

# Yoshiaki Ishihara

## List of Publications by Year in descending order

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84  
papers

3,734  
citations

172457

29  
h-index

133252

59  
g-index

86  
all docs

86  
docs citations

86  
times ranked

2175  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hayabusa2 arrives at the carbonaceous asteroid 162173 Ryugu—A spinning top-shaped rubble pile. <i>Science</i> , 2019, 364, 268-272.	12.6	410
2	The geomorphology, color, and thermal properties of Ryugu: Implications for parent-body processes. <i>Science</i> , 2019, 364, 252.	12.6	313
3	Lunar Global Shape and Polar Topography Derived from Kaguya-LALT Laser Altimetry. <i>Science</i> , 2009, 323, 897-900.	12.6	263
4	Possible mantle origin of olivine around lunar impact basins detected by SELENE. <i>Nature Geoscience</i> , 2010, 3, 533-536.	12.9	184
5	Farside Gravity Field of the Moon from Four-Way Doppler Measurements of SELENE (Kaguya). <i>Science</i> , 2009, 323, 900-905.	12.6	169
6	Sample collection from asteroid (162173) Ryugu by Hayabusa2: Implications for surface evolution. <i>Science</i> , 2020, 368, 654-659.	12.6	158
7	Preliminary analysis of the Hayabusa2 samples returned from C-type asteroid Ryugu. <i>Nature Astronomy</i> , 2022, 6, 214-220.	10.1	136
8	Timing and characteristics of the latest mare eruption on the Moon. <i>Earth and Planetary Science Letters</i> , 2011, 302, 255-266.	4.4	133
9	Crustal thickness of the Moon: Implications for farside basin structures. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	102
10	Massive layer of pure anorthosite on the Moon. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	102
11	Highly porous nature of a primitive asteroid revealed by thermal imaging. <i>Nature</i> , 2020, 579, 518-522.	27.8	100
12	Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. <i>Science</i> , 2023, 379, .	12.6	97
13	An improved lunar gravity field model from SELENE and historical tracking data: Revealing the farside gravity features. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	92
14	Illumination conditions of the south pole of the Moon derived using Kaguya topography. <i>Icarus</i> , 2010, 208, 558-564.	2.5	88
15	Internal structure of the Moon inferred from Apollo seismic data and selenodetic data from GRAIL and LLR. <i>Geophysical Research Letters</i> , 2015, 42, 7351-7358.	4.0	88
16	Illumination conditions at the lunar polar regions by KAGUYA(SELENE) laser altimeter. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	86
17	Pebbles and sand on asteroid (162173) Ryugu: In situ observation and particles returned to Earth. <i>Science</i> , 2022, 375, 1011-1016.	12.6	78
18	On the origin and evolution of the asteroid Ryugu: A comprehensive geochemical perspective. <i>Proceedings of the Japan Academy Series B: Physical and Biological Sciences</i> , 2022, 98, 227-282.	3.8	77

#	ARTICLE	IF	CITATIONS
19	Lunar gravity field determination using SELENE same-beam differential VLBI tracking data. <i>Journal of Geodesy</i> , 2011, 85, 205-228.	3.6	63
20	Olivine-rich exposures in the South Pole-Aitken Basin. <i>Icarus</i> , 2012, 218, 331-344.	2.5	57
21	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
22	Geologic structure generated by large impact basin formation observed at the South Pole-Aitken basin on the Moon. <i>Geophysical Research Letters</i> , 2014, 41, 2738-2745.	4.0	49
23	Thermally altered subsurface material of asteroid (162173) Ryugu. <i>Nature Astronomy</i> , 2021, 5, 246-250.	10.1	47
24	Compositional evidence for an impact origin of the Moon's Procellarum basin. <i>Nature Geoscience</i> , 2012, 5, 775-778.	12.9	45
25	Picosecond accuracy VLBI of the two subsatellites of SELENE (KAGUYA) using multifrequency and same beam methods. <i>Radio Science</i> , 2009, 44, .	1.6	38
26	A new type of pyroclastic deposit on the Moon containing Fe-spinel and chromite. <i>Geophysical Research Letters</i> , 2013, 40, 4549-4554.	4.0	38
27	Development of an application scheme for the SELENE/SP lunar reflectance model for radiometric calibration of hyperspectral and multispectral sensors. <i>Planetary and Space Science</i> , 2016, 124, 76-83.	1.7	33
28	The 1998 Miyako fireball's trajectory determined from shock wave records of a dense seismic array. <i>Earth, Planets and Space</i> , 2003, 55, e9-e12.	2.5	32
29	The relative timing of Lunar Magma Ocean solidification and the Late Heavy Bombardment inferred from highly degraded impact basin structures. <i>Icarus</i> , 2015, 250, 492-503.	2.5	30
30	Anomalously porous boulders on (162173) Ryugu as primordial materials from its parent body. <i>Nature Astronomy</i> , 2021, 5, 766-774.	10.1	30
31	The 2003 Kanto large bolide's trajectory determined from shockwaves recorded by a seismic network and images taken by a video camera. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	26
32	Lunar farside Th distribution measured by Kaguya gamma-ray spectrometer. <i>Earth and Planetary Science Letters</i> , 2012, 337-338, 10-16.	4.4	23
33	Anomalous Moscoviense basin: Single oblique impact or double impact origin?. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	22
34	Viscoelastic deformation of lunar impact basins: Implications for heterogeneity in the deep crustal paleothermal state and radioactive element concentration. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 398-415.	3.6	22
35	Evidence of impact melt sheet differentiation of the lunar South Pole-Aitken basin. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 1672-1686.	3.6	22
36	Azimuthally controlled observation of heavy cosmic-ray primaries by means of the balloon-borne emulsion chamber. <i>Astroparticle Physics</i> , 1997, 6, 155-167.	4.3	21

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37	Capability of the penetrator seismometer system for lunar seismic event observation. Planetary and Space Science, 2009, 57, 751-763.	1.7	21
38	An Overview of JAXA's Ground-Observation Activities for HAYABUSA Reentry. Publication of the Astronomical Society of Japan, 2011, 63, 961-969.	2.5	21
39	Detection of Acoustic/Infrasonic/Seismic Waves Generated by Hypersonic Re-Entry of the HAYABUSA Capsule and Fragmented Parts of the Spacecraft. Publication of the Astronomical Society of Japan, 2011, 63, 971-978.	2.5	20
40	Same-beam VLBI observations of SELENE for improving lunar gravity field model. Radio Science, 2010, 45, n/a-n/a.	1.6	19
41	Hayabusa2 Landing Site Selection: Surface Topography of Ryugu and Touchdown Safety. Space Science Reviews, 2020, 216, 1.	8.1	17
42	Infrasound/seismic observation of the Hayabusa reentry: Observations and preliminary results. Earth, Planets and Space, 2012, 64, 655-660.	2.5	16
43	Infrasound observations at Syowa Station, East Antarctica: Implications for detecting the surface environmental variations in the polar regions. Geoscience Frontiers, 2015, 6, 285-296.	8.4	16
44	Improving Hayabusa2 trajectory by combining LIDAR data and a shape model. Icarus, 2020, 338, 113574.	2.5	16
45	Analytical and graphical determination of the trajectory of a fireball using seismic data. Planetary and Space Science, 2006, 54, 78-86.	1.7	15
46	Seismic Wave Interactions Between the Atmosphere - Ocean - Cryosphere System and the Geosphere in Polar Regions. , 0, , .		14
47	Global occurrence trend of high-Ca pyroxene on lunar highlands and its implications. Journal of Geophysical Research E: Planets, 2015, 120, 831-848.	3.6	13
48	Featureless spectra on the Moon as evidence of residual lunar primordial crust. Journal of Geophysical Research E: Planets, 2015, 120, 2190-2205.	3.6	13
49	Infrasound array observations in the LÃ¼tzow-Holm Bay region, East Antarctica. Polar Science, 2015, 9, 35-50.	1.2	13
50	Albedo Observation by Hayabusa2 LIDAR: Instrument Performance and Error Evaluation. Space Science Reviews, 2017, 208, 49-64.	8.1	13
51	Lunar laser topography by LALT on board the KAGUYA lunar explorer â€“ Operational history, new topographic data, peak height analysis of laser echo pulses. Advances in Space Research, 2013, 52, 262-271.	2.6	12
52	Variation of the lunar highland surface roughness at baseline 0.15â€“100â€“km and the relationship to relative age. Geophysical Research Letters, 2014, 41, 1444-1451.	4.0	11
53	Dust Detection Mode of the Hayabusa2 LIDAR. Space Science Reviews, 2017, 208, 65-79.	8.1	11
54	Dynamic precise orbit determination of Hayabusa2 using laser altimeter (LIDAR) and image tracking data sets. Earth, Planets and Space, 2020, 72, .	2.5	11

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55	Overview of Differential VLBI Observations of Lunar Orbiters in SELENE (Kaguya) for Precise Orbit Determination and Lunar Gravity Field Study. <i>Space Science Reviews</i> , 2010, 154, 123-144.	8.1	9
56	Accuracy assessment of lunar topography models. <i>Earth, Planets and Space</i> , 2011, 63, 15-23.	2.5	9
57	Numerical Simulation of Lunar Seismic Wave Propagation: Investigation of Subsurface Scattering Properties Near Apollo 12 Landing Site. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006406.	3.6	9
58	Time-space variations in infrasound sources related to environmental dynamics around L&#228;tow-Holm Bay, east Antarctica. <i>Polar Science</i> , 2017, 14, 39-48.	1.2	8
59	Global classification of lunar reflectance spectra obtained by Kaguya (SELENE): Implication for hidden basaltic materials. <i>Icarus</i> , 2019, 321, 407-425.	2.5	8
60	Improving the geometry of Kaguya extended mission data through refined orbit determination using laser altimetry. <i>Icarus</i> , 2020, 336, 113454.	2.5	8
61	Infrasonic Waves in Antarctica: A New Proxy for Monitoring Polar Environment. <i>International Journal of Geosciences</i> , 2013, 04, 797-802.	0.6	8
62	Light detection and ranging (LIDAR) laser altimeter for the Martian Moons Exploration (MMX) spacecraft. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	7
63	Constraints on timing and magnitude of early global expansion of the Moon from topographic features in lunar gravity anomaly areas. <i>Geophysical Research Letters</i> , 2016, 43, 4865-4870.	4.0	6
64	Infrasound Signals and Their Source Location Inferred from Array Deployment in the L&#228;tow-Holm Bay Region, East Antarctica: January-June 2015. <i>International Journal of Geosciences</i> , 2017, 08, 181-188.	0.6	6
65	The scientific observation campaign of the Hayabusa-2 capsule re-entry. <i>Publication of the Astronomical Society of Japan</i> , 2022, 74, 50-63.	2.5	6
66	Local lunar gravity field analysis over the South Pole-Aitken basin from SELENE farside tracking data. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	5
67	Two-stage development of the lunar farside highlands crustal formation. <i>Planetary and Space Science</i> , 2016, 120, 43-47.	1.7	5
68	Rotational effect as the possible cause of the east-west asymmetric crater rims on Ryugu observed by LIDAR data. <i>Icarus</i> , 2021, 354, 114073.	2.5	5
69	Modeling of 3D trajectory of Hayabusa2 re-entry based on acoustic observations. <i>Publication of the Astronomical Society of Japan</i> , 2022, 74, 308-317.	2.5	5
70	Seismic Tremors and Their Relation to Cryosphere Dynamics in April 2015 around the L&#228;tow-Holm Bay, East Antarctica. <i>International Journal of Geosciences</i> , 2017, 08, 1025-1047.	0.6	4
71	Site selection for the Hayabusa2 artificial cratering and subsurface material sampling on Ryugu. <i>Planetary and Space Science</i> , 2022, 219, 105519.	1.7	4
72	Effect of Phase Pattern of Antennas Onboard Flying Spin Satellites on Doppler Measurements. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2011, 47, 405-419.	4.7	3

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73	Characteristic atmosphere-ocean-solid earth interactions in the Antarctic coastal and marine environment inferred from seismic and infrasound recording at Syowa Station, East Antarctica. Geological Society Special Publication, 2013, 381, 469-480.	1.3	3
74	Characteristics of non-tectonic tremors around the Lützow-Holm Bay, East Antarctica, during 2013-2015. Polar Science, 2019, 19, 77-85.	1.2	3
75	Alignment determination of the Hayabusa2 laser altimeter (LIDAR). Earth, Planets and Space, 2021, 73, .	2.5	3
76	Modeling an international co-operative global complementary production system. Computers and Industrial Engineering, 1994, 27, 205-208.	6.3	2
77	Quantitative measurement method for impact basin characteristics based on localized spherical harmonics. Icarus, 2014, 228, 315-323.	2.5	2
78	Lunar mare volcanism: lateral heterogeneities in volcanic activity and relationship with crustal structure. Geological Society Special Publication, 2015, 401, 127-138.	1.3	2
79	Global Distribution and Geological Context of Existing Occurrences of Olivine-Rich and Plagioclase-Rich Materials on the Lunar Surface. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	2
80	Same-beam VLBI observation of SELENE. , 2009, , .		1
81	Usability of lunar reflectance model based on SELENE/SP for planned HISUI radiometric calibration. , 2013, , .		1
82	Four-way Doppler tracking for lunar gravity measurements executed by Kaguya and its relay satellite: Okina. , 2009, , .		0
83	Overview of Differential VLBI Observations of Lunar Orbiters in SELENE (Kaguya) for Precise Orbit Determination and Lunar Gravity Field Study. , 2010, , 123-144.		0
84	Albedo Observation by Hayabusa2 LIDAR: Instrument Performance and Error Evaluation. , 2016, , 49-64.		0