Surveyor: Orbit insertion through one Mars year in mapping orbit. Journal of Geophysical Research, 2001, 106, 23327-23348.	3.3	98
62	A 50-degree spherical harmonic model of the magnetic field of Mars. Journal of Geophysical Research, 2001, 106, 23197-23208.	3.3	111
63	An improved solution of the gravity field of Mars (GMM-2B) from Mars Global Surveyor. Journal of Geophysical Research, 2001, 106, 23359-23376.	3.3	227
64	Did the Alba Patera and Syria Planum regions of Mars lose their lithospheric roots in convective overturn events?. Journal of Geophysical Research, 2003, 108, .	3.3	9
65	Syrtis Major and Isidis Basin contact: Morphological and topographic characteristics of Syrtis Major lava flows and material of the Vastitas Borealis Formation. Journal of Geophysical Research, 2003, 108,	3.3	37
66	Anomalous tilt of Isidis Planitia, Mars. Geophysical Research Letters, 2006, 33, .	4.0	10
67	Robotic Exploration of the Solar System. , 2007, , .		0
68	Surface and craterâ€exposed lithologic units of the Isidis Basin as mapped by coanalysis of THEMIS and TES derived data products. Journal of Geophysical Research, 2008, 113, .	3.3	86
69	The Utopia/Isidis overlap: Possible conduit for mud volcanism on Mars. Icarus, 2011, 212, 622-628.	2.5	22
70	Probing the Hidden Geology of Isidis Planitia (Mars) with Impact Craters. Geosciences (Switzerland), 2015, 5, 30-44.	2.2	0
71	Landform assemblage in Isidis Planitia, Mars: Evidence for a 3 Ga old polythermal ice sheet. Earth and Planetary Science Letters, 2015, 411, 253-267.	4.4	28
72	Impact and admittance modeling of the Isidis Planitia, Mars. Planetary and Space Science, 2015, 117, 73-81.	1.7	6

	CITATION	CITATION REPORT		
#	Article	IF	Citations	
73	Topography of the Deuteronilus contact on Mars: Evidence for an ancient water/mud ocean and long-wavelength topographic readjustments. Planetary and Space Science, 2017, 144, 49-70.	1.7	33	
74	A high resolution Mars surface gravity grid. Planetary and Space Science, 2018, 160, 84-106.	1.7	11	
75	Timing of oceans on Mars from shoreline deformation. Nature, 2018, 555, 643-646.	27.8	91	
76	IN VITRO INTERACTION OF COVALENTLY LINKED CLOSED CIRCULAR DNA WITH THE SECOND-GENERATION PLATINUM COMPOUNDS. , 1980, , 213-226.		7	
78	The ancient martian lithospheric structure at Isidis Planitia. Icarus, 2022, 374, 114741.	2.5	4	
80	Subsurface structure of the Martian Elysium Rise revealed by gravitational field separation. Icarus, 2022, 372, 114738.	2.5	1	
81	6.6 Gravity studies from orbiters and density models of lithospheres. , 0, , 392-398.		0	
82	6.13 References. , 0, , 413-417.		0	