Hidenori Genda

List of Publications by Year
in descending order

65 papers	2,901 citations	218677 26 h-index	182427 51 g-index
66 all docs	66 docs citations	66 times ranked	2104 citing authors

#	Article	IF	Citations
1	Emergence of two types of terrestrial planet on solidification of magma ocean. Nature, 2013, 497, 607-610.	27.8	292
2	Enhanced atmospheric loss on protoplanets at the giant impact phase in the presence of oceans. Nature, 2005, 433, 842-844.	27.8	231
3	Constraints on the Mass of a Habitable Planet with Water of Nebular Origin. Astrophysical Journal, 2006, 648, 696-706.	4.5	180
4	Survival of a proto-atmosphere through the stage of giant impacts: the mechanical aspects. Icarus, 2003, 164, 149-162.	2.5	164
5	FORMATION OF TERRESTRIAL PLANETS FROM PROTOPLANETS UNDER A REALISTIC ACCRETION CONDITION. Astrophysical Journal Letters, 2010, 714, L21-L25.	8.3	126
6	MERGING CRITERIA FOR GIANT IMPACTS OF PROTOPLANETS. Astrophysical Journal, 2012, 744, 137.	4.5	123
7	The naked planet Earth: Most essential pre-requisite for the origin and evolution of life. Geoscience Frontiers, 2013, 4, 141-165.	8.4	122
8	Formation of Phobos and Deimos via a giant impact. Icarus, 2015, 252, 334-338.	2.5	120
9	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
10	The terrestrial late veneer from core disruption of a lunar-sized impactor. Earth and Planetary Science Letters, 2017, 480, 25-32.	4.4	95
11	Accretion of Phobos and Deimos in an extended debris disc stirred by transient moons. Nature Geoscience, 2016, 9, 581-583.	12.9	91
12	On the Origin of HD 149026b. Astrophysical Journal, 2006, 650, 1150-1159.	4.5	86
13	WARM DEBRIS DISKS PRODUCED BY GIANT IMPACTS DURING TERRESTRIAL PLANET FORMATION. Astrophysical Journal, 2015, 810, 136.	4.5	72
14	Formation and Evolution of Protoatmospheres. Space Science Reviews, 2016, 205, 153-211.	8.1	68
15	Ring formation around giant planets by tidal disruption of a single passing large Kuiper belt object. Icarus, 2017, 282, 195-213.	2.5	61
16	Origin of Earthâ€™s oceans: An assessment of the total amount, history and supply of water. Geochemical Journal, 2016, 50, 27-42.	1.0	54
17	On the Impact Origin of Phobos and Deimos. I. Thermodynamic and Physical Aspects. Astrophysical Journal, 2017, 845, 125.	4.5	52
18	Martian moons exploration MMX: sample return mission to Phobos elucidating formation processes of habitable planets. Earth, Planets and Space, 2022, 74, .	2.5	51

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19	FORMATION OF CENTAURSâ€™ RINGS THROUGH THEIR PARTIAL TIDAL DISRUPTION DURING PLANETARY ENCOUNTERS. Astrophysical Journal Letters, 2016, 828, L8.	8.3	50
20	Replacement and late formation of atmospheric N2 on undifferentiated Titan by impacts. Nature Geoscience, 2011, 4, 359-362.	12.9	42
21	Hydrogen Limits Carbon in Liquid Iron. Geophysical Research Letters, 2019, 46, 5190-5197.	4.0	42
22	Resolution dependence of disruptive collisions between planetesimals in the gravity regime. Icarus, 2015, 262, 58-66.	2.5	41
23	On the Impact Origin of Phobos and Deimos. II. True Polar Wander and Disk Evolution. Astrophysical Journal, 2017, 851, 122.	4.5	41
24	Effects of Friction and Plastic Deformation in Shockâ€Comminuted Damaged Rocks on Impact Heating. Geophysical Research Letters, 2018, 45, 620-626.	4.0	38
25	Giant impacts in the Saturnian system: A possible origin of diversity in the inner mid-sized satellites. Planetary and Space Science, 2012, 63-64, 133-138.	1.7	34
26	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
27	The Charon-forming giant impact as a source of Plutoâ€™s dark equatorial regions. Nature Astronomy, 2017, 1, .	10.1	28
28	The giant impact simulations with density independent smoothed particle hydrodynamics. Icarus, 2016, 271, 131-157.	2.5	27
29	Hydrocode modeling of the spallation process during hypervelocity impacts: Implications for the ejection of Martian meteorites. Icarus, 2018, 301, 219-234.	2.5	27
30	Impact degassing and atmospheric erosion on Venus, Earth, and Mars during the late accretion. Icarus, 2019, 317, 48-58.	2.5	25
31	Transport of impact ejecta from Mars to its moons as a means to reveal Martian history. Scientific Reports, 2019, 9, 19833.	3.3	25
32	Modification of a proto-lunar disk by hydrodynamic escape of silicate vapor. Earth, Planets and Space, 2003, 55, 53-57.	2.5	22
33	Impact erosion model for gravity-dominated planetesimals. Icarus, 2017, 294, 234-246.	2.5	22
34	Dependence of the Onset of the Runaway Greenhouse Effect on the Latitudinal Surface Water Distribution of Earthâ€Like Planets. Journal of Geophysical Research E: Planets, 2018, 123, 559-574.	3.6	22
35	Impact-induced N2 production from ammonium sulfate: Implications for the origin and evolution of N2 in Titanâ€™s atmosphere. Icarus, 2010, 209, 715-722.	2.5	21
36	Assessment of the probability of microbial contamination for sample return from Martian moons II: The fate of microbes on Martian moons. Life Sciences in Space Research, 2019, 23, 85-100.	2.3	21

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37	Early formation of moons around large trans-Neptunian objects via giant impacts. Nature Astronomy, 2019, 3, 802-807.	10.1	20
38	On the Impact Origin of Phobos and Deimos. IV. Volatile Depletion. Astrophysical Journal, 2018, 860, 150.	4.5	18
39	RAPID WATER LOSS CAN EXTEND THE LIFETIME OF PLANETARY HABITABILITY. Astrophysical Journal, 2015, 812, 165.	4.5	17
40	On the Impact Origin of Phobos and Deimos. III. Resulting Composition from Different Impactors. Astrophysical Journal, 2018, 853, 118.	4.5	16
41	Assessment of the probability of microbial contamination for sample return from Martian moons I: Departure of microbes from Martian surface. Life Sciences in Space Research, 2019, 23, 73-84.	2.3	15
42	Inner Edge of Habitable Zones for Earthâ€Sized Planets With Various Surface Water Distributions. Journal of Geophysical Research E: Planets, 2019, 124, 2306-2324.	3.6	15
43	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
44	Fates of hydrous materials during planetesimal collisions. Icarus, 2019, 328, 58-68.	2.5	14
45	Implantation of Martian Materials in the Inner Solar System by a Mega Impact on Mars. Astrophysical Journal Letters, 2018, 856, L36.	8.3	13
46	MIRS: an imaging spectrometer for the MMX mission. Earth, Planets and Space, 2021, 73, .	2.5	13
47	Numerous chondritic impactors and oxidized magma ocean set Earthâ€™s volatile depletion. Scientific Reports, 2021, 11, 20894.	3.3	11
48	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
49	Enhancement of Impact Heating in Pressureâ€Strengthened Rocks in Oblique Impacts. Geophysical Research Letters, 2019, 46, 13678-13686.	4.0	10
50	Shock Recovery With Decaying Compressive Pulses: Shock Effects in Calcite (CaCO₃) Around the Hugoniot Elastic Limit. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	9
51	Mars in the aftermath of a colossal impact. Icarus, 2019, 333, 87-95.	2.5	8
52	Escape and Accretion by Cratering Impacts: Formulation of Scaling Relations for High-speed Ejecta. Astrophysical Journal, 2020, 898, 30.	4.5	8
53	The Role of Postâ€Shock Heating by Plastic Deformation During Impact Devolatilization of Calcite (CaCO₃). Geophysical Research Letters, 2021, 48, e2020GL091130.	4.0	8
54	Impact chemistry of methanol: Implications for volatile evolution on icy satellites and dwarf planets, and cometary delivery to the Moon. Icarus, 2014, 243, 39-47.	2.5	6

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55	Impact Ejecta Near the Impact Point Observed Using Ultraâ€highâ€Speed Imaging and SPH Simulations and a Comparison of the Two Methods. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE005943.	3.6	6
56	Modification of the composition and density of Mercury from late accretion. Icarus, 2021, 354, 114064.	2.5	6
57	Large planets may not form fractionally large moons. Nature Communications, 2022, 13, 568.	12.8	4
58	A ground-based observation of the LCROSS impact events using the Subaru Telescope. Icarus, 2011, 214, 21-29.	2.5	3
59	The Onset of a Globally Iceâ€Covered State for a Land Planet. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006975.	3.6	3
60	Giant impact onto a Vesta-like asteroid and formation of mesosiderites through mixing of metallic core and surface crust. Icarus, 2022, 379, 114949.	2.5	3
61	Tidal Evolution of the Eccentric Moon around Dwarf Planet (225088) Gonggong. Astronomical Journal, 2021, 162, 226.	4.7	2
62	Giant Impacts and Debris Disks. Proceedings of the International Astronomical Union, 2012, 8, 270-272.	0.0	0
63	The Complete Evaporation Limit of Land Planets. Proceedings of the International Astronomical Union, 2012, 8, 336-338.	0.0	0
64	Evolution of Early Atmosphere. , 2019, , 197-207.		0
65	Erosion and Accretion by Cratering Impacts on Rocky and Icy Bodies. Astrophysical Journal, 2021, 913, 77.	4.5	0