Ryudo Tsukizaki

List of Publications by Year
in descending order

46 papers	1,943 citations	430874 18 h-index	254184 43 g-index
49 all docs	49 docs citations	49 times ranked	1101 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	The geomorphology, color, and thermal properties of Ryugu: Implications for parent-body processes. Science, 2019, 364, 252.	12.6	313
3	An artificial impact on the asteroid (162173) Ryugu formed a crater in the gravity-dominated regime. Science, 2020, 368, 67-71.	12.6	183
4	Sample collection from asteroid (162173) Ryugu by Hayabusa2: Implications for surface evolution. Science, 2020, 368, 654-659.	12.6	158
5	Preliminary analysis of the Hayabusa2 samples returned from C-type asteroid Ryugu. Nature Astronomy, 2022, 6, 214-220.	10.1	136
6	Highly porous nature of a primitive asteroid revealed by thermal imaging. Nature, 2020, 579, 518-522.	27.8	100
7	Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. Science, 2023, 379, .	12.6	97
8	Pebbles and sand on asteroid (162173) Ryugu: In situ observation and particles returned to Earth. Science, 2022, 375, 1011-1016.	12.6	78
9	Thermally altered subsurface material of asteroid (162173) Ryugu. Nature Astronomy, 2021, 5, 246-250.	10.1	47
10	Collisional history of Ryuguâ€™s parent body from bright surface boulders. Nature Astronomy, 2021, 5, 39-45.	10.1	42
11	Performance improvement of the Î¼10 microwave discharge ion thruster by expansion of the plasma production volume. Acta Astronautica, 2019, 157, 425-434.	3.2	38
12	Thrust Enhancement of a Microwave Ion Thruster. Journal of Propulsion and Power, 2014, 30, 1383-1389.	2.2	31
13	Anomalously porous boulders on (162173) Ryugu as primordial materials from its parent body. Nature Astronomy, 2021, 5, 766-774.	10.1	30
14	Development and Testing of the Hayabusa2 Ion Engine System. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2016, 14, Pb_131-Pb_140.	0.2	25
15	Numerical investigation of plasma properties for the microwave discharge ion thruster Î¼10 using PIC-MCC simulation. Physics of Plasmas, 2019, 26, 073510.	1.9	21
16	In-flight operation of the Hayabusa2 ion engine system on its way to rendezvous with asteroid 162173 Ryugu. Acta Astronautica, 2020, 166, 69-77.	3.2	21
17	Hayabusa2â€™s station-keeping operation in the proximity of the asteroid Ryugu. Astrodynamics, 2020, 4, 349-375.	2.4	19
18	Electric field measurement in microwave discharge ion thruster with electro-optic probe. Review of Scientific Instruments, 2012, 83, 124702.	1.3	18

#	Article	IF	Citations
19	Microwave power absorption to high energy electrons in the ECR ion thruster. Plasma Sources Science and Technology, 2018, 27, 095015.	3.1	18
20	Measurement of axial neutral density profiles in a microwave discharge ion thruster by laser absorption spectroscopy with optical fiber probes. Review of Scientific Instruments, 2011, 82, 123103.	1.3	13
21	Investigation and experimental simulation of performance deterioration of microwave discharge ion thruster Î¼10 during space operation. Acta Astronautica, 2020, 174, 367-376.	3.2	13
22	Two-photon absorption laser induced fluorescence with various laser intensities for density measurement of ground state neutral xenon. Acta Astronautica, 2019, 161, 382-388.	3.2	12
23	Effect of nozzle magnetic field on microwave discharge cathode performance. Acta Astronautica, 2019, 165, 25-31.	3.2	11
24	Plasma hysteresis caused by high-voltage breakdown in gridded microwave discharge ion thruster Î¼10. Acta Astronautica, 2021, 185, 179-187.	3.2	10
25	Azimuthal velocity measurement in the ion beam of a gridded ion thruster using laser-induced fluorescence spectroscopy. Plasma Sources Science and Technology, 2018, 27, 015013.	3.1	8
26	Neutral ground state particle density measurement of xenon plasma in microwave cathode by two-photon laser-induced fluorescence spectroscopy. Vacuum, 2019, 168, 108846.	3.5	8
27	Effect of discharge chamber geometry on ion loss in microwave discharge ion thruster. Acta Astronautica, 2020, 176, 77-88.	3.2	8
28	Application of a microwave cathode to a 200-W Hall thruster with comparison to a hollow cathode. Acta Astronautica, 2020, 176, 413-423.	3.2	8
29	Improvement of the Thrust Force of the ECR Ion Thruster Î¼10. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2010, 8, Pb_67-Pb_72.	0.2	7
30	Azimuthal ion drift of a gridded ion thruster. Plasma Sources Science and Technology, 2018, 27, 105006.	3.1	7
31	Plasma parameters measured inside and outside a microwave-discharge-based plasma cathode using laser-induced fluorescence spectroscopy. Journal of Applied Physics, 2022, 131, .	2.5	7
32	Design and testing of additively manufactured high-efficiency resistojet on hydrogen propellant. Acta Astronautica, 2021, 181, 14-27.	3.2	6
33	Importance of stepwise ionization from the metastable state in electron cyclotron resonance ion thrusters. Journal of Electric Propulsion, 2022, 1, 1.	2.0	6
34	Feasibility Study on Performance Enhancement Options for the ECR Ion Thruster Âµ10. Transactions of the Japan Society for Aeronautical and Space Sciences Space Technology Japan, 2009, 7, Pb_113-Pb_118.	0.2	4
35	Neutral atom density measurements of xenon plasma inside a Î¼10 microwave ion thruster using two-photon laser-induced fluorescence spectroscopy. Vacuum, 2021, 190, 110269.	3.5	4
36	Investigation of plasma mode transition and hysteresis in electron cyclotron resonance ion thrusters. Plasma Sources Science and Technology, 2021, 30, 095023.	3.1	4

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37	Characterization of a Capillary Flow Controller for Electric Propulsion. Journal of Propulsion and Power, 2020, 36, 586-592.	2.2	3
38	Characteristics of Plasma and Gas in Microwave Discharge Ion Thruster Î¼10 Using Kinetic Particle Simulation. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2020, 18, 57-63.	0.2	3
39	Effects of Segmented Chamber Walls in a Microwave Ion Thruster on Thrust Performance. Journal of the Japan Society for Aeronautical and Space Sciences, 2017, 65, 17-20.	0.1	2
40	Calibration methods for the simultaneous measurement of the impulse, mass loss, and average thrust of a pulsed plasma thruster. Review of Scientific Instruments, 2018, 89, 095103.	1.3	2
41	Performance of a Miniature Hall Thruster and an In-house PPU. Transactions of the Japan Society for Aeronautical and Space Sciences, 2021, 64, 189-192.	0.7	2
42	Additive-manufactured single-piece thin multi-layer tungsten heater for an electrothermal thruster. Review of Scientific Instruments, 2021, 92, 114501.	1.3	2
43	Effect of ion beam extraction on neutral density distribution inside a gridded microwave discharge ion thruster. Vacuum, 2022, 200, 110962.	3.5	2
44	Pulse-width variation of power supply for evaluating quasi-steady state of magneto-plasma-dynamic thruster operation. Review of Scientific Instruments, 2019, 90, .	1.3	1
45	Application of Two-photon Laser-induced Fluorescence Spectroscopy to Microwave Cathode. Transactions of the Japan Society for Aeronautical and Space Sciences, 2020, 63, 281-283.	0.7	1
46	Sensitivity degradation of optical navigation camera and attempts for dust removal. , 2022, , 415-431.		1