Yuichi Tsuda

List of Publications by Year
in descending order

75	3,418	279798	144013
papers	citations	23 h-index	57 g-index

76	76	76	1513
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hayabusa2 arrives at the carbonaceous asteroid 162173 Ryuguâ€”A spinning topâ€“shaped rubble pile. Science, 2019, 364, 268-272.	12.6	410
2	System design of the Hayabusa 2â€”Asteroid sample return mission to 1999 JU3. Acta Astronautica, 2013, 91, 356-362.	3.2	364
3	The geomorphology, color, and thermal properties of Ryugu: Implications for parent-body processes. Science, 2019, 364, 252.	12.6	313
4	The surface composition of asteroid 162173 Ryugu from Hayabusa2 near-infrared spectroscopy. Science, 2019, 364, 272-275.	12.6	262
5	Hayabusa2 Mission Overview. Space Science Reviews, 2017, 208, 3-16.	8.1	228
6	An artificial impact on the asteroid (162173) Ryugu formed a crater in the gravity-dominated regime. Science, 2020, 368, 67-71.	12.6	183
7	Sample collection from asteroid (162173) Ryugu by Hayabusa2: Implications for surface evolution. Science, 2020, 368, 654-659.	12.6	158
8	Preliminary analysis of the Hayabusa2 samples returned from C-type asteroid Ryugu. Nature Astronomy, 2022, 6, 214-220.	10.1	136
9	Hayabusa2 mission status: Landing, roving and cratering on asteroid Ryugu. Acta Astronautica, 2020, 171, 42-54.	3.2	111
10	Boulder size and shape distributions on asteroid Ryugu. Icarus, 2019, 331, 179-191.	2.5	107
11	Highly porous nature of a primitive asteroid revealed by thermal imaging. Nature, 2020, 579, 518-522.	27.8	100
12	Images from the surface of asteroid Ryugu show rocks similar to carbonaceous chondrite meteorites. Science, 2019, 365, 817-820.	12.6	99
13	Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. Science, 2023, 379, .	12.6	97
14	Pebbles and sand on asteroid (162173) Ryugu: In situ observation and particles returned to Earth. Science, 2022, 375, 1011-1016.	12.6	78
15	First compositional analysis of Ryugu samples by the MicrOmega hyperspectral microscope. Nature Astronomy, 2022, 6, 221-225.	10.1	65
16	Thermophysical properties of the surface of asteroid 162173 Ryugu: Infrared observations and thermal inertia mapping. Icarus, 2020, 348, 113835.	2.5	48
17	Thermally altered subsurface material of asteroid (162173) Ryugu. Nature Astronomy, 2021, 5, 246-250.	10.1	47
18	Collisional history of Ryuguâ€™s parent body from bright surface boulders. Nature Astronomy, 2021, 5, 39-45.	10.1	42

#	Article	IF	Citations
19	Image-based autonomous navigation of Hayabusa2 using artificial landmarks: The design and brief in-flight results of the first landing on asteroid Ryugu. Astrodynamics, 2020, 4, 89-103.	2.4	34
20	The Western Bulge of 162173 Ryugu Formed as a Result of a Rotationally Driven Deformation Process. Astrophysical Journal Letters, 2019, 874, L10.	8.3	30
21	Modeling and analysis of Hayabusa2 touchdown. Astrodynamics, 2020, 4, 119-135.	2.4	30
22	Anomalously porous boulders on (162173) Ryugu as primordial materials from its parent body. Nature Astronomy, 2021, 5, 766-774.	10.1	30
23	The spatial distribution of impact craters on Ryugu. Icarus, 2020, 338, 113527.	2.5	25
24	Guidance, navigation, and control of Hayabusa2 touchdown operations. Astrodynamics, 2020, 4, 393-409.	2.4	25
25	Resurfacing processes on asteroid (162173) Ryugu caused by an artificial impact of Hayabusa2's Small Carry-on Impactor. Icarus, 2021, 366, 114530.	2.5	24
26	Spectrally blue hydrated parent body of asteroid (162173) Ryugu. Nature Communications, 2021, 12, 5837.	12.8	23
27	Rendezvous to asteroid with highly uncertain ephemeris: Hayabusa2â€™s Ryugu-approach operation result. Astrodynamics, 2020, 4, 137-147.	2.4	20
28	Design and Reconstruction of the Hayabusa2 Precision Landing on Ryugu. Journal of Spacecraft and Rockets, 2020, 57, 1033-1060.	1.9	20
29	Hayabusa2 extended mission: New voyage to rendezvous with a small asteroid rotating with a short period. Advances in Space Research, 2021, 68, 1533-1555.	2.6	20
30	Hayabusa2â€™s station-keeping operation in the proximity of the asteroid Ryugu. Astrodynamics, 2020, 4, 349-375.	2.4	19
31	The deep-space multi-object orbit determination system and its application to Hayabusa2â€™s asteroid proximity operations. Astrodynamics, 2020, 4, 377-392.	2.4	19
32	Design and flight results of GNC systems in Hayabusa2 descent operations. Astrodynamics, 2020, 4, 105-117.	2.4	19
33	GNC strategies and flight results of Hayabusa2 first touchdown operation. Acta Astronautica, 2020, 174, 131-147.	3.2	19
34	The MASCOT lander aboard Hayabusa2: The in-situ exploration of NEA (162173) Ryugu. Planetary and Space Science, 2021, 200, 105200.	1.7	18
35	Hayabusa2 Landing Site Selection: Surface Topography of Ryugu and Touchdown Safety. Space Science Reviews, 2020, 216, 1.	8.1	17
36	Improving Hayabusa2 trajectory by combining LIDAR data and a shape model. Icarus, 2020, 338, 113574.	2.5	16

#	Article	IF	Citations
37	Multivariable statistical analysis of spectrophotometry and spectra of (162173) Ryugu as observed by JAXA Hayabusa2 mission. Astronomy and Astrophysics, 2019, 629, A13.	5.1	15
38	Hayabusa2's kinetic impact experiment: Operational planning and results. Acta Astronautica, 2020, 175, 362-374.	3.2	14
39	Ballistic deployment of the Hayabusa2 artificial landmarks in the microgravity environment of Ryugu. Icarus, 2021, 358, 114220.	2.5	13
40	Dynamic precise orbit determination of Hayabusa2 using laser altimeter (LIDAR) and image tracking data sets. Earth, Planets and Space, 2020, 72, .	2.5	11
41	Hayabusa2â€™s superior solar conjunction mission operations: planning and post-operation results. Astrodynamics, 2020, 4, 265-288.	2.4	10
42	Characterization of the Ryugu surface by means of the variability of the near-infrared spectral slope in NIRS3 data. Icarus, 2020, 351, 113959.	2.5	9
43	Hayabusa2 pinpoint touchdown near the artificial crater on Ryugu: Trajectory design and guidance performance. Advances in Space Research, 2021, 68, 3093-3140.	2.6	9
44	Simulation of Seismic Wave Propagation on Asteroid Ryugu Induced by The Impact Experiment of The Hayabusa2 Mission: Limited Mass Transport by Low Yield Strength of Porous Regolith. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006594.	3.6	8
45	Motion reconstruction of the small carry-on impactor aboard Hayabusa2. Astrodynamics, 2020, 4, 289-308.	2.4	7
46	Hayabusa2â€™s Superior Solar Conjunction Phase. Space Science Reviews, 2020, 216, 1.	8.1	7
47	Simultaneous estimation of spacecraft position and asteroid diameter during final approach of Hayabusa2 to Ryugu. Astrodynamics, 2020, 4, 163-175.	2.4	7
48	The process for the selection of MASCOT landing site on Ryugu: Design, execution and results. Planetary and Space Science, 2020, 194, 105086.	1.7	6
49	Rotational effect as the possible cause of the east-west asymmetric crater rims on Ryugu observed by LIDAR data. Icarus, 2021, 354, 114073.	2.5	5
50	High-resolution observations of bright boulders on asteroid Ryugu: 2. Spectral properties. Icarus, 2021, 369, 114591.	2.5	5
51	Ground-based low altitude hovering technique of Hayabusa2. Astrodynamics, 2020, 4, 331-347.	2.4	4
52	Site selection for the Hayabusa2 artificial cratering and subsurface material sampling on Ryugu. Planetary and Space Science, 2022, 219, 105519.	1.7	4
53	Attitude reconstruction of MASCOT lander during its descent and stay on asteroid (162173) Ryugu. Planetary and Space Science, 2021, 195, 105150.	1.7	3
54	Alignment determination of the Hayabusa2 laser altimeter (LIDAR). Earth, Planets and Space, 2021, 73, .	2.5	3

#	Article	IF	Citations
55	Hayabusa2 operation for MASCOT delivery to Ryugu surface. Planetary and Space Science, 2021, 205, 105288.	1.7	3
56	Mission objectives, planning, and achievements of Hayabusa2. , 2022, , 5-23.		3
57	Autonomous image-based navigation using vector code correlation algorithm for distant small body exploration. Acta Astronautica, 2022, 196, 400-413.	3.2	2
58	Frozen Orbits Under Radiation Pressure and Zonal Gravity Perturbations. Journal of Guidance, Control, and Dynamics, 2021, 44, 1924-1946.	2.8	2
59	High-resolution observations of bright boulders on asteroid Ryugu: 1. Size frequency distribution and morphology. Icarus, 2021, 369, 114529.	2.5	2
60	Initial Achievements of Hayabusa2 in Asteroid Proximity Phase. Transactions of the Japan Society for Aeronautical and Space Sciences, 2020, 63, 115-123.	0.7	2
61	Frozen Orbits under Radiation Pressure and Zonal Gravity Perturbations. , 2020, , .		1
62	Hayabusa2 spacecraft dynamics and operational design of final descent and touchdown in sampling mission. , 2020, , .		1
63	Three-axial shape distributions of pebbles, cobbles and boulders smaller than a few meters on asteroid Ryugu. Icarus, 2022, 381, 115007.	2.5	1
64	Extended mission of Hayabusa2. , 2022, , 557-571.		1
65	Target markers for image-based autonomous navigation. , 2022, , 341-357.		1
66	Sensitivity degradation of optical navigation camera and attempts for dust removal. , 2022, , 415-431.		1
67	Overview of the Hayabusa2 asteroid proximity operations. , 2022, , 113-136.		1
68	NIRS3 spectral analysis of the artificial Omusubi-Kororin crater on Ryugu. Monthly Notices of the Royal Astronomical Society, 2022, 514, 6173-6182.	4.4	1
69	Ejecta models for particles generated by small kinetic impactors onto asteroid surfaces. , 2022, , .		0
70	Orbit determination for Hayabusa2. , 2022, , 73-94.		0
71	GNC design and results of Hayabusa2â€™s initial remote sensing operations. , 2022, , 137-175.		0
72	Hayabusa2 radio science investigation. , 2022, , 387-399.		0

#	Article	IF	Citations
73	MASCOT lander release operation. , 2022, , 229-240.		0
74	Landing site selection for the Hayabusa2 mission: Pre-arrival training and post-arrival analyses. , 2022, , 189-208.		0
75	Hayabusa2â€™s kinetic impact experiment. , 2022, , 291-312.		0