

Hideaki Miyamoto

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1443561/publications.pdf>

Version: 2024-02-01

123
papers

6,232
citations

87888

38
h-index

69250

77
g-index

128
all docs

128
docs citations

128
times ranked

3689
citing authors

#	ARTICLE	IF	CITATIONS
1	Martian moons exploration MMX: sample return mission to Phobos elucidating formation processes of habitable planets. <i>Earth, Planets and Space</i> , 2022, 74, .	2.5	51
2	The MMX rover: performing in situ surface investigations on Phobos. <i>Earth, Planets and Space</i> , 2022, 74, .	2.5	20
3	Fluidâ€‘structure interaction analysis of flexible flapping wing in the Martian environment. <i>Acta Astronautica</i> , 2022, 193, 138-151.	3.2	3
4	Three-axial shape distributions of pebbles, cobbles and boulders smaller than a few meters on asteroid Ryugu. <i>Icarus</i> , 2022, 381, 115007.	2.5	1
5	The ESA Hera Mission: Detailed Characterization of the DART Impact Outcome and of the Binary Asteroid (65803) Didymos. <i>Planetary Science Journal</i> , 2022, 3, 160.	3.6	82
6	Simplified Simulated Materials of Asteroid Ryugu for Spacecraft Operations and Scientific Evaluations. <i>Natural Resources Research</i> , 2021, 30, 3035-3044.	4.7	6
7	Results of Solar System Explorations and Their Implications to the Utilization of Space Resources. <i>Resources Processing</i> , 2021, 68, 3-9.	0.4	0
8	Continuous microfluidic solvent extraction of cobalt from mimicked and real asteroid leaching solutions. <i>Separation and Purification Technology</i> , 2021, 260, 118238.	7.9	6
9	Geologic History and Crater Morphology of Asteroid (162173) Ryugu. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006572.	3.6	10
10	Development of image texture analysis technique for boulder distribution measurements: Applications to asteroids Ryugu and Itokawa. <i>Planetary and Space Science</i> , 2021, 204, 105249.	1.7	6
11	Stray Light Analysis by Ray Tracing Simulation for the Wide-Angle Multiband Camera OROCHI onboard the Martian Moons Exploration (MMX) Spacecraft. <i>Advances in Space Research</i> , 2021, 69, 1236-1236.	2.6	0
12	Surface environment of Phobos and Phobos simulant UTPS. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	15
13	Small-scale topographic irregularities on Phobos: image and numerical analyses for MMX mission. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	4
14	MMX geodesy investigations: science requirements and observation strategy. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	11
15	Science operation plan of Phobos and Deimos from the MMX spacecraft. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	22
16	Sample collection from asteroid (162173) Ryugu by Hayabusa2: Implications for surface evolution. <i>Science</i> , 2020, 368, 654-659.	12.6	158
17	Collisional formation of top-shaped asteroids and implications for the origins of Ryugu and Bennu. <i>Nature Communications</i> , 2020, 11, 2655.	12.8	87
18	Dataâ€‘driven taxonomy matching of asteroid and meteorite. <i>Meteoritics and Planetary Science</i> , 2020, 55, 193-206.	1.6	2

#	ARTICLE	IF	CITATIONS
19	Cold-based glaciation of Pavonis Mons, Mars: evidence for moraine deposition during glacial advance. <i>Progress in Earth and Planetary Science</i> , 2020, 7, 13.	3.0	2
20	Morphology and Morphometry of Sub-kilometer Craters on the Nearsides of Phobos and Implications for Regolith Properties. <i>Transactions of the Japan Society for Aeronautical and Space Sciences</i> , 2020, 63, 124-131.	0.7	6
21	Experimental Study to Determine the Best Compression Ratio of High-Resolution Images of Small Bodies for the Martian Moons eXploration Mission. <i>Transactions of the Japan Society for Aeronautical and Space Sciences</i> , 2020, 63, 212-221.	0.7	1
22	Several Geological Issues of Schr�dinger Basin Exposed by CE-2 CELMS Data. <i>Advances in Astronomy</i> , 2019, 2019, 1-13.	1.1	5
23	Evidence for multiple 4.0–3.7 Ga impact events within the Apollo 16 collection. <i>Meteoritics and Planetary Science</i> , 2019, 54, 675-698.	1.6	10
24	Spatial Distribution of Ray Craters on Callisto: Implications for Ray Retention and Impactor Sources on Jovian Satellites. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 1717-1727.	3.6	0
25	Boulder size and shape distributions on asteroid Ryugu. <i>Icarus</i> , 2019, 331, 179-191.	2.5	107
26	Hayabusa2 arrives at the carbonaceous asteroid 162173 Ryugu—A spinning top-shaped rubble pile. <i>Science</i> , 2019, 364, 268-272.	12.6	410
27	The geomorphology, color, and thermal properties of Ryugu: Implications for parent-body processes. <i>Science</i> , 2019, 364, 252.	12.6	313
28	The Western Bulge of 162173 Ryugu Formed as a Result of a Rotationally Driven Deformation Process. <i>Astrophysical Journal Letters</i> , 2019, 874, L10.	8.3	30
29	Optimizing Change Detection for Planetary Remote Sensing Datasets. <i>Journal of Physics: Conference Series</i> , 2018, 1036, 012004.	0.4	1
30	Asteroid Ryugu before the Hayabusa2 encounter. <i>Progress in Earth and Planetary Science</i> , 2018, 5, .	3.0	39
31	Taxonomy matching between asteroids and meteorites: supervised clustering approach. <i>Journal of Physics: Conference Series</i> , 2018, 1036, 012005.	0.4	0
32	Reflectance spectra of Asteroids and Meteorites: their classifications and statistical comparisons. <i>Journal of Physics: Conference Series</i> , 2018, 1036, 012003.	0.4	3
33	High-Resolution Topographic Analyses of Mounds in Southern Acidalia Planitia, Mars: Implications for Possible Mud Volcanism in Submarine and Subaerial Environments. <i>Geosciences (Switzerland)</i> , 2018, 8, 152.	2.2	17
34	Ray craters on Ganymede: Implications for cratering apex-antapex asymmetry and surface modification processes. <i>Icarus</i> , 2017, 295, 140-148.	2.5	2
35	Generic identification and classification of morphostructures in the Noachis-Sabaea region, southern highlands of Mars. <i>Journal of Maps</i> , 2017, 13, 755-766.	2.0	10
36	Distribution, morphology, and morphometry of circular mounds in the elongated basin of northern Terra Sirenum, Mars. <i>Progress in Earth and Planetary Science</i> , 2017, 4, .	3.0	20

#	ARTICLE	IF	CITATIONS
37	An Automatic Deconvolution Method for Modified Gaussian Model using the Exchange Monte Carlo Method: Application to Reflectance Spectra of Synthetic Clinopyroxene. <i>Journal of Geology & Geophysics</i> , 2016, 05, .	0.1	5
38	Cluster analysis on the bulk elemental compositions of Antarctic stony meteorites. <i>Meteoritics and Planetary Science</i> , 2016, 51, 906-919.	1.6	6
39	Geomorphological Indication of Ancient, Recent, and Possibly Present-day Aqueous Activity on Mars. <i>Journal of Geography (Chigaku Zasshi)</i> , 2016, 125, 121-132.	0.3	3
40	Geomorphological View of the Environmental History of Mars and Candidate Habitable Environments. <i>Journal of Geography (Chigaku Zasshi)</i> , 2016, 125, 171-184.	0.3	4
41	Rayed craters on Dione: Implication for the dominant surface alteration process. <i>Icarus</i> , 2016, 274, 116-121.	2.5	7
42	Tsunami waves extensively resurfaced the shorelines of an early Martian ocean. <i>Scientific Reports</i> , 2016, 6, 25106.	3.3	121
43	The Argyre Region as a Prime Target for <i>in situ</i> Astrobiological Exploration of Mars. <i>Astrobiology</i> , 2016, 16, 143-158.	3.0	4
44	Groundwater flow induced collapse and flooding in Noctis Labyrinthus, Mars. <i>Planetary and Space Science</i> , 2016, 124, 1-14.	1.7	18
45	Martian outflow channels: How did their source aquifers form and why did they drain so rapidly?. <i>Scientific Reports</i> , 2015, 5, 13404.	3.3	29
46	Did the martian outflow channels mostly form during the Amazonian Period?. <i>Icarus</i> , 2015, 257, 387-395.	2.5	27
47	Lunar core structure investigation: Implication of GRAIL gravity field model. <i>Advances in Space Research</i> , 2015, 55, 1721-1727.	2.6	13
48	Geological and hydrological histories of the Argyre province, Mars. <i>Icarus</i> , 2015, 253, 66-98.	2.5	24
49	New insights into the Late Amazonian zonal shrinkage of the martian south polar plateau. <i>Icarus</i> , 2015, 248, 407-411.	2.5	6
50	Asteroid Surface Geophysics. , 2015, , .		21
51	Mineralogy, chemistry and biological contingents of an early-middle Miocene Antarctic paleosol and its relevance as a Martian analogue. <i>Planetary and Space Science</i> , 2014, 104, 253-269.	1.7	8
52	Particle deposition on the saturnian satellites from ephemeral cryovolcanism on Enceladus. <i>Geophysical Research Letters</i> , 2014, 41, 4135-4141.	4.0	10
53	Impact cratering experiments in brittle targets with variable thickness: Implications for deep pit craters on Mars. <i>Planetary and Space Science</i> , 2014, 96, 71-80.	1.7	5
54	Evidence for Middle Amazonian catastrophic flooding and glaciation on Mars. <i>Icarus</i> , 2014, 242, 202-210.	2.5	22

#	ARTICLE	IF	CITATIONS
55	Unconsolidated boulders on the surface of Itokawa. <i>Planetary and Space Science</i> , 2014, 95, 94-102.	1.7	7
56	Transition zone origin of potassic basalts from Wudalianchi volcano, northeast China. <i>Lithos</i> , 2013, 156-159, 1-12.	1.4	118
57	A meteor head echo analysis algorithm for the lower VHF band. <i>Annales Geophysicae</i> , 2012, 30, 639-659.	1.6	30
58	Infiltration of Martian outflow channel floodwaters into lowland cavernous systems. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	19
59	Dust levitation as a major resurfacing process on the surface of a saturnian icy satellite, Atlas. <i>Icarus</i> , 2012, 220, 106-113.	2.5	22
60	First results from the 2009-2010 MU radar head echo observation programme for sporadic and shower meteors: the Orionids 2009. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 416, 2550-2559.	4.4	40
61	Meteorites at Meridiani Planum provide evidence for significant amounts of surface and near-surface water on early Mars. <i>Meteoritics and Planetary Science</i> , 2011, 46, 1832-1841.	1.6	17
62	Constraints on martian lobate debris apron evolution and rheology from numerical modeling of ice flow. <i>Icarus</i> , 2011, 214, 246-257.	2.5	24
63	An inventory of potentially habitable environments on Mars: Geological and biological perspectives. , 2011, , .		11
64	Surface morphological features of boulders on Asteroid 25143 Itokawa. <i>Icarus</i> , 2010, 206, 319-326.	2.5	22
65	The sedimentology and dynamics of crater-affiliated wind streaks in western Arabia Terra, Mars and Patagonia, Argentina. <i>Geomorphology</i> , 2010, 121, 30-54.	2.6	55
66	New evidence for a magmatic influence on the origin of Valles Marineris, Mars. <i>Journal of Volcanology and Geothermal Research</i> , 2009, 185, 12-27.	2.1	31
67	Claritas rise, Mars: Pre-Tharsis magmatism?. <i>Journal of Volcanology and Geothermal Research</i> , 2009, 185, 139-156.	2.1	66
68	The global distribution of pure anorthosite on the Moon. <i>Nature</i> , 2009, 461, 236-240.	27.8	265
69	A survey of possible impact structures on 25143 Itokawa. <i>Icarus</i> , 2009, 200, 486-502.	2.5	75
70	Long-Lived Volcanism on the Lunar Farside Revealed by SELENE Terrain Camera. <i>Science</i> , 2009, 323, 905-908.	12.6	133
71	Quaternary paleolake formation and cataclysmic flooding along the upper Yenisei River. <i>Geomorphology</i> , 2009, 104, 143-164.	2.6	61
72	Mare volcanism in the lunar farside Moscoviense region: Implication for lateral variation in magma production of the Moon. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	51

#	ARTICLE	IF	CITATIONS
73	Possible lunar lava tube skylight observed by SELENE cameras. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	134
74	Nonstop Mars Sample Return System Using Aerocapture Technologies. , 2009, , .		25
75	Formation age of the lunar crater Giordano Bruno. <i>Meteoritics and Planetary Science</i> , 2009, 44, 1115-1120.	1.6	49
76	The search for life beyond Earth through fuzzy expert systems. <i>Planetary and Space Science</i> , 2008, 56, 448-472.	1.7	23
77	Recent geological and hydrological activity on Mars: The Tharsis/Elysium corridor. <i>Planetary and Space Science</i> , 2008, 56, 985-1013.	1.7	92
78	Fluvial channels on Titan: Initial Cassini RADAR observations. <i>Planetary and Space Science</i> , 2008, 56, 1132-1144.	1.7	151
79	Impact process of boulders on the surface of asteroid 25143 Itokawa’s fragments from collisional disruption. <i>Earth, Planets and Space</i> , 2008, 60, 7-12.	2.5	36
80	Size-frequency statistics of boulders on global surface of asteroid 25143 Itokawa. <i>Earth, Planets and Space</i> , 2008, 60, 13-20.	2.5	121
81	Granular processes on Itokawa, a small near-Earth asteroid: implications for resource utilization. <i>Proceedings of SPIE</i> , 2008, , .	0.8	7
82	Robotic resource exploration is a key to human expansion through the cosmos. , 2008, , .		0
83	Lack of Exposed Ice Inside Lunar South Pole Shackleton Crater. <i>Science</i> , 2008, 322, 938-939.	12.6	77
84	Regolith Migration and Sorting on Asteroid Itokawa. <i>Science</i> , 2007, 316, 1011-1014.	12.6	271
85	Global mapping of the degree of space weathering on asteroid 25143 Itokawa by Hayabusa/AMICA observations. <i>Meteoritics and Planetary Science</i> , 2007, 42, 1791-1800.	1.6	43
86	Tier-Scalable Reconnaissance Missions For The Autonomous Exploration Of Planetary Bodies. , 2007, , .		32
87	Fundamentally distinct outcomes of asteroid collisional evolution: Itokawa and Eros. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	12
88	Significance of the gravitational relaxation on a plume-driven surface uplift: Dynamic calculations using the Boundary Element Method. <i>Environmental Modelling and Software</i> , 2007, 22, 1482-1487.	4.5	0
89	Modelling, computer-assisted simulations, and mapping of dangerous phenomena for hazard assessment. <i>Environmental Modelling and Software</i> , 2007, 22, 1389-1391.	4.5	10
90	Cataclysmic Scabland flooding: Insights from a simple depth-averaged numerical model. <i>Environmental Modelling and Software</i> , 2007, 22, 1400-1408.	4.5	23

#	ARTICLE	IF	CITATIONS
91	A macroscopic collisional model for debris-flows simulation. <i>Environmental Modelling and Software</i> , 2007, 22, 1417-1436.	4.5	43
92	Rock glaciers on Mars: Earth-based clues to Mars's recent paleoclimatic history. <i>Planetary and Space Science</i> , 2007, 55, 181-192.	1.7	38
93	Possible ancient giant basin and related water enrichment in the Arabia Terra province, Mars. <i>Icarus</i> , 2007, 190, 74-92.	2.5	39
94	The Rubble-Pile Asteroid Itokawa as Observed by Hayabusa. <i>Science</i> , 2006, 312, 1330-1334.	12.6	761
95	Nature and characteristics of the flows that carved the Simud and Tiu outflow channels, Mars. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	20
96	Headward growth of chasmata by volatile outbursts, collapse, and drainage: Evidence from Ganges chaos, Mars. <i>Geophysical Research Letters</i> , 2006, 33, n/a-n/a.	4.0	27
97	Numerical simulations of large-scale cataclysmic floodwater: A simple depth-averaged model and an illustrative application. <i>Geomorphology</i> , 2006, 76, 179-192.	2.6	34
98	A simplified two-component model for the lateral growth of pahoehoe lobes. <i>Journal of Volcanology and Geothermal Research</i> , 2006, 157, 331-342.	2.1	5
99	Detailed Images of Asteroid 25143 Itokawa from Hayabusa. <i>Science</i> , 2006, 312, 1341-1344.	12.6	234
100	Pole and Global Shape of 25143 Itokawa. <i>Science</i> , 2006, 312, 1347-1349.	12.6	104
101	Touchdown of the Hayabusa Spacecraft at the Muses Sea on Itokawa. <i>Science</i> , 2006, 312, 1350-1353.	12.6	349
102	Outflow channel sources, reactivation, and chaos formation, Xanthe Terra, Mars. <i>Icarus</i> , 2005, 175, 36-57.	2.5	93
103	Putative ice flows on Europa: Geometric patterns and relation to topography collectively constrain material properties and effusion rates. <i>Icarus</i> , 2005, 177, 413-424.	2.5	35
104	Extraterrestrial hydrogeology. <i>Hydrogeology Journal</i> , 2005, 13, 51-68.	2.1	23
105	Control of impact crater fracture systems on subsurface hydrology, ground subsidence, and collapse, Mars. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	44
106	Mapping the structure and depth of lava tubes using ground penetrating radar. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	25
107	Formation of Martian gullies by avalanches of seasonal CO ₂ frost. <i>Journal of the Japanese Society of Snow and Ice</i> , 2005, 67, 123-132.	0.1	3
108	Ancient wet aeolian environments on Earth: clues to presence of fossil/live microorganisms on Mars. <i>Icarus</i> , 2004, 171, 39-53.	2.5	28

#	ARTICLE	IF	CITATIONS
109	Fluid dynamical implications of anastomosing slope streaks on Mars. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	56
110	Dynamics of unusual debris flows on Martian sand dunes. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	36
111	Rheology and topography control the path of a lava flow: Insight from numerical simulations over a preexisting topography. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	14
112	Acquisition of ground penetrating radar data to detect lava tubes: preliminary results on the Komoriana cave at Fuji volcano in Japan. <i>Bulletin of Engineering Geology and the Environment</i> , 2003, 62, 281-288.	3.5	16
113	Nature and hydrological relevance of the Shalbatana complex underground cavernous system. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	42
114	Prospects of engineering applications of submarine-groundwater-discharge research in Japan. , 2003, , 61-75.		1
115	Mars dust counter (MDC) on board NOZOMI: Initial results. <i>COSPAR Colloquia Series</i> , 2002, 15, 176-180.	0.2	0
116	Computer modelling of the water resurge at a marine impact: the Lockne crater, Sweden. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2002, 49, 983-994.	1.4	27
117	Observation of interplanetary and interstellar dust particles by Mars Dust Counter (MDC) on board NOZOMI. <i>Advances in Space Research</i> , 2002, 29, 1145-1153.	2.6	4
118	The Channeled Scabland: Back to Bretz?: Comment and Reply. <i>Geology</i> , 2000, 28, 573.	4.4	19
119	Two Different Supply Styles of Crater Outflow Materials on Venus Inferred from Numerical Simulations over DEMs. <i>Icarus</i> , 2000, 145, 533-545.	2.5	11
120	The Channeled Scabland: Back to Bretz?: Comment and Reply. <i>Geology</i> , 2000, 28, 573-576.	4.4	0
121	Mars Dust Counter. <i>Earth, Planets and Space</i> , 1998, 50, 241-245.	2.5	16
122	Numerical simulations of flood basalt lava flows: Roles of parameters on lava flow morphologies. <i>Journal of Geophysical Research</i> , 1998, 103, 27489-27502.	3.3	39
123	Simulating lava flows by an improved cellular automata method. <i>Computers and Geosciences</i> , 1997, 23, 283-292.	4.2	98