Akiko M Nakamura

List of Publications by Year
in descending order

101	3,248	201674	155660
papers	citations	27 h-index	55 g-index

107	107	107	1870
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Appearance of a â€œFreshâ€•Surface on 596 Scheila as a Consequence of the 2010 Impact Event. Astrophysical Journal Letters, 2022, 924, L9.	8.3	7
2	The ESA Hera Mission: Detailed Characterization of the DART Impact Outcome and of the Binary Asteroid (65803) Didymos. Planetary Science Journal, 2022, 3, 160.	3.6	82
3	Experimental study concerning the oblique impact of low- and high-density projectiles on sedimentary rocks. Planetary and Space Science, 2021, 195, 105141.	1.7	6
4	Primordial Porous Structure of Chondrite Parent Bodies Due to Self-gravity. Planetary Science Journal, 2021, 2, 41.	3.6	2
5	Packing fraction of clusters formed in free-falling granular streams based on flash x-ray radiography. Physical Review E, 2021, 103, 032903.	2.1	1
6	Cohesion of regolith: Measurements of meteorite powders. Icarus, 2021, 360, 114357.	2.5	16
7	Crater shape as a possible record of the impact environment of metallic bodies: Effects of temperature, impact velocity and impactor density. Icarus, 2021, 362, 114410.	2.5	8
8	Surface environment of Phobos and Phobos simulant UTPS. Earth, Planets and Space, 2021, 73, .	2.5	15
9	Collisional disruption of highly porous targets in the strength regime: Effects of mixture. Planetary and Space Science, 2020, 182, 104819.	1.7	2
10	Numerical Simulations of Laboratoryâ€Scale, Hypervelocityâ€Impact Experiments for Asteroidâ€Deflection Code Validation. Earth and Space Science, 2020, 7, e2018EA000474.	2.6	12
11	Observations of the Agglomeration Process of Granular Streams Using a Flash X-ray Radiography Technique. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2020, 27, 165-167.	0.0	0
12	Are hypervelocity impacts able to produce chondrule-like ejecta?. Planetary and Space Science, 2019, 177, 104684.	1.7	4
13	Experimental Study on Gravitational and Atmospheric Effects on Crater Size Formed by Lowâ€Velocity Impacts Into Granular Media. Journal of Geophysical Research E: Planets, 2019, 124, 1379-1392.	3.6	4
14	Hypervelocity impacts as a source of deceiving surface signatures on iron-rich asteroids. Science Advances, 2019, 5, eaav3971.	10.3	21
15	Planetary Impact Processes in Porous Materials. Shock Wave and High Pressure Phenomena, 2019, , 103-136.	0.1	6
16	Laboratory experiments on agglomeration of particles in a granular stream. Progress in Earth and Planetary Science, 2018, 5, .	3.0	7
17	Correction to: Laboratory experiments on agglomeration of particles in a granular stream. Progress in Earth and Planetary Science, 2018, 5, .	3.0	2
18	Asteroid Ryugu before the Hayabusa2 encounter. Progress in Earth and Planetary Science, 2018, 5, .	3.0	39

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19	Impactâ€induced chemical fractionation as inferred from hypervelocity impact experiments with silicate projectiles and metallic targets. Meteoritics and Planetary Science, 2018, 53, 2306-2326.	1.6	3
20	Estimating the Porosity Structure of Granular Bodies Using the Laneâ€“Emden Equation Applied to Laboratory Measurements of the Pressureâ€“Density Relation of Fluffy Granular Samples. Astrophysical Journal, 2018, 860, 123.	4.5	6
21	Scaling of impact-generated cavity-size for highly porous targets and its application to cometary surfaces. Icarus, 2017, 292, 234-244.	2.5	9
22	Impact cratering on porous targets in the strength regime. Planetary and Space Science, 2017, 149, 5-13.	1.7	10
23	Anisotropic Ejection from Active Asteroid P/2010 A2: An Implication of Impact Shattering on an Asteroid[*]. Astronomical Journal, 2017, 153, 228.	4.7	20
24	Experimental study on compression property of regolith analogues. Planetary and Space Science, 2017, 149, 14-22.	1.7	17
25	Laboratory Study of Compaction of Granular Bodies due to Collisions in Interplanetary Space. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2017, 25, 104-108.	0.0	0
26	Centrifugal Experiments with Simulated Regolith: Effects of Gravity, Size Distribution, and Particle Shape on Porosity. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2016, 14, Pk_17-Pk_21.	0.2	3
27	Crater-ray formation by impact-induced ejecta particles. Icarus, 2015, 250, 215-221.	2.5	18
28	Size dependence of the disruption threshold: laboratory examination of millimeterâ€“centimeter porous targets. Planetary and Space Science, 2015, 107, 45-52.	1.7	13
29	Impact experiments on highly porous targets: Cavity morphology and disruption thresholds in the strength regime. Planetary and Space Science, 2015, 107, 36-44.	1.7	7
30	Boulder Field. , 2015, , 154-161.		0
31	Boulder Field. , 2014, , 1-9.		0
32	Experimental study of impact-cratering damage on brittle cylindrical column model as a fundamental component of space architecture. Advances in Space Research, 2014, 54, 1479-1486.	2.6	5
33	Laboratory experiments on the impact disruption of iron meteorites at temperature of near-Earth space. Icarus, 2014, 241, 1-12.	2.5	10
34	Relationship between regolith particle size and porosity on small bodies. Icarus, 2014, 239, 291-293.	2.5	28
35	Degree of impactor fragmentation under collision with a regolith surfaceâ€”Laboratory impact experiments of rock projectiles. Meteoritics and Planetary Science, 2014, 49, 69-79.	1.6	16
36	Experiments on the consolidation of chondrites and the formation of dense rims around chondrules. Icarus, 2013, 225, 558-569.	2.5	31

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37	A formation mechanism for concentric ridges in ejecta surrounding impact craters in a layer of fine glass beads. Icarus, 2013, 225, 298-307.	2.5	5
38	Impact and intrusion experiments on the deceleration of low-velocity impactors by small-body regolith. Icarus, 2013, 223, 222-233.	2.5	19
39	Collision of a chondrule with matrix: Relation between static strength of matrix and impact pressure. Icarus, 2013, 226, 111-118.	2.5	7
40	Impact experiments of exotic dust grain capture by highly porous primitive bodies. Icarus, 2013, 224, 209-217.	2.5	9
41	Flyer acceleration experiments using high-power laser. EPJ Web of Conferences, 2013, 59, 19002.	0.3	1
42	Flyer acceleration by high-power laser and impact experiments at velocities higher than 10 km/s. , 2012, , .		1
43	Cratering experiments on the self armoring of coarse-grained granular targets. Icarus, 2012, 220, 1040-1049.	2.5	38
44	Laboratory experiments on crater scalingâ€law for sedimentary rocks in the strength regime. Journal of Geophysical Research, 2012, 117, .	3.3	14
45	SIZE AND DENSITY ESTIMATION FROM IMPACT TRACK MORPHOLOGY IN SILICA AEROGEL: APPLICATION TO DUST FROM COMET 81P/WILD 2. Astrophysical Journal, 2012, 744, 18.	4.5	18
46	The dynamical evolution of dwarf planet (136108) Haumeaâ€™s collisional family: general properties and implications for the trans-Neptunian belt. Monthly Notices of the Royal Astronomical Society, 2012, 421, 1331-1350.	4.4	26
47	INTERPRETATION OF (596) SCHEILA'S TRIPLE DUST TAILS. Astrophysical Journal Letters, 2011, 741, L24.	8.3	43
48	SILICATE DUST SIZE DISTRIBUTION FROM HYPERVELOCITY COLLISIONS: IMPLICATIONS FOR DUST PRODUCTION IN DEBRIS DISKS. Astrophysical Journal Letters, 2011, 733, L39.	8.3	31
49	OBSERVATIONAL EVIDENCE FOR AN IMPACT ON THE MAIN-BELT ASTEROID (596) SCHEILA. Astrophysical Journal Letters, 2011, 740, L11.	8.3	45
50	Experimental study on static and impact strength of sintered agglomerates. Icarus, 2011, 211, 885-893.	2.5	14
51	In situ observation of penetration process in silica aerogel: Deceleration mechanism of hard spherical projectiles. Icarus, 2011, 211, 986-992.	2.5	25
52	High- and low-velocity impact experiments on porous sintered glass bead targets of different compressive strengths: Outcome sensitivity and scaling. Icarus, 2010, 205, 702-711.	2.5	20
53	The shape distribution of boulders on Asteroid 25143 Itokawa: Comparison with fragments from impact experiments. Icarus, 2010, 207, 277-284.	2.5	52
54	The Hayabusa Spacecraft Asteroid Multi-band Imaging Camera (AMICA). Icarus, 2010, 207, 714-731.	2.5	38

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55	Compaction and fragmentation of porous gypsum targets from low-velocity impacts. Icarus, 2009, 201, 795-801.	2.5	12
56	A survey of possible impact structures on 25143 Itokawa. Icarus, 2009, 200, 486-502.	2.5	75
57	Numerical simulations of impacts involving porous bodies. Icarus, 2009, 201, 802-813.	2.5	71
58	Collisional disruption experiments of porous targets. Planetary and Space Science, 2009, 57, 111-118.	1.7	26
59	IMPACT EXPERIMENTS WITH PROJECTILES AT VELOCITIES HIGHER THAN 10 KMâˆ•S. , 2009, , .		0
60	Measurements of target compressive and tensile strength for application to impact cratering on iceâ€silicate mixtures. Journal of Geophysical Research, 2008, 113, .	3.3	13
61	Impact process of boulders on the surface of asteroid 25143 Itokawaâ€”fragments from collisional disruption. Earth, Planets and Space, 2008, 60, 7-12.	2.5	36
62	Size-frequency statistics of boulders on global surface of asteroid 25143 Itokawa. Earth, Planets and Space, 2008, 60, 13-20.	2.5	121
63	Asteroids and Their Collisional Disruption. Lecture Notes in Physics, 2008, , 1-27.	0.7	5
64	Regolith Migration and Sorting on Asteroid Itokawa. Science, 2007, 316, 1011-1014.	12.6	271
65	Weibull parameters ofYakunobasalt targets used in documented high-velocity impact experiments. Journal of Geophysical Research, 2007, 112, .	3.3	40
66	Global mapping of the degree of space weathering on asteroid 25143 Itokawa by Hayabusa/AMICA observations. Meteoritics and Planetary Science, 2007, 42, 1791-1800.	1.6	43
67	Collisional disruption of weakly sintered porous targets at low-impact velocities. Earth, Planets and Space, 2007, 59, 319-324.	2.5	11
68	Laboratory experiments of crater formation on iceâ€“silicate mixture targets. Advances in Space Research, 2007, 39, 392-399.	2.6	6
69	Collisional disruption of porous sintered glass beads at low impact velocities. Advances in Space Research, 2007, 40, 252-257.	2.6	6
70	The Rubble-Pile Asteroid Itokawa as Observed by Hayabusa. Science, 2006, 312, 1330-1334.	12.6	761
71	Secondary craters of Tycho: Size-frequency distributions and estimated fragment sizeâ€“velocity relationships. Journal of Geophysical Research, 2006, 111, .	3.3	23
72	Asteroidal surface studies by laboratory light scattering and LIDAR on HAYABUSA. Advances in Space Research, 2006, 37, 138-141.	2.6	12

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73	Light scattering by particulate media of irregularly shaped particles: laboratory measurements and numerical simulations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 295-304.	2.3	12
74	Detailed Images of Asteroid 25143 Itokawa from Hayabusa. Science, 2006, 312, 1341-1344.	12.6	234
75	A polarimetric study of Asteroid 25143 Itokawa. Icarus, 2005, 179, 297-303.	2.5	29
76	Quantification of porosity and surface roughness in laboratory measurements of the bidirectional reflectance of asteroid surface analogues. Earth, Planets and Space, 2005, 57, 71-76.	2.5	24
77	Ejecta size-velocity relation derived from the distribution of the secondary craters of kilometer-sized craters on Mars. Planetary and Space Science, 2004, 52, 1103-1108.	1.7	13
78	Measurements of bidirectional reflectance of ordinary chondrite for muses-C in-situ detection. Advances in Space Research, 2003, 31, 2495-2499.	2.6	3
79	Laboratory Study of the Bidirectional Reflectance of Powdered Surfaces: On the Asymmetry Parameter of Asteroid Photometric Data. Icarus, 2002, 156, 551-561.	2.5	36
80	Wavelength dependence of reflectance of Martian surface fogs. Advances in Space Research, 2002, 29, 209-214.	2.6	1
81	Cratering of asteroids and small bodies. Advances in Space Research, 2002, 29, 1221-1230.	2.6	3
82	Detection of mass, shape and surface roughness of target asteroid of MUSES-C by LIDAR. Advances in Space Research, 2002, 29, 1231-1235.	2.6	15
83	Multi-band imaging camera and its sciences for the Japanese near-earth asteroid mission MUSES-C. Earth, Planets and Space, 2001, 53, 1047-1063.	2.5	13
84	Reconsideration of crater size-frequency distribution on the moon: effect of projectile population and secondary craters. Advances in Space Research, 2001, 28, 1181-1186.	2.6	7
85	Physical Processes on Interplanetary Dust. Astronomy and Astrophysics Library, 2001, , 445-507.	0.1	19
86	Radar Observations and Physical Model of Asteroid 6489 Golevka. Icarus, 2000, 148, 37-51.	2.5	65
87	Mars Imaging Camera (MIC) on board PLANET-B. Acta Astronautica, 1999, 45, 597-604.	3.2	1
88	Laboratory measurements of laser-scattered light by rough surfaces. Advances in Space Research, 1999, 23, 1201-1204.	2.6	7
89	Incident angle dependence of backscattered light by regolith layers. Advances in Space Research, 1999, 23, 1205-1208.	2.6	10
90	Intercontinental bistatic radar observations of 6489 Golevka (1991 JX). Planetary and Space Science, 1997, 45, 771-778.	1.7	8

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91	Measurements of light scattering by rough surfaces. Advances in Space Research, 1997, 20, 1609-1612.	2.6	4
92	Velocity Measurements of Impact Ejecta from Regolith Targets. Icarus, 1997, 128, 160-170.	2.5	22
93	Catastrophic disruption experiments: recent results. Planetary and Space Science, 1994, 42, 1013-1026.	1.7	43
94	Velocity of finer fragments from impact. Planetary and Space Science, 1994, 42, 1043-1052.	1.7	40
95	Cratering Experiments into Curved Surfaces and Their Implication for Craters on Small Satellites. Icarus, 1993, 105, 345-350.	2.5	31
96	Efficiency of linear and angular momentum transfer in oblique impact. Planetary and Space Science, 1993, 41, 687-692.	1.7	5
97	Measurement of expansion velocity of an impactâ€generated vapor cloud. Geophysical Research Letters, 1993, 20, 1595-1598.	4.0	4
98	Velocity and spin of fragments from impact disruptions. Icarus, 1992, 100, 127-135.	2.5	47
99	Velocity distribution of fragments formed in a simulated collisional disruption. Icarus, 1991, 92, 132-146.	2.5	171
100	Penetration of Hypervelocity Projectiles into Aluminum and Polyethylene Thin-Sheet Stacks. Japanese Journal of Applied Physics, 1991, 30, 2129-2133.	1.5	1
101	Aperture synthesis CS(2-1) observations of a young stellar object GL 490 - Accretion flow in gas disk. Astrophysical Journal, 1991, 383, L81.	4.5	7