Hiroshi Kobayashi

List of Publications by Year
in descending order

96	4,843	117625	98798
papers	citations	34 h-index	67 g-index

96	96	96	3409
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Separation of Glycoproteins Based on Sugar Chains Using Novel Stationary Phases Modified with Poly(ethylene glycol)-Conjugated Boronic-Acid Derivatives. Analytical Chemistry, 2022, 94, 6882-6892.	6.5	7
2	No Evidence of the Significant Grain Growth but Tentative Discovery of Disk Substructure in a Disk around the Class I Protostar L1489 IRS. Astrophysical Journal, 2022, 933, 23.	4.5	6
3	Ring Formation by Coagulation of Dust Aggregates in the Early Phase of Disk Evolution around a Protostar. Astrophysical Journal, 2021, 907, 80.	4.5	19
4	Phenylâ€bonded monolithic silica capillary column liquid chromatographic separation and detection of fluorogenic derivatized intact proteins. Biomedical Chromatography, 2021, 35, e5078.	1.7	3
5	New Growth Mechanism of Dust Grains in Protoplanetary Disks with Magnetically Driven Disk Winds. Astrophysical Journal, 2021, 909, 75.	4.5	14
6	Chromatographic Performance of an Amine/amino-bonded Column and a Monolithic Reversed-Phase Column for the Separation of Fluorescently Labeled Glycoprotein Glycans. Chromatography, 2021, , .	1.7	1
7	Collisional Growth and Fragmentation of Dust Aggregates with Low Mass Ratios. I. Critical Collision Velocity for Water Ice. Astrophysical Journal, 2021, 915, 22.	4.5	22
8	Recent Progress in FD-LC-MS/MS Proteomics Method. Frontiers in Chemistry, 2021, 9, 640336.	3.6	4
9	Photoevaporation of Grain-depleted Protoplanetary Disks around Intermediate-mass Stars: Investigating the Possibility of Gas-rich Debris Disks as Protoplanetary Remnants. Astrophysical Journal, 2021, 915, 90.	4.5	14
10	A systematic study of silicate absorption features in heavily obscured AGNs observed by Spitzer/IRS. Astronomy and Astrophysics, 2021, 651, A117.	5.1	7
11	The Growth of Protoplanets via the Accretion of Small Bodies in Disks Perturbed by the Planetary Gravity. Astrophysical Journal, 2021, 916, 109.	4.5	11
12	SPH simulations for shape deformation of rubble-pile asteroids through spinup: The challenge for making top-shaped asteroids Ryugu and Bennu. Icarus, 2021, 365, 114505.	2.5	15
13	Effect of Dust Size on the Near-infrared Spectra (1.0â€“5.0 Î¼m) of Brown Dwarf Atmospheres. Astrophysical Journal, 2021, 919, 117.	4.5	1
14	Rapid Formation of Gas-giant Planets via Collisional Coagulation from Dust Grains to Planetary Cores. Astrophysical Journal, 2021, 922, 16.	4.5	22
15	Coagulation Instability in Protoplanetary Disks: A Novel Mechanism Connecting Collisional Growth and Hydrodynamical Clumping of Dust Particles. Astrophysical Journal, 2021, 923, 34.	4.5	15
16	High-resolution simulations of catastrophic disruptions: Resultant shape distributions. Planetary and Space Science, 2020, 181, 104807.	1.7	4
17	Is water ice an efficient facilitator for dust coagulation?. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1801-1813.	4.4	21
18	Sample collection from asteroid (162173) Ryugu by Hayabusa2: Implications for surface evolution. Science, 2020, 368, 654-659.	12.6	158

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19	Development of Monolithic Silica Capillary Columns for LC/MS Analysis of Intact Proteins. Bunseki Kagaku, 2020, 69, 97-104.	0.2	0
20	First Subarcsecond Submillimeter-wave [C i]ÂImage of 49 Ceti with ALMA. Astrophysical Journal, 2019, 883, 180.	4.5	13
21	Collisional elongation: Possible origin of extremely elongated shape of 1I/â€˜Oumuamua. Icarus, 2019, 328, 14-22.	2.5	11
22	Importance of Giant Impact Ejecta for Orbits of Planets Formed during the Giant Impact Era. Astrophysical Journal, 2019, 887, 226.	4.5	9
23	Near- to mid-infrared spectroscopy of the heavily obscured AGN LEDA 1712304 with AKARI/IRC. Astronomy and Astrophysics, 2019, 626, A130.	5.1	2
24	Numerical Simulations of Catastrophic Impacts Resolving Shapes of Remnants. Proceedings of the International Astronomical Union, 2018, 14, 13-14.	0.0	0
25	Toward understanding the origin of asteroid geometries. Astronomy and Astrophysics, 2018, 620, A167.	5.1	18
26	From Planetesimal to Planet in Turbulent Disks. II. Formation of Gas Giant Planets. Astrophysical Journal, 2018, 862, 127.	4.5	15
27	Star formation induced by cloudâ€“cloud collisions and galactic giant molecular cloud evolution. Publication of the Astronomical Society of Japan, 2018, 70, .	2.5	15
28	Collisional disruption of planetesimals in the gravity regime with iSALE code: Comparison with SPH code for purely hydrodynamic bodies. Icarus, 2018, 314, 121-132.	2.5	10
29	Detection of Submillimeter-wave [C i] Emission in Gaseous Debris Disks of 49 Ceti and Î² Pictoris. Astrophysical Journal Letters, 2017, 839, L14.	8.3	44
30	Faint warm debris disks around nearby bright stars explored by AKARI and IRSF. Astronomy and Astrophysics, 2017, 601, A72.	5.1	4
31	Size Dependence of Dust Distribution around the Earth Orbit. Astronomical Journal, 2017, 153, 232.	4.7	10
32	Evolutionary Description of Giant Molecular Cloud Mass Functions on Galactic Disks. Astrophysical Journal, 2017, 836, 175.	4.5	29
33	Orbital Evolution of Moons in Weakly Accreting Circumplanetary Disks. Astronomical Journal, 2017, 153, 194.	4.7	41
34	Impact erosion model for gravity-dominated planetesimals. Icarus, 2017, 294, 234-246.	2.5	22
35	A likely detection of a local interplanetary dust cloud passing near the Earth in the AKARI mid-infrared all-sky map. Astronomy and Astrophysics, 2017, 603, A82.	5.1	0
36	Detection of submillimeter-wave [C I]emission in gaseous debris disks of 49 Ceti and Î² Pictoris. Proceedings of the International Astronomical Union, 2017, 13, 81-87.	0.0	0

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37	FROM PLANETESIMALS TO PLANETS IN TURBULENT PROTOPLANETARY DISKS. I. ONSET OF RUNAWAY GROWTH. Astrophysical Journal, 2016, 817, 105.	4.5	38
38	Effect of Acidic Additives on Peak Capacity and Detectivity in Peptide Analysis Using Nano-Flow LC/MS with Low-Density ODS Modified Monolithic Silica Capillary Columns. Chromatography, 2016, 37, 133-139.	1.7	5
39	The SHARDDS survey: First resolved image of the HDâ€‰114082 debris disk in the Lower Centaurus Crux with SPHERE. Astronomy and Astrophysics, 2016, 596, L4.	5.1	36
40	Time Evolution of the Giant Molecular Cloud Mass Functions across Galactic Disks. Proceedings of the International Astronomical Union, 2016, 11, 158-159.	0.0	0
41	Discovery of a low-luminosity spiral DRAGN. Astronomy and Astrophysics, 2016, 595, L8.	5.1	10
42	MODELING OF THE ZODIACAL EMISSION FOR THE AKARI/IRC MID-INFRARED ALL-SKY DIFFUSE MAPS. Astronomical Journal, 2016, 151, 71.	4.7	17
43	SINTERING-INDUCED DUST RING FORMATION IN PROTOPLANETARY DISKS: APPLICATION TO THE HL TAU DISK. Astrophysical Journal, 2016, 821, 82.	4.5	275
44	Resolution dependence of disruptive collisions between planetesimals in the gravity regime. Icarus, 2015, 262, 58-66.	2.5	41
45	Unique Separation Behavior of a C₆₀ Fullereneâ€Bonded Silica Monolith Prepared by an Effective Thermal Coupling Agent. Chemistry - A European Journal, 2015, 21, 18095-18098.	3.3	18
46	Orbital evolution of planetesimals in gaseous disks. Earth, Planets and Space, 2015, 67, .	2.5	5
47	Significant gas-to-dust ratio asymmetry and variation in the disk of HDÂ142527 and the indication of gas depletion. Publication of the Astronomical Society of Japan, 2015, 67, .	2.5	35
48	COHESION OF AMORPHOUS SILICA SPHERES: TOWARD A BETTER UNDERSTANDING OF THE COAGULATION GROWTH OF SILICATE DUST AGGREGATES. Astrophysical Journal, 2015, 812, 67.	4.5	85
49	WARM DEBRIS DISKS PRODUCED BY GIANT IMPACTS DURING TERRESTRIAL PLANET FORMATION. Astrophysical Journal, 2015, 810, 136.	4.5	72
50	Planetary and meteoritic Mg/Si and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>Î´</mml:mi></mml:mrow><mml:mrow><mml:mn>30</mml:mn></mml:mrow></mml:msup><mml:mrow><mml:mi mathvariant="normal">Si</mml:mi></mml:mrow></mml:math> variations inherited from solar nebula chemistry. Earth and Planetary Science Letters, 2015, 427, 236-248.	4.4	116
51	Comet C/2012 S1 (ISON) coma composition at ~4au from HST observations. Planetary and Space Science, 2015, 118, 138-163.	1.7	42
52	Formation of terrestrial planets in disks evolving via disk winds and implications for the origin of the solar systemâ€™s terrestrial planets. Astronomy and Astrophysics, 2015, 579, A65.	5.1	26
53	The Evolution of Giant Molecular Cloud Mass Function due to Cloud-Cloud Collisions. EAS Publications Series, 2015, 75-76, 387-388.	0.3	0
54	Debris disc formation induced by planetary growth. Monthly Notices of the Royal Astronomical Society, 2014, 442, 3266-3274.	4.4	20

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55	N-BODY SIMULATIONS OF TERRESTRIAL PLANET FORMATION UNDER THE INFLUENCE OF A HOT JUPITER. Astrophysical Journal, 2014, 787, 172.	4.5	35
56	Small planetesimals in a massive disk formed Mars. Icarus, 2013, 225, 122-130.	2.5	36
57	Local Enhancement of the Surface Density in the Protoplanetary Ring Surrounding HD 142527. Publication of the Astronomical Society of Japan, 2013, 65, .	2.5	129
58	CROWDING-OUT OF GIANTS BY DWARFS: AN ORIGIN FOR THE LACK OF COMPANION PLANETS IN HOT JUPITER SYSTEMS. Astrophysical Journal Letters, 2013, 778, L9.	8.3	29
59	CONDITION FOR CAPTURE INTO FIRST-ORDER MEAN MOTION RESONANCES AND APPLICATION TO CONSTRAINTS ON THE ORIGIN OF RESONANT SYSTEMS. Astrophysical Journal, 2013, 775, 34.	4.5	66
60	Evolution of dust grain size distribution by shattering in the interstellar medium: Robustness and uncertainty. Earth, Planets and Space, 2013, 65, 1083-1094.	2.5	21
61	Growth efficiency of dust aggregates through collisions with high mass ratios. Astronomy and Astrophysics, 2013, 559, A62.	5.1	121
62	Dust mantle of comet 9P/Tempel 1: dynamical constraints on physical properties. Astronomy and Astrophysics, 2013, 550, A72.	5.1	12
63	Giant Impacts and Debris Disks. Proceedings of the International Astronomical Union, 2012, 8, 270-272.	0.0	0
64	UNDERSTANDING HOW PLANETS BECOME MASSIVE. I. DESCRIPTION AND VALIDATION OF A NEW TOY MODEL. Astrophysical Journal, 2012, 747, 115.	4.5	80
65	RAPID FORMATION OF SATURN AFTER JUPITER COMPLETION. Astrophysical Journal, 2012, 756, 70.	4.5	29
66	RAPID COAGULATION OF POROUS DUST AGGREGATES OUTSIDE THE SNOW LINE: A PATHWAY TO SUCCESSFUL ICY PLANETESIMAL FORMATION. Astrophysical Journal, 2012, 752, 106.	4.5	331
67	An improved model of the Edgeworth-Kuiper debris disk. Astronomy and Astrophysics, 2012, 540, A30.	5.1	59
68	PLANETARY CORE FORMATION WITH COLLISIONAL FRAGMENTATION AND ATMOSPHERE TO FORM GAS GIANT PLANETS. Astrophysical Journal, 2011, 738, 35.	4.5	58
69	Sublimation temperature of circumstellar dust particles and its importance for dust ring formation. Earth, Planets and Space, 2011, 63, 1067-1075.	2.5	66
70	Fragmentation model dependence of collision cascades. Icarus, 2010, 206, 735-746.	2.5	101
71	Planetary growth with collisional fragmentation and gas drag. Icarus, 2010, 209, 836-847.	2.5	82
72	Collisional process on Comet 9/P Tempel 1: Mass loss of its dust and ice by impacts of asteroidal objects and its collisional history. Earth, Planets and Space, 2010, 62, 5-11.	2.5	4

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73	Planets in orbit around Î² Pictoris formed the orbital architecture of planetesimal belts?. Earth, Planets and Space, 2010, 62, 111-116.	2.5	0
74	Ice sublimation of dust particles and their detection in the outer solar system. Earth, Planets and Space, 2010, 62, 57-61.	2.5	9
75	Dust ring formation due to sublimation of dust grains drifting radially inward by the Poyntingâ€“Robertson drag: An analytical model. Icarus, 2009, 201, 395-405.	2.5	52
76	Dust ring formation due to ice sublimation of radially drifting dust particles under the Poyntingâ€“Robertson effect in debris disks. Icarus, 2008, 195, 871-881.	2.5	29
77	Comet 9P/Tempel 1: Interpretation with theDeep ImpactResults. Astrophysical Journal, 2008, 673, L199-L202.	4.5	11
78	High-Efficiency Liquid Chromatographic Separation Utilizing Long Monolithic Silica Capillary Columns. Analytical Chemistry, 2008, 80, 8741-8750.	6.5	132
79	Performance of Monolithic Silica Capillary Columns with Increased Phase Ratios and Small-Sized Domains. Analytical Chemistry, 2006, 78, 7632-7642.	6.5	150
80	Properties of Monolithic Silica Columns for HPLC. Analytical Sciences, 2006, 22, 491-501.	1.6	80
81	Two-dimensional reversed-phase liquid chromatography using two monolithic silica C18 columns and different mobile phase modifiers in the two dimensions. Journal of Chromatography A, 2006, 1106, 112-117.	3.7	87
82	Faster axial band dispersion in a monolithic silica column than in a particle-packed column. Journal of Chromatography A, 2006, 1109, 2-9.	3.7	52
83	A kinetic parameter concerning mass transfer in silica monolithic and particulate stationary phases measured by the peak-parking and slow-elution methods. Journal of Separation Science, 2006, 29, 2452-2462.	2.5	15
84	The evidence of an early stellar encounter in Edgeworthâ€“Kuiper belt. Icarus, 2005, 177, 246-255.	2.5	33
85	Percolation-fission model study of the 1 GeV proton-induced reaction onPb208targets. Physical Review C, 2005, 71, .	2.9	1
86	High-Performance Liquid Chromatography for Metabolomics: High-Efficiency Separations Utilizing Monolithic Silica Columns. , 2005, , 107-126.		2
87	How to utilize the true performance of monolithic silica columns. Journal of Separation Science, 2004, 27, 1292-1302.	2.5	62
88	Monolithic columns for liquid chromatography. Analytical and Bioanalytical Chemistry, 2003, 376, 298-301.	3.7	53
89	Monolithic Silica Columns for Capillary Liquid Chromatography. Journal of Chromatography Library, 2003, , 173-196.	0.1	11
90	Capillary Electrochromatography on Monolithic Silica Columns.. Analytical Sciences, 2002, 18, 89-92.	1.6	25

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91	Monolithic silica columns for high-efficiency separations by high-performance liquid chromatography. Journal of Chromatography A, 2002, 960, 85-96.	3.7	209
92	Monolithic silica columns for high-efficiency chromatographic separations. Journal of Chromatography A, 2002, 965, 35-49.	3.7	478
93	Monolithic silica columns with various skeleton sizes and through-pore sizes for capillary liquid chromatography. Journal of Chromatography A, 2002, 961, 53-63.	3.7	270
94	Capillary Electrochromatography on Monolithic Silica Columns. Journal of Chromatography Library, 2001, 62, 165-181.	0.1	4
95	The Effects of a Stellar Encounter on a Planetesimal Disk. Icarus, 2001, 153, 416-429.	2.5	92
96	Monolithic Silica Columns for HPLC, Micro-HPLC, and CEC. Journal of High Resolution Chromatography, 2000, 23, 111-116.	1.4	299