JÃ¼rgen Blum

List of Publications by Year
in descending order

176 papers	8,840 citations	50276 46 h-index	49909 87 g-index
183 all docs	183 docs citations	183 times ranked	3792 citing authors

#	Article	IF	Citations
1	The Growth Mechanisms of Macroscopic Bodies in Protoplanetary Disks. Annual Review of Astronomy and Astrophysics, 2008, 46, 21-56.	24.3	672
2	The outcome of protoplanetary dust growth: pebbles, boulders, or planetesimals?. Astronomy and Astrophysics, 2010, 513, A57.	5.1	415
3	The outcome of protoplanetary dust growth: pebbles, boulders, or planetesimals?. Astronomy and Astrophysics, 2010, 513, A56.	5.1	384
4	Adhesion and Friction Forces between Spherical Micrometer-Sized Particles. Physical Review Letters, 1999, 83, 3328-3331.	7.8	365
5	Experiments on Sticking, Restructuring, and Fragmentation of Preplanetary Dust Aggregates. Icarus, 2000, 143, 138-146.	2.5	354
6	Growth and Form of Planetary Seedlings: Results from a Microgravity Aggregation Experiment. Physical Review Letters, 2000, 85, 2426-2429.	7.8	238
7	THE STICKINESS OF MICROMETER-SIZED WATER-ICE PARTICLES. Astrophysical Journal, 2015, 798, 34.	4.5	221
8	Analogous Experiments on the Stickiness of Micronâ€sized Preplanetary Dust. Astrophysical Journal, 2000, 533, 454-471.	4.5	190
9	Experiments on Preplanetary Dust Aggregation. Icarus, 1998, 132, 125-136.	2.5	172
10	Planetesimal formation by sweep-up: how the bouncing barrier can be beneficial to growth. Astronomy and Astrophysics, 2012, 540, A73.	5.1	169
11	Experimental Investigations on Aggregate-Aggregate Collisions in the Early Solar Nebula. Icarus, 1993, 106, 151-167.	2.5	162
12	Structure and Mechanical Properties of High-Porosity Macroscopic Agglomerates Formed by Random Ballistic Deposition. Physical Review Letters, 2004, 93, 115503.	7.8	162
13	A new method to determine the grain size of planetary regolith. Icarus, 2013, 223, 479-492.	2.5	160
14	The Physics of Protoplanetesimal Dust Agglomerates. I. Mechanical Properties and Relations to Primitive Bodies in the Solar System. Astrophysical Journal, 2006, 652, 1768-1781.	4.5	158
15	Evidence for the formation of comet 67P/Churyumov-Gerasimenko through gravitational collapse of a bound clump of pebbles. Monthly Notices of the Royal Astronomical Society, 2017, 469, S755-S773.	4.4	146
16	Micrometer-sized ice particles for planetary-science experiments â€“ I. Preparation, critical rolling friction force, and specific surface energy. Icarus, 2011, 214, 717-723.	2.5	138
17	Dust release and tensile strength of the non-volatile layer of cometary nuclei. Icarus, 2012, 221, 1-11.	2.5	130
18	THE PHYSICS OF PROTOPLANETESIMAL DUST AGGLOMERATES. III. COMPACTION IN MULTIPLE COLLISIONS. Astrophysical Journal, 2009, 696, 2036-2043.	4.5	115

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19	Free collisions in a microgravity many-particle experiment. I. Dust aggregate sticking at low velocities. Icarus, 2012, 218, 688-700.	2.5	110
20	Comets formed in solar-nebula instabilities! â€“ An experimental and modeling attempt to relate the activity of comets to their formation process. Icarus, 2014, 235, 156-169.	2.5	100
21	Synthesis of the morphological description of cometary dust at comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2019, 630, A24.	5.1	100
22	Outgassing of icy bodies in the Solar System â€“ II: Heat transport in dry, porous surface dust layers. Icarus, 2012, 219, 618-629.	2.5	97
23	Flux and composition of interstellar dust at Saturn from Cassiniâ€™s Cosmic Dust Analyzer. Science, 2016, 352, 312-318.	12.6	97
24	THE PHYSICS OF PROTOPLANETESIMAL DUST AGGLOMERATES. IV. TOWARD A DYNAMICAL COLLISION MODEL. Astrophysical Journal, 2009, 701, 130-141.	4.5	96
25	LOW-VELOCITY COLLISIONS OF CENTIMETER-SIZED DUST AGGREGATES. Astrophysical Journal, 2011, 736, 34.	4.5	95
26	Science case for the Asteroid Impact Mission (AIM): A component of the Asteroid Impact & Deflection Assessment (AIDA) mission. Advances in Space Research, 2016, 57, 2529-2547.	2.6	95
27	The tensile strength of ice and dust aggregates and its dependence on particle properties. Monthly Notices of the Royal Astronomical Society, 2018, 479, 1273-1277.	4.4	94
28	Dust Evolution in Protoplanetary Discs and the Formation of Planetesimals. Space Science Reviews, 2018, 214, 1.	8.1	92
29	Outgassing of icy bodies in the Solar System â€“ I. The sublimation of hexagonal water ice through dust layers. Icarus, 2011, 213, 710-719.	2.5	87
30	Growth and Form of Planetary Seedlings: Results from a Sounding Rocket Microgravity Aggregation Experiment. Physical Review Letters, 2004, 93, 021103.	7.8	86
31	Experiments on Collisional Grain Charging of Micronâ€sized Preplanetary Dust. Astrophysical Journal, 2000, 533, 472-480.	4.5	80
32	Thermal conductivity measurements of porous dust aggregates: I. Technique, model and first results. Icarus, 2011, 214, 286-296.	2.5	76
33	What drives the dust activity of comet 67P/Churyumov-Gerasimenko?. Astronomy and Astrophysics, 2015, 583, A12.	5.1	75
34	A New Mechanism Relevant to the Formation of Planetesimals in the Solar Nebula. Icarus, 2001, 151, 318-321.	2.5	73
35	The Brownian Motion of Dust Particles in the Solar Nebula: An Experimental Approach to the Problem of Pre-planetary Dust Aggregation. Icarus, 1996, 124, 441-451.	2.5	70
36	Dust growth in protoplanetary disks â€” a comprehensive experimental/theoretical approach. Research in Astronomy and Astrophysics, 2010, 10, 1199-1214.	1.7	68

#	ARTICLE	IF	CITATIONS
37	Free collisions in a microgravity many-particle experiment. III. The collision behavior of sub-millimeter-sized dust aggregates. Icarus, 2013, 225, 75-85.	2.5	60
38	THE PHYSICS OF PROTOPLANETESIMAL DUST AGGLOMERATES. VI. EROSION OF LARGE AGGREGATES AS A SOURCE OF MICROMETER-SIZED PARTICLES. Astrophysical Journal, 2011, 734, 108.	4.5	59
39	The refractory-to-ice mass ratio in comets. Monthly Notices of the Royal Astronomical Society, 2019, 482, 3326-3340.	4.4	59
40	THE PHYSICS OF PROTOPLANETESIMAL DUST AGGLOMERATES. VII. THE LOW-VELOCITY COLLISION BEHAVIOR OF LARGE DUST AGGLOMERATES. Astrophysical Journal, 2012, 758, 35.	4.5	58
41	Fractal dust constrains the collisional history of comets. Monthly Notices of the Royal Astronomical Society, 2017, 469, S39-S44.	4.4	58
42	Microgravity experiments on the collisional behavior of saturnian ring particles. Icarus, 2010, 206, 424-430.	2.5	56
43	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. Planetary and Space Science, 2014, 104, 122-140.	1.7	56
44	The Physics of Protoplanetesimal Dust Agglomerates. II. Lowâ€Velocity Collision Properties. Astrophysical Journal, 2008, 675, 764-776.	4.5	54
45	Physics and chemistry of icy particles in the universe: answers from microgravity. Planetary and Space Science, 2003, 51, 473-494.	1.7	53
46	Dust agglomeration. Advances in Physics, 2006, 55, 881-947.	14.4	53
47	THE ROLE OF PEBBLE FRAGMENTATION IN PLANETESIMAL FORMATION. I. EXPERIMENTAL STUDY. Astrophysical Journal, 2017, 834, 145.	4.5	50
48	Activity of comets: Gas transport in the near-surface porous layers of a cometary nucleus. Icarus, 2011, 212, 867-876.	2.5	49
49	THE PHYSICS OF PROTOPLANETESIMAL DUST AGGLOMERATES. V. MULTIPLE IMPACTS OF DUSTY AGGLOMERATES AT VELOCITIES ABOVE THE FRAGMENTATION THRESHOLD. Astrophysical Journal, 2010, 725, 1242-1251.	4.5	47
50	Comet formation in collapsing pebble clouds. Astronomy and Astrophysics, 2016, 587, A128.	5.1	47
51	Laboratory Experiments on Preplanetary Dust Aggregation. Space Science Reviews, 2000, 92, 265-278.	8.1	46
52	Observations of the long-lasting activity of the distant Comets 29P Schwassmannâ€“Wachmann 1, C/2003 WT42 (LINEAR) and C/2002 VQ94 (LINEAR). Icarus, 2011, 211, 559-567.	2.5	46
53	THE ROLE OF PEBBLE FRAGMENTATION IN PLANETESIMAL FORMATION. II. NUMERICAL SIMULATIONS. Astrophysical Journal, 2017, 835, 109.	4.5	46
54	How comets work: nucleus erosion versus dehydration. Monthly Notices of the Royal Astronomical Society, 2020, 493, 4039-4044.	4.4	46

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55	On the activity of comets: understanding the gas and dust emission from comet 67/Churyumovâ€“Gerasimenkoâ€™s south-pole region during perihelion. Monthly Notices of the Royal Astronomical Society, 2020, 493, 3690-3715.	4.4	45
56	The 10 Î¼m Infrared Band of Silicate Dust: A Laboratory Study Comparing the Aerosol and KBr Pellet Techniques. Astrophysical Journal, 2006, 648, L147-L150.	4.5	44
57	Measurement of the Translational and Rotational Brownian Motion of Individual Particles in a Rarefied Gas. Physical Review Letters, 2006, 97, 230601.	7.8	44
58	The MASCOT Magnetometer. Space Science Reviews, 2017, 208, 433-449.	8.1	41
59	Local growth of dust- and ice-mixed aggregates as cometary building blocks in the solar nebula. Astronomy and Astrophysics, 2018, 611, A18.	5.1	41
60	Tensile strength as an indicator of the degree of primitiveness of undifferentiated bodies. Planetary and Space Science, 2009, 57, 243-249.	1.7	40
61	The Philae lander reveals low-strength primitive ice inside cometary boulders. Nature, 2020, 586, 697-701.	27.8	40
62	Thermal modelling of water activity on comet 67P/Churyumov-Gerasimenko with global dust mantle and plural dust-to-ice ratio. Monthly Notices of the Royal Astronomical Society, 2017, 469, S295-S311.	4.4	39
63	Aerodynamical sticking of dust aggregates. Physical Review E, 2001, 64, 046301.	2.1	36
64	Debris disc constraints on planetesimal formation. Monthly Notices of the Royal Astronomical Society, 2018, 474, 2564-2575.	4.4	36
65	Calculation of the heat-source function in photophoresis of aggregated spheres. Physical Review E, 1999, 60, 2347-2365.	2.1	35
66	Aspects of Laboratory Dust Aggregation with Relevance to the Formation of Planetesimals. Earth, Moon and Planets, 1998, 80, 285-309.	0.6	34
67	Experiments on pre-planetary grain growth. Advances in Space Research, 1997, 20, 1595-1604.	2.6	33
68	Free collisions in a microgravity many-particle experiment â€“ II: The collision dynamics of dust-coated chondrules. Icarus, 2012, 218, 701-706.	2.5	33
69	Experiments on the consolidation of chondrites and the formation of dense rims around chondrules. Icarus, 2013, 225, 558-569.	2.5	31
70	Acceleration of cometary dust near the nucleus: application to 67P/Churyumovâ€“Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2016, 461, 3410-3420.	4.4	31
71	An Experimental Study on the Structure of Cosmic Dust Aggregates and Their Alignment by Motion Relative to Gas. Astrophysical Journal, 2000, 529, L57-L60.	4.5	30
72	Experimenting with Mixtures of Water Ice and Dust as Analogues for Icy Planetary Material. Space Science Reviews, 2019, 215, 1.	8.1	29

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73	Experimental investigation of the nebular formation of chondrule rims and the formation of chondrite parent bodies. Geochimica Et Cosmochimica Acta, 2013, 116, 41-51.	3.9	28
74	Submillimetre-sized dust aggregate collision and growth properties. Astronomy and Astrophysics, 2016, 593, A3.	5.1	28
75	Generating a jet of deagglomerated small particles in vacuum. Review of Scientific Instruments, 1997, 68, 2529-2533.	1.3	27
76	Morphological effects on IR band profiles. Astronomy and Astrophysics, 2009, 501, 251-267.	5.1	27
77	The stratification of regolith on celestial objects. Icarus, 2015, 257, 33-46.	2.5	27
78	Development of an optical trap for microparticle clouds in dilute gases. European Physical Journal E, 2004, 15, 287-291.	1.6	26
79	Photophoresis of micrometer-sized particles in the free-molecular regime. International Journal of Heat and Mass Transfer, 2001, 44, 1649-1657.	4.8	25
80	Micrometer-sized Water Ice Particles for Planetary Science Experiments: Influence of Surface Structure on Collisional Properties. Astrophysical Journal, 2017, 848, 96.	4.5	25
81	Numerical simulations of highly porous dust aggregates in the low-velocity collision regime. Astronomy and Astrophysics, 2010, 513, A58.	5.1	24
82	Origin and Evolution of Cometary Nuclei. Space Science Reviews, 2020, 216, 1.	8.1	24
83	The Flow Of Granular Matter Under Reduced-Gravity Conditions. , 2009, , .		23
84	Experimental characterization of the opposition surge in fine-grained waterâ€"ice and high albedo ice analogs. Icarus, 2016, 264, 109-131.	2.5	23
85	Sintering and sublimation of micrometre-sized water-ice particles: the formation of surface crusts on icy Solar System bodies. Monthly Notices of the Royal Astronomical Society, 2018, 479, 5272-5287.	4.4	23
86	Homogeneity of 67P/Churyumov-Gerasimenko as seen by CONSERT: implication on composition and formation. Astronomy and Astrophysics, 2019, 630, A6.	5.1	23
87	Micrometer-sized ice particles for planetary-science experiments â€" II. Bidirectional reflectance. Icarus, 2013, 225, 352-366.	2.5	22
88	Calibration of relative sensitivity factors for impact ionization detectors with high-velocity silicate microparticles. Icarus, 2014, 241, 336-345.	2.5	22
89	THE COLLISIONAL EVOLUTION OF UNDIFFERENTIATED ASTEROIDS AND THE FORMATION OF CHONDRITIC METEOROIDS. Astrophysical Journal, 2016, 824, 12.	4.5	22
90	Collisions of small ice particles under microgravity conditions. Astronomy and Astrophysics, 2015, 573, A49.	5.1	21

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91	The Physics of Protoplanetary Dust Agglomerates. X. High-velocity Collisions between Small and Large Dust Agglomerates as a Growth Barrier. Astrophysical Journal, 2018, 853, 74.	4.5	21
92	The deâ€agglomeration and dispersion of small dust particlesâ€”Principles and applications. Review of Scientific Instruments, 1996, 67, 589-595.	1.3	20
93	Light scattering by low-density agglomerates of micron-sized grains with the PROGRA2 experiment. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 106, 74-89.	2.3	20
94	Exposing metal and silicate charges to electrical discharges: Did chondrules form by nebular lightning?. Icarus, 2008, 195, 504-510.	2.5	20
95	Astrophysical Microgravity Experiments with Dust Particles. Microgravity Science and Technology, 2010, 22, 517-527.	1.4	20
96	The Physics of Protoplanetesimal Dust Agglomerates. VIII. Microgravity Collisions between Porous SiO₂ Aggregates and Loosely Bound Agglomerates. Astrophysical Journal, 2017, 836, 94.	4.5	20
97	Sticky or not sticky? Measurements of the tensile strength of microgranular organic materials. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2517-2528.	4.4	20
98	Experimental infrared spectroscopic measurement of light extinction for agglomerate dust grains. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 373-381.	2.3	19
99	The footprint of cometary dust analogues â€“ I. Laboratory experiments of low-velocity impacts and comparison with Rosetta data. Monthly Notices of the Royal Astronomical Society, 2017, 469, S204-S216.	4.4	19
100	Experimental Phase Function and Degree of Linear Polarization Curves of Millimeter-sized Cosmic Dust Analogs. Astrophysical Journal, Supplement Series, 2020, 247, 19.	7.7	19
101	Physical Processes on Interplanetary Dust. Astronomy and Astrophysics Library, 2001, , 445-507.	0.1	19
102	Laboratory Studies Towards Understanding Comets. Space Science Reviews, 2015, 197, 101-150.	8.1	18
103	How Comets Work. Astrophysical Journal Letters, 2019, 879, L8.	8.3	18
104	Micro-craters in aluminum foils: Implications for dust particles from comet Wild 2 on NASA's Stardust spacecraft. International Journal of Impact Engineering, 2008, 35, 1616-1624.	5.0	17
105	The Effect of Aqueous Alteration and Metamorphism in the Survival of Presolar Silicate Grains in Chondrites. Publications of the Astronomical Society of Australia, 2009, 26, 289-296.	3.4	17
106	The Physics of Protoplanetesimal Dust Agglomerates. IX. Mechanical Properties of Dust Aggregates Probed by a Solid-projectile Impact. Astrophysical Journal, 2017, 851, 23.	4.5	17
107	Photophoresis of dust aggregates in protoplanetary disks. Astronomy and Astrophysics, 2012, 548, A96.	5.1	16
108	Nanoindenting the Chelyabinsk Meteorite to Learn about Impact Deflection Effects in asteroids. Astrophysical Journal, 2017, 835, 157.	4.5	16

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109	Compressive strength of comet 67P/Churyumov-Gerasimenko derived from Philae surface contacts. Astronomy and Astrophysics, 2019, 630, A2.	5.1	16
110	First results from the cosmic dust aggregation experiment codag. Advances in Space Research, 2002, 29, 497-503.	2.6	15
111	Why are Jupiter-family comets active and asteroids in cometary-like orbits inactive?. Astronomy and Astrophysics, 2016, 589, A111.	5.1	15
112	Impact-Induced Energy Transfer and Dissipation in Granular Clusters under Microgravity Conditions. Physical Review Letters, 2018, 121, 208001.	7.8	15
113	Triple Fâ€"a comet nucleus sample return mission. Experimental Astronomy, 2009, 23, 809-847.	3.7	14
114	Low-velocity collision behaviour of clusters composed of sub-millimetre sized dust aggregates. Astronomy and Astrophysics, 2017, 603, A66.	5.1	14
115	The cosmic dust aggregation experiment CODAG. Measurement Science and Technology, 1999, 10, 836-844.	2.6	13
116	New experiments on collisions of solid grains related to the preplanetary dust aggregation. Advances in Space Research, 1999, 23, 1197-1200.	2.6	13
117	Parabolic Flights @ Home. Microgravity Science and Technology, 2011, 23, 191-197.	1.4	13
118	Tensile strength of dust-ice mixtures and their relevance as cometary analog material. Astronomy and Astrophysics, 2020, 642, A218.	5.1	13
119	Collisional properties of cm-sized high-porosity ice and dust aggregates and their applications to early planet formation. Monthly Notices of the Royal Astronomical Society, 2021, 509, 5641-5656.	4.4	13
120	Formation of Comets. Universe, 2022, 8, 381.	2.5	13
121	Regolith grain size and cohesive strength of near-Earth Asteroid (29075) 1950 DA. Icarus, 2015, 257, 126-129.	2.5	12
122	CO-driven activity constrains the origin of comets. Astronomy and Astrophysics, 2020, 636, L3.	5.1	12
123	The effect of varying porosity and inhomogeneities of the surface dust layer on the modelling of comet gas production. Monthly Notices of the Royal Astronomical Society, 2021, 501, 2635-2646.	4.4	12
124	High-energy radiation effects on the isophot far-infrared detectors. Infrared Physics, 1990, 30, 93-96.	0.5	11
125	Codag â€" dust agglomeration experiment in micro-gravity. Advances in Space Research, 1993, 13, 73-76.	2.6	11
126	ESAâ€™s Drop Tower Utilisation Activities 2000 to 2011. Microgravity Science and Technology, 2011, 23, 409-425.	1.4	11

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127	Learning about comets from the study of mass distributions and fluxes of meteoroid streams. Monthly Notices of the Royal Astronomical Society, 2022, 512, 2277-2289.	4.4	11
128	Sticking efficiency of nanoparticles in high-velocity collisions with various target materials. Journal of Nanoparticle Research, 2006, 8, 693-703.	1.9	10
129	Dynamical properties and acceleration of hierarchical dust in the vicinity of comet 67P/Churyumovâ€"Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2018, 477, 4896-4907.	4.4	10
130	Sublimation of ice-dust mixtures in cooled vacuum environments to reproduce cometary morphologies. Astronomy and Astrophysics, 2021, 649, A35.	5.1	10
131	Aspects of Laboratory Dust Aggregation with Relevance to the Formation of Planetesimals. Astrophysics and Space Science Library, 1999, , 399-423.	2.7	10
132	Laboratory and space experiments to study pre-planetary growth. Advances in Space Research, 1995, 15, 39-54.	2.6	9
133	The MAGIC meteoric smoke particle sampler. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 118, 127-144.	1.6	9
134	Free collisions in a microgravity many-particle experiment. IV. â€" Three-dimensional analysis of collision properties. Icarus, 2015, 253, 31-39.	2.5	9
135	Experiments on cometary activity: ejection of dust aggregates from a sublimating water-ice surface. Monthly Notices of the Royal Astronomical Society, 2019, 483, 1202-1210.	4.4	9
136	The effect of hierarchical structure of the surface dust layer on the modelling of comet gas production. Monthly Notices of the Royal Astronomical Society, 2022, 510, 5520-5534.	4.4	9
137	Dust in space. Europhysics News, 2008, 39, 27-29.	0.3	8
138	A zero-gravity instrument to study low velocity collisions of fragile particles at low temperatures. Review of Scientific Instruments, 2009, 80, 074501.	1.3	8
139	Transport Characteristics of the Near-Surface Layer of the Nucleus of Comet 67P/Churyumovâ€"Gerasimenko. Solar System Research, 2021, 55, 106-123.	0.7	8
140	Thermal properties of lunar regolith simulant melting specimen. Acta Astronautica, 2021, 187, 429-437.	3.2	8
141	Are there any pristine comets? Constraints from pebble structure. Monthly Notices of the Royal Astronomical Society, 2022, 514, 3366-3394.	4.4	8
142	Collision of a chondrule with matrix: Relation between static strength of matrix and impact pressure. Icarus, 2013, 226, 111-118.	2.5	7
143	Laboratory Drop Towers for the Experimental Simulation of Dust-aggregate Collisions in the Early Solar System. Journal of Visualized Experiments, 2014, , .	0.3	7
144	Laboratory measurements of the sub-millimetre opacity of amorphous and micro-particulate H2O ices for temperatures above 80ÂK. Monthly Notices of the Royal Astronomical Society, 2018, 481, 5022-5033.	4.4	7

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145	The tensile strength of compressed dust samples and the catastrophic disruption threshold of pre-planetary matter. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2418-2424.	4.4	7
146	Comparing the reflectivity of ungrouped carbonaceous chondrites with those of short-period comets like 2P/Encke. Astronomy and Astrophysics, 2020, 641, A58.	5.1	7
147	Coagulation simulations for interstellar dust grains using an N-particle code. Advances in Space Research, 1995, 15, 55-58.	2.6	6
148	The CODAG sounding rocket experiment to study aggregation of thermally diffusing dust particles. Advances in Space Research, 1999, 23, 1267-1270.	2.6	6
149	Laboratory Experiments on Preplanetary Dust Aggregation. Space Sciences Series of ISSI, 2000, , 265-278.	0.0	6
150	Analyzing the Compaction of High-Porosity Microscopic Agglomerates. Australian Journal of Chemistry, 2005, 58, 671.	0.9	6
151	Effect of Reduced-Gravity Conditions on the Flowability of Granular Media. , 2008, , .		6
152	The suborbital particle aggregation and collision experiment (SPACE): Studying the collision behavior of submillimeter-sized dust aggregates on the suborbital rocket flight REXUS 12. Review of Scientific Instruments, 2013, 84, 094501.	1.3	6
153	The optical characteristics of the dust of sungrazing comet C/2012 S1 (ISON) observed at large heliocentric distances. Icarus, 2018, 313, 1-14.	2.5	6
154	Observation of aerodynamic instability in the flow of a particle stream in a dilute gas. Astronomy and Astrophysics, 2019, 622, A151.	5.1	6
155	The CoPhyLab comet-simulation chamber. Review of Scientific Instruments, 2021, 92, 115102.	1.3	6
156	A method to distinguish between micro- and macro-granular surfaces of small Solar system bodies. Monthly Notices of the Royal Astronomical Society, 2021, 508, 4705-4721.	4.4	5
157	Scattering of light by a large, densely packed agglomerate of small silica spheres. Optics Letters, 2020, 45, 1679.	3.3	5
158	Transport Characteristics of a Hierarchical Near-Surface Layer of the Nucleus of Comet 67P/Churyumovâ€"Gerasimenko. Solar System Research, 2022, 56, 100-121.	0.7	5
159	Collisions of small ice particles under microgravity conditions. Astronomy and Astrophysics, 2015, 575, A6.	5.1	4
160	The footprint of cometary dust analogues â€" II. Morphology as a tracer of tensile strength and application to dust collection by the Rosetta spacecraft. Monthly Notices of the Royal Astronomical Society, 2019, 486, 3755-3765.	4.4	4
161	CubeSat Particle Aggregation Collision Experiment (Q-PACE): Design of a 3U CubeSat mission to investigate planetesimal formation. Acta Astronautica, 2019, 155, 131-142.	3.2	4
162	Activity of (6478) Gault during 2019 January 13â€"March 28. Monthly Notices of the Royal Astronomical Society, 2020, 496, 2636-2647.	4.4	4

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163	AMBITION â€“ comet nucleus cryogenic sample return. Experimental Astronomy, 2022, 54, 1077-1128.	3.7	4
164	A new method for the analysis of compaction processes in high-porosity agglomerates. Granular Matter, 2008, 10, 89-91.	2.2	3
165	SARIM PLUSâ€"sample return of comet 67P/CG and of interstellar matter. Experimental Astronomy, 2012, 33, 723-751.	3.7	3
166	Experiments on the effects of dust flux exposure on ROSETTA spacecraft materials. Advances in Space Research, 1999, 23, 1225-1228.	2.6	2
167	Experiments on dust aggregation and their relevance to space missions. Advances in Space Research, 2002, 29, 763-771.	2.6	2
168	The Large-Area Dust Detection Array (LADDA). Advances in Space Research, 2003, 31, 307-312.	2.6	2
169	Drop tower experiments on sticking, restructuring, and fragmentation of preplanetary dust aggregates. Microgravity Science and Technology, 2001, 13, 29-34.	1.4	1
170	Handling of particulate solids on the International Space Station. Granular Matter, 2008, 10, 323-328.	2.2	1
171	Dust Agglomeration. EAS Publications Series, 2009, 35, 195-217.	0.3	1
172	Towards a Dynamical Collision Model of Highly Porous Dust Aggregates. , 2009, , .		1
173	Laboratory Studies of Planetary Ring Systems. , 0, , 494-516.		1
174	Sublimation of organic-rich comet analog materials and their relevance in fracture formation. Astronomy and Astrophysics, 2021, 653, A153.	5.1	1
175	Laboratory Studies of Ice-Particle Collisions in Saturnâ€™s Dense Rings. , 2009, , .		0
176	Laboratory Studies Towards Understanding Comets. , 2017, , 101-150.		0