Futoshi Takahashi

List of Publications by Year
in descending order

70	2,432	201674 27	206112 48
papers	citations	h-index	g-index

73	73	73	1492
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A numerical dynamo benchmark. Physics of the Earth and Planetary Interiors, 2001, 128, 25-34.	1.9	224
2	Solar wind proton reflection at the lunar surface: Low energy ion measurement by MAPâ€PACE onboard SELENE (KAGUYA). Geophysical Research Letters, 2008, 35, .	4.0	178
3	In-flight Performance and Initial Results of Plasma Energy Angle and Composition Experiment (PACE) onÂSELENE (Kaguya). Space Science Reviews, 2010, 154, 265-303.	8.1	123
4	Surface vector mapping of magnetic anomalies over the Moon using Kaguya and Lunar Prospector observations. Journal of Geophysical Research E: Planets, 2015, 120, 1160-1185.	3.6	106
5	Lunar Magnetic Field Observation and Initial Global Mapping of Lunar Magnetic Anomalies by MAP-LMAG Onboard SELENE (Kaguya). Space Science Reviews, 2010, 154, 219-251.	8.1	94
6	Simulations of a Quasi-Taylor State Geomagnetic Field Including Polarity Reversals on the Earth Simulator. Science, 2005, 309, 459-461.	12.6	93
7	Simultaneous observation of the electron acceleration and ion deceleration over lunar magnetic anomalies. Earth, Planets and Space, 2012, 64, 83-92.	2.5	87
8	First direct detection of ions originating from the Moon by MAPâ€PACE IMA onboard SELENE (KAGUYA). Geophysical Research Letters, 2009, 36, .	4.0	79
9	Solarâ€wind proton access deep into the nearâ€Moon wake. Geophysical Research Letters, 2009, 36, .	4.0	79
10	Seismoelectromagnetic Effect Associated with the Izmit Earthquake and Its Aftershocks. Bulletin of the Seismological Society of America, 2002, 92, 350-360.	2.3	71
11	Preliminary results of multidisciplinary observations before, during and after the Kocaeli (Izmit) earthquake in the western part of the North Anatolian Fault Zone. Earth, Planets and Space, 2000, 52, 293-298.	2.5	69
12	Performance benchmarks for a next generation numerical dynamo model. Geochemistry, Geophysics, Geosystems, 2016, 17, 1586-1607.	2.5	66
13	Ground calibration of the high-sensitivity SELENE lunar magnetometer LMAG. Earth, Planets and Space, 2008, 60, 353-363.	2.5	62
14	First in situ observation of the Moonâ€originating ions in the Earth's Magnetosphere by MAPâ€PACE on SELENE (KAGUYA). Geophysical Research Letters, 2009, 36, .	4.0	62
15	Phase Transition of FeO and Stratification in Earthâ€™s Outer Core. Science, 2011, 334, 792-794.	12.6	60
16	Scale variability in convection-driven MHD dynamos at low Ekman number. Physics of the Earth and Planetary Interiors, 2008, 167, 168-178.	1.9	56
17	Dipolar and non-dipolar dynamos in a thin shell geometry with implications for the magnetic field of Mercury. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	53
18	In-orbit calibration of the lunar magnetometer onboard SELENE (KAGUYA). Earth, Planets and Space, 2009, 61, 1269-1274.	2.5	51

#	Article	IF	Citations
19	Pairwise energy gainâ€loss feature of solar wind protons in the nearâ€Moon wake. Geophysical Research Letters, 2009, 36, .	4.0	51
20	Constraint on the lunar core size from electromagnetic sounding based on magnetic field observations by an orbiting satellite. Icarus, 2013, 222, 32-43.	2.5	51
21	The Origin of Mercuryâ€™s Internal Magnetic Field. Space Science Reviews, 2007, 132, 261-290.	8.1	44
22	Electrostatic solitary waves associated with magnetic anomalies and wake boundary of the Moon observed by KAGUYA. Geophysical Research Letters, 2010, 37, .	4.0	41
23	Effects of thermally heterogeneous structure in the lowermost mantle on the geomagnetic field strength. Earth and Planetary Science Letters, 2008, 272, 738-746.	4.4	39
24	Magnetic Cleanliness Program Under Control ofÂElectromagnetic Compatibility for the SELENE (Kaguya) Spacecraft. Space Science Reviews, 2010, 154, 253-264.	8.1	36
25	Effect of the solar wind proton entry into the deepest lunar wake. Geophysical Research Letters, 2010, 37, .	4.0	34
26	Non-monochromatic whistler waves detected by Kaguya on the dayside surface of the moon. Earth, Planets and Space, 2011, 63, 37-46.	2.5	31
27	Reorientation of the early lunar pole. Nature Geoscience, 2014, 7, 409-412.	12.9	31
28	Mercuryâ€™s anomalous magnetic field caused by a symmetry-breaking self-regulating dynamo. Nature Communications, 2019, 10, 208.	12.8	27
29	Thermal coreâ€mantle coupling in an early lunar dynamo: Implications for a global magnetic field and magnetosphere of the early Moon. Geophysical Research Letters, 2009, 36, .	4.0	24
30	Statistical analysis of monochromatic whistler waves near the Moon detected by Kaguya. Annales Geophysicae, 2011, 29, 889-893.	1.6	24
31	Type-II entry of solar wind protons into the lunar wake: Effects of magnetic connection to the night-side surface. Planetary and Space Science, 2013, 87, 106-114.	1.7	23
32	Regional mapping of the lunar magnetic anomalies at the surface: Method and its application to strong and weak magnetic anomaly regions. Icarus, 2014, 228, 35-53.	2.5	23
33	Statistical study of broadband whistlerâ€mode waves detected by Kaguya near the Moon. Geophysical Research Letters, 2012, 39, .	4.0	22
34	A detailed analysis of a dynamo mechanism in a rapidly rotating spherical shell. Journal of Fluid Mechanics, 2012, 701, 228-250.	3.4	22
35	Largeâ€amplitude monochromatic ULF waves detected by Kaguya at the Moon. Journal of Geophysical Research, 2012, 117, .	3.3	20
36	A numerical study on magnetic polarity transition in an MHD dynamo model. Earth, Planets and Space, 2007, 59, 665-673.	2.5	19

#	Article	IF	Citations
37	Kaguya observations of the lunar wake in the terrestrial foreshock: Surface potential change by bow-shock reflected ions. Icarus, 2017, 293, 45-51.	2.5	19
38	Dynamo action in a rotating spherical shell at high Rayleigh numbers. Physics of Fluids, 2005, 17, 076601.	4.0	18
39	Double diffusive convection in the Earthâ€™s core and the morphology of the geomagnetic field. Physics of the Earth and Planetary Interiors, 2014, 226, 83-87.	1.9	17
40	Structure of the ionized lunar sodium and potassium exosphere: Dawnâ€dusk asymmetry. Journal of Geophysical Research E: Planets, 2014, 119, 798-809.	3.6	16
41	Paleointensity study of the middle Cretaceous Iritono granite in northeast Japan: Implication for high field intensity of the Cretaceous normal superchron. Physics of the Earth and Planetary Interiors, 2009, 176, 235-242.	1.9	15
42	Dynamo action and its temporal variation inside the tangent cylinder in MHD dynamo simulations. Physics of the Earth and Planetary Interiors, 2003, 140, 53-71.	1.9	14
43	Interaction between terrestrial plasma sheet electrons and the lunar surface: SELENE (Kaguya) observations. Geophysical Research Letters, 2010, 37, .	4.0	13
44	Effects of boundary layers on magnetic field behavior in an MHD dynamo model. Physics of the Earth and Planetary Interiors, 2001, 128, 149-161.	1.9	12
45	Implementation of a high-order combined compact difference scheme in problems of thermally driven convection and dynamo in rotating spherical shells. Geophysical and Astrophysical Fluid Dynamics, 2012, 106, 231-249.	1.2	11
46	Anomalous deformation of the Earth's bow shock in the lunar wake: Joint measurement by Changâ€™E-1 and SELENE. Planetary and Space Science, 2011, 59, 378-386.	1.7	10
47	Night side lunar surface potential in the Earthâ€™s magnetosphere. Advances in Space Research, 2014, 54, 1985-1992.	2.6	10
48	KAGUYA observation of global emissions of indigenous carbon ions from the Moon. Science Advances, 2020, 6, eaba1050.	10.3	10
49	A candidate secular variation model for IGRF-13 based on MHD dynamo simulation and 4DEnVar data assimilation. Earth, Planets and Space, 2020, 72, .	2.5	10
50	Nongyrotropic electron velocity distribution functions near the lunar surface. Journal of Geophysical Research, 2012, 117, .	3.3	9
51	Harmonics of whistler-mode waves near the Moon. Earth, Planets and Space, 2015, 67, 36.	2.5	9
52	Plasmoid formation for multiple onset substorms: observations of the Japanese Lunar Mission "Kaguya". Annales Geophysicae, 2009, 27, 59-64.	1.6	8
53	Electrons on closed field lines of lunar crustal fields in the solar wind wake. Icarus, 2015, 250, 238-248.	2.5	8
54	Control of lunar external magnetic enhancements by IMF polarity: A case study. Planetary and Space Science, 2012, 73, 161-167.	1.7	7

#	Article	IF	Citations
55	Smallâ€scale magnetic fields on the lunar surface inferred from plasma sheet electrons. Geophysical Research Letters, 2013, 40, 3362-3366.	4.0	7
56	Kaguya observation of the ion acceleration around a lunar crustal magnetic anomaly. Planetary and Space Science, 2014, 93-94, 87-95.	1.7	6
57	Groupâ€standing of whistler mode waves near the Moon. Journal of Geophysical Research: Space Physics, 2014, 119, 2634-2648.	2.4	5
58	ELF magnetic fluctuations detected by Kaguya in deepest lunar wake associated with type-II protons. Earth, Planets and Space, 2015, 67, .	2.5	5
59	Tidal resonance of eigenmode oscillation in the early Earth's ocean and its acceleration effect on the Moon's orbital evolution. Icarus, 2020, 335, 113382.	2.5	5
60	Electromagnetic Ion Cyclotron Waves Detected by Kaguya and Geotail in the Earth's Magnetotail. Journal of Geophysical Research: Space Physics, 2018, 123, 1146-1164.	2.4	2
61	Lunar Magnetic Field Observation and Initial Global Mapping of Lunar Magnetic Anomalies by MAP-LMAG Onboard SELENE (Kaguya). , 2010, , 219-251.		2
62	Multiple solutions of inhomogeneous H-systems with zero Dirichlet boundary conditions. Nonlinear Analysis: Theory, Methods & Applications, 2003, 52, 239-259.	1.1	1
63	Testing a toroidal magnetic field imaging method at the core-mantle boundary using a numerical dynamo model. Earth, Planets and Space, 2014, 66, .	2.5	1
64	Decrease of the interplanetary magnetic field strength on the lunar dayside and over the polar region. Icarus, 2020, 335, 113392.	2.5	1
65	Global Maps of Solar Wind Electron Modification by Electrostatic Waves Above the Lunar Day Side: Kaguya Observations. Geophysical Research Letters, 2021, 48, e2021GL095260.	4.0	1
66	Magnetic Cleanliness Program Under Control of Electromagnetic Compatibility for the SELENE (Kaguya) Spacecraft. , 2010, , 253-264.		1
67	In-flight Performance and Initial Results of Plasma Energy Angle and Composition Experiment (PACE) on SELENE (Kaguya). , 2010, , 265-303.		1
68	Polarization Reversal of Lowâ€Frequency Magnetic Variation in the Lunar Wake. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029299.	2.4	0
69	An event study on broadband electric field noises and electron distributions in the lunar wake boundary. Earth, Planets and Space, 2022, 74, .	2.5	0
70	Diffuse Whistlerâ€Mode Waves Detected by Kaguya in the Lunar Polar Region. Radio Science, 2022, 57, .	1.6	0