Masahiro Ikoma

List of Publications by Year
in descending order

55 papers	3,614 citations	159585 30 h-index	155660 55 g-index
55 all docs	55 docs citations	55 times ranked	2699 citing authors

#	Article	IF	Citations
1	Formation of Giant Planets: Dependences on Core Accretion Rate and Grain Opacity. Astrophysical Journal, 2000, 537, 1013-1025.	4.5	383
2	A chemical survey of exoplanets with ARIEL. Experimental Astronomy, 2018, 46, 135-209.	3.7	249
3	Constraints on the Mass of a Habitable Planet with Water of Nebular Origin. Astrophysical Journal, 2006, 648, 696-706.	4.5	180
4	IN SITU ACCRETION OF HYDROGEN-RICH ATMOSPHERES ON SHORT-PERIOD SUPER-EARTHS: IMPLICATIONS FOR THE KEPLER-11 PLANETS. Astrophysical Journal, 2012, 753, 66.	4.5	171
5	Formation of gas giant planets: core accretion models with fragmentation and planetary envelope. Icarus, 2003, 166, 46-62.	2.5	153
6	A Planetary Companion to the Hyades Giant Îµ Tauri. Astrophysical Journal, 2007, 661, 527-531.	4.5	139
7	PLANET ENGULFMENT BY â¼1.5-3M_{â˜‰}RED GIANTS. Astrophysical Journal, 2011, 737, 66.	4.5	122
8	The naked planet Earth: Most essential pre-requisite for the origin and evolution of life. Geoscience Frontiers, 2013, 4, 141-165.	8.4	122
9	Enhanced collisional growth of a protoplanet that has an atmosphere. Astronomy and Astrophysics, 2003, 410, 711-723.	5.1	119
10	SELF-CONSISTENT MODEL ATMOSPHERES AND THE COOLING OF THE SOLAR SYSTEM'S GIANT PLANETS. Astrophysical Journal, 2011, 729, 32.	4.5	115
11	Gas giant formation with small cores triggered by envelope pollution by icy planetesimals. Monthly Notices of the Royal Astronomical Society, 2011, 416, 1419-1429.	4.4	109
12	Planetary Companions around Three Intermediate-Mass G and K Giants: 18 Delphini, Î¾ Aquilae, and HD 81688. Publication of the Astronomical Society of Japan, 2008, 60, 539-550.	2.5	105
13	Origin of the ocean on the Earth: Early evolution of water D/H in a hydrogen-rich atmosphere. Icarus, 2008, 194, 42-52.	2.5	101
14	THEORETICAL EMISSION SPECTRA OF ATMOSPHERES OF HOT ROCKY SUPER-EARTHS. Astrophysical Journal, 2015, 801, 144.	4.5	99
15	On the Origin of HD 149026b. Astrophysical Journal, 2006, 650, 1150-1159.	4.5	86
16	A Systematic Study of the Final Masses of Gas Giant Planets. Astrophysical Journal, 2007, 667, 557-570.	4.5	78
17	Theoretical Transmission Spectra of Exoplanet Atmospheres with Hydrocarbon Haze: Effect of Creation, Growth, and Settling of Haze Particles. I. Model Description and First Results. Astrophysical Journal, 2018, 853, 7.	4.5	69
18	CRITICAL CORE MASSES FOR GAS GIANT FORMATION WITH GRAIN-FREE ENVELOPES. Astrophysical Journal, 2010, 714, 1343-1346.	4.5	68

#	Article	IF	Citations
19	Formation and Evolution of Protoatmospheres. Space Science Reviews, 2016, 205, 153-211.	8.1	68
20	Formation of Giant Planets in Dense Nebulae: Critical Core Mass Revisited. Astrophysical Journal, 2001, 553, 999-1005.	4.5	65
21	Critical core mass for enriched envelopes: the role of H₂O condensation. Astronomy and Astrophysics, 2015, 576, A114.	5.1	62
22	MULTI-COLOR TRANSIT PHOTOMETRY OF GJ 1214b THROUGHBJHK_sBANDS AND A LONG-TERM MONITORING OF THE STELLAR VARIABILITY OF GJ 1214. Astrophysical Journal, 2013, 773, 144.	4.5	59
23	OPTICAL-TO-NEAR-INFRARED SIMULTANEOUS OBSERVATIONS FOR THE HOT URANUS GJ3470b: A HINT OF A CLOUD-FREE ATMOSPHERE. Astrophysical Journal, 2013, 770, 95.	4.5	55
24	Theoretical Transmission Spectra of Exoplanet Atmospheres with Hydrocarbon Haze: Effect of Creation, Growth, and Settling of Haze Particles. II. Dependence on UV Irradiation Intensity, Metallicity, C/O Ratio, Eddy Diffusion Coefficient, and Temperature. Astrophysical Journal, 2019, 877, 109.	4.5	54
25	IRSF SIRIUS JHKs Simultaneous Transit Photometry of GJ 1214b. Publication of the Astronomical Society of Japan, 2013, 65, .	2.5	52
26	Initiation of leaking Earth: An ultimate trigger of the Cambrian explosion. Gondwana Research, 2014, 25, 910-944.	6.0	49
27	MULTI-BAND, MULTI-EPOCH OBSERVATIONS OF THE TRANSITING WARM JUPITER WASP-80b. Astrophysical Journal, 2014, 790, 108.	4.5	44
28	Water Partitioning in Planetary Embryos and Protoplanets with Magma Oceans. Space Science Reviews, 2018, 214, 1.	8.1	43
29	Theoretical Model of Hydrogen Line Emission from Accreting Gas Giants. Astrophysical Journal, 2018, 866, 84.	4.5	42
30	Accretion Properties of PDS 70b with MUSE*. Astronomical Journal, 2020, 159, 222.	4.7	42
31	DEMONSTRATING HIGH-PRECISION, MULTIBAND TRANSIT PHOTOMETRY WITH MUSCAT: A CASE FOR HAT-P-14B. Astrophysical Journal, 2016, 819, 27.	4.5	39
32	STARSPOTS-TRANSIT DEPTH RELATION OF THE EVAPORATING PLANET CANDIDATE KIC 12557548b. Astrophysical Journal Letters, 2013, 776, L6.	8.3	37
33	Detectable Molecular Features above Hydrocarbon Haze via Transmission Spectroscopy with JWST: Case Studies of GJ 1214b-, GJ 436b-, HD 97658b-, and Kepler-51b-like Planets. Astrophysical Journal Letters, 2019, 876, L5.	8.3	37
34	Five Key Exoplanet Questions Answered via the Analysis of 25 Hot-Jupiter Atmospheres in Eclipse. Astrophysical Journal, Supplement Series, 2022, 260, 3.	7.7	33
35	Capture of solids by growing proto-gas giants: effects of gap formation and supply limited growth. Monthly Notices of the Royal Astronomical Society, 2019, 487, 4510-4524.	4.4	32
36	Ejection of iron-bearing giant-impact fragments and the dynamical and geochemical influence of the fragment re-accretion. Earth and Planetary Science Letters, 2017, 470, 87-95.	4.4	31

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37	Constraining Planetary Gas Accretion Rate from HÎ± Line Width and Intensity: Case of PDS 70 b and c. Astrophysical Journal Letters, 2019, 885, L29.	8.3	29
38	Discovery of a hot, transiting, Earth-sized planet and a second temperate, non-transiting planet around the M4 dwarf GJ 3473 (TOI-488). Astronomy and Astrophysics, 2020, 642, A236.	5.1	27
39	Comparison of Planetary HÎ±-emission Models: A New Correlation with Accretion Luminosity. Astrophysical Journal Letters, 2021, 917, L30.	8.3	25
40	Impact of photo-evaporative mass loss on masses and radii of water-rich sub/super-Earths. Astronomy and Astrophysics, 2014, 562, A80.	5.1	23
41	Hydrodynamic escape of mineral atmosphere from hot rocky exoplanet. I. Model description. Monthly Notices of the Royal Astronomical Society, 2021, 502, 750-771.	4.4	23
42	TOI-2109: An Ultrahot Gas Giant on a 16 hr Orbit. Astronomical Journal, 2021, 162, 256.	4.7	21
43	Acceleration of Cooling of Ice Giants by Condensation in Early Atmospheres. Astronomical Journal, 2017, 153, 260.	4.7	20
44	Two Bright M Dwarfs Hosting Ultra-Short-Period Super-Earths with Earth-like Compositions*. Astronomical Journal, 2021, 162, 161.	4.7	20
45	The Origin of the Heavy-element Content Trend in Giant Planets via Core Accretion. Astrophysical Journal, 2018, 865, 32.	4.5	18
46	A 38 Million Year Old Neptune-sized Planet in the Kepler Field. Astronomical Journal, 2022, 163, 121.	4.7	18
47	Runaway climate cooling of ocean planets in the habitable zone: a consequence of seafloor weathering enhanced by melting of high-pressure ice. Monthly Notices of the Royal Astronomical Society, 2019, 488, 1580-1596.	4.4	13
48	Formation of aqua planets with water of nebular origin: effects of water enrichment on the structure and mass of captured atmospheres of terrestrial planets. Monthly Notices of the Royal Astronomical Society, 2020, 496, 3755-3766.	4.4	12
49	Ariel planetary interiors White Paper. Experimental Astronomy, 2022, 53, 323-356.	3.7	12
50	First measurements of Jupiterâ€™s zonal winds with visible imaging spectroscopy. Icarus, 2019, 319, 795-811.	2.5	10
51	Keck/OSIRIS PaÎ² High-contrast Imaging and Updated Constraints on PDS 70b. Astronomical Journal, 2021, 162, 214.	4.7	9
52	Hydrodynamic Model of HÎ± Emission from Accretion Shocks of a Proto-giant Planet and Circumplanetary Disk. Astrophysical Journal, 2021, 921, 10.	4.5	8
53	Stellar imaging coronagraph and exoplanet coronal spectrometer: two additional instruments for exoplanet exploration onboard the WSO-UV 1.7-m orbital telescope. Journal of Astronomical Telescopes, Instruments, and Systems, 2018, 4, 1.	1.8	6
54	TOI-1696: A Nearby M4 Dwarf with a 3 R _{âŠ•} Planet in the Neptunian Desert. Astronomical Journal, 2022, 163, 298.	4.7	6

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55	Formation of a proto-Jovian envelope for various planetary accretion rates. Journal of Physics Condensed Matter, 1998, 10, 11537-11540.	1.8	2