

Harold F Levison

List of Publications by Year in descending order

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108
papers

18,248
citations

26630

56
h-index

32842

100
g-index

109
all docs

109
docs citations

109
times ranked

7981
citing authors

#	ARTICLE	IF	CITATIONS
1	The USNO-B Catalog. <i>Astronomical Journal</i> , 2003, 125, 984-993.	4.7	1,832
2	Origin of the cataclysmic Late Heavy Bombardment period of the terrestrial planets. <i>Nature</i> , 2005, 435, 466-469.	27.8	1,444
3	Origin of the orbital architecture of the giant planets of the Solar System. <i>Nature</i> , 2005, 435, 459-461.	27.8	1,186
4	The Long-Term Dynamical Behavior of Short-Period Comets. <i>Icarus</i> , 1994, 108, 18-36.	2.5	778
5	Debiased Orbital and Absolute Magnitude Distribution of the Near-Earth Objects. <i>Icarus</i> , 2002, 156, 399-433.	2.5	605
6	From the Kuiper Belt to Jupiter-Family Comets: The Spatial Distribution of Ecliptic Comets. <i>Icarus</i> , 1997, 127, 13-32.	2.5	551
7	Cratering rates in the outer Solar System. <i>Icarus</i> , 2003, 163, 263-289.	2.5	497
8	The fossilized size distribution of the main asteroid belt. <i>Icarus</i> , 2005, 175, 111-140.	2.5	479
9	A Multiple Time Step Symplectic Algorithm for Integrating Close Encounters. <i>Astronomical Journal</i> , 1998, 116, 2067-2077.	4.7	467
10	Asteroids were born big. <i>Icarus</i> , 2009, 204, 558-573.	2.5	424
11	COMETARY ORIGIN OF THE ZODIACAL CLOUD AND CARBONACEOUS MICROMETEORITES. IMPLICATIONS FOR HOT DEBRIS DISKS. <i>Astrophysical Journal</i> , 2010, 713, 816-836.	4.5	422
12	A Disk of Scattered Icy Objects and the Origin of Jupiter-Family Comets. <i>Science</i> , 1997, 276, 1670-1672.	12.6	413
13	Dynamical Lifetimes of Objects Injected into Asteroid Belt Resonances. <i>Science</i> , 1997, 277, 197-201.	12.6	399
14	Linking the collisional history of the main asteroid belt to its dynamical excitation and depletion. <i>Icarus</i> , 2005, 179, 63-94.	2.5	394
15	Origin of the structure of the Kuiper belt during a dynamical instability in the orbits of Uranus and Neptune. <i>Icarus</i> , 2008, 196, 258-273.	2.5	385
16	On the Character and Consequences of Large Impacts in the Late Stage of Terrestrial Planet Formation. <i>Icarus</i> , 1999, 142, 219-237.	2.5	375
17	Terrestrial planet formation with strong dynamical friction. <i>Icarus</i> , 2006, 184, 39-58.	2.5	372
18	An Archaean heavy bombardment from a destabilized extension of the asteroid belt. <i>Nature</i> , 2012, 485, 78-81.	27.8	345

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19	Dynamics of the Giant Planets of the Solar System in the Gaseous Protoplanetary Disk and Their Relationship to the Current Orbital Architecture. <i>Astronomical Journal</i> , 2007, 134, 1790-1798.	4.7	268
20	The formation of Uranus and Neptune in the Jupiter-Saturn region of the Solar System. <i>Nature</i> , 1999, 402, 635-638.	27.8	261
21	Contamination of the asteroid belt by primordial trans-Neptunian objects. <i>Nature</i> , 2009, 460, 364-366.	27.8	250
22	The recent breakup of an asteroid in the main-belt region. <i>Nature</i> , 2002, 417, 720-721.	27.8	243
23	The Dynamical Structure of the Kuiper Belt. <i>Astronomical Journal</i> , 1995, 110, 3073.	4.7	238
24	Cratering Rates on the Galilean Satellites. <i>Icarus</i> , 1998, 136, 202-222.	2.5	232
25	Growing the gas-giant planets by the gradual accumulation of pebbles. <i>Nature</i> , 2015, 524, 322-324.	27.8	208
26	LATE ORBITAL INSTABILITIES IN THE OUTER PLANETS INDUCED BY INTERACTION WITH A SELF-GRAVITATING PLANETESIMAL DISK. <i>Astronomical Journal</i> , 2011, 142, 152.	4.7	204
27	The formation of the Kuiper belt by the outward transport of bodies during Neptune's migration. <i>Nature</i> , 2003, 426, 419-421.	27.8	202
28	Planetary migration in a planetesimal disk: why did Neptune stop at 30 AU?. <i>Icarus</i> , 2004, 170, 492-507.	2.5	197
29	EVIDENCE FROM THE ASTEROID BELT FOR A VIOLENT PAST EVOLUTION OF JUPITER'S ORBIT. <i>Astronomical Journal</i> , 2010, 140, 1391-1401.	4.7	192
30	Scenarios for the Origin of the Orbits of the Trans-Neptunian Objects 2000 CR105 and 2003 VB12 (Sedna). <i>Astronomical Journal</i> , 2004, 128, 2564-2576.	4.7	184
31	Orbital and Collisional Evolution of the Irregular Satellites. <i>Astronomical Journal</i> , 2003, 126, 398-429.	4.7	173
32	Could the Lunar "Late Heavy Bombardment" Have Been Triggered by the Formation of Uranus and Neptune?. <i>Icarus</i> , 2001, 151, 286-306.	2.5	159
33	Recent Origin of the Solar System Dust Bands. <i>Astrophysical Journal</i> , 2003, 591, 486-497.	4.5	150
34	Growing the terrestrial planets from the gradual accumulation of submeter-sized objects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14180-14185.	7.1	142
35	Dynamical evolution of Jupiter's Trojan asteroids. <i>Nature</i> , 1997, 385, 42-44.	27.8	139
36	The Origin of Halley-Type Comets: Probing the Inner Oort Cloud. <i>Astronomical Journal</i> , 2001, 121, 2253-2267.	4.7	136

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37	Capture of the Sun's Oort Cloud from Stars in Its Birth Cluster. <i>Science</i> , 2010, 329, 187-190.	12.6	136
38	On the Size Dependence of the Inclination Distribution of the Main Kuiper Belt. <i>Astronomical Journal</i> , 2001, 121, 1730-1735.	4.7	133
39	Evidence for two populations of classical transneptunian objects: The strong inclination dependence of classical binaries. <i>Icarus</i> , 2008, 194, 758-768.	2.5	132
40	MODELING THE FORMATION OF GIANT PLANET CORES. I. EVALUATING KEY PROCESSES. <i>Astronomical Journal</i> , 2010, 139, 1297-1314.	4.7	125
41	Modeling the Diversity of Outer Planetary Systems. <i>Astronomical Journal</i> , 1998, 116, 1998-2014.	4.7	123
42	Can planetesimals left over from terrestrial planet formation produce the lunar Late Heavy Bombardment?. <i>Icarus</i> , 2007, 190, 203-223.	2.5	119
43	Oort Cloud Formation and Dynamics. , 2004, , 153-174.		110
44	Origin and Evolution of Short-period Comets. <i>Astrophysical Journal</i> , 2017, 845, 27.	4.5	106
45	Evidence for very early migration of the Solar System planets from the Patroclus-Menoetius binary Jupiter Trojan. <i>Nature Astronomy</i> , 2018, 2, 878-882.	10.1	104
46	The history of the Solar system's debris disc: observable properties of the Kuiper belt. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 399, 385-398.	4.4	98
47	Simulations of planet migration driven by planetesimal scattering. <i>Icarus</i> , 2009, 199, 197-209.	2.5	94
48	A SEARCH FOR MULTI-PLANET SYSTEMS USING THE HOBBY-EBERLY TELESCOPE. <i>Astrophysical Journal, Supplement Series</i> , 2009, 182, 97-119.	7.7	93
49	The Role of Giant Planets in Terrestrial Planet Formation. <i>Astronomical Journal</i> , 2003, 125, 2692-2713.	4.7	92
50	The Dynamical Evolution of Lunar Impact Ejecta. <i>Icarus</i> , 1995, 118, 302-321.	2.5	87
51	Planetary Impact Rates from Ecliptic Comets. <i>Icarus</i> , 2000, 143, 415-420.	2.5	85
52	The Mass Disruption of Oort Cloud Comets. <i>Science</i> , 2002, 296, 2212-2215.	12.6	82
53	The scattered disk as a source of Halley-type comets. <i>Icarus</i> , 2006, 184, 619-633.	2.5	80
54	On the origin of the unusual orbit of Comet 2P/Encke. <i>Icarus</i> , 2006, 182, 161-168.	2.5	77

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55	Effects of Type I Migration on Terrestrial Planet Formation. <i>Astronomical Journal</i> , 2005, 130, 2884-2899.	4.7	74
56	Symplectically Integrating Close Encounters with the Sun. <i>Astronomical Journal</i> , 2000, 120, 2117-2123.	4.7	70
57	The Discovery of Halley-sized Kuiper Belt Objects Using the Hubble Space Telescope. <i>Astrophysical Journal</i> , 1995, 455, 342.	4.5	66
58	Evolution of a Terrestrial Multiple-Moon System. <i>Astronomical Journal</i> , 1999, 117, 603-620.	4.7	65
59	TERRESTRIAL PLANET FORMATION FROM AN ANNULUS. <i>Astronomical Journal</i> , 2016, 152, 68.	4.7	63
60	Impact Seeding and Reseeding in the Inner Solar System. <i>Astrobiology</i> , 2005, 5, 483-496.	3.0	62
61	Considerations on the magnitude distributions of the Kuiper belt and of the Jupiter Trojans. <i>Icarus</i> , 2009, 202, 310-315.	2.5	55
62	Lucy Mission to the Trojan Asteroids: Science Goals. <i>Planetary Science Journal</i> , 2021, 2, 171.	3.6	54
63	ON A SCATTERED-DISK ORIGIN FOR THE 2003 EL ₆₁ COLLISIONAL FAMILY—AN EXAMPLE OF THE IMPORTANCE OF COLLISIONS ON THE DYNAMICS OF SMALL BODIES. <i>Astronomical Journal</i> , 2008, 136, 1079-1088.	4.7	51
64	OBSERVED BINARY FRACTION SETS LIMITS ON THE EXTENT OF COLLISIONAL GRINDING IN THE KUIPER BELT. <i>Astronomical Journal</i> , 2011, 141, 159.	4.7	50
65	Origin and Evolution of the Unusual Object 1996 PW: Asteroids from the Oort Cloud?. <i>Astrophysical Journal</i> , 1997, 488, L133-L136.	4.5	49
66	A search for proto-comets in the outer regions of the solar system. <i>Astronomical Journal</i> , 1990, 100, 1669.	4.7	45
67	A LAGRANGIAN INTEGRATOR FOR PLANETARY ACCRETION AND DYNAMICS (LIPAD). <i>Astronomical Journal</i> , 2012, 144, 119.	4.7	44
68	Planetesimals to terrestrial planets: Collisional evolution amidst a dissipating gas disk. <i>Icarus</i> , 2019, 329, 88-100.	2.5	44
69	Planetesimal-driven planet migration in the presence of a gas disk. <i>Icarus</i> , 2011, 211, 819-831.	2.5	43
70	FORMATION AND EVOLUTION OF PLUTO'S SMALL SATELLITES. <i>Astronomical Journal</i> , 2015, 150, 11.	4.7	40
71	IRREGULAR SATELLITE CAPTURE BY EXCHANGE REACTIONS. <i>Astronomical Journal</i> , 2008, 136, 1463-1476.	4.7	39
72	Models of the collisional damping scenario for ice-giant planets and Kuiper belt formation. <i>Icarus</i> , 2007, 189, 196-212.	2.5	38

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73	Timing of the formation and migration of giant planets as constrained by CB chondrites. <i>Science Advances</i> , 2016, 2, e1601658.	10.3	38
74	Sculpting the Kuiper Belt by a Stellar Encounter: Constraints from the Oort Cloud and Scattered Disk. <i>Astronomical Journal</i> , 2004, 128, 2553-2563.	4.7	35
75	SIZE AND SHAPE FROM STELLAR OCCULTATION OBSERVATIONS OF THE DOUBLE JUPITER TROJAN PATROCLUS AND MENOETIUS. <i>Astronomical Journal</i> , 2015, 149, 113.	4.7	35
76	Discovery of a binary Centaur. <i>Icarus</i> , 2006, 184, 611-618.	2.5	28
77	Regarding the Criteria for Planethood and Proposed Planetary Classification Schemes. <i>Highlights of Astronomy</i> , 2002, 12, 205-213.	0.0	27
78	Dynamical and Observational Constraints on Additional Planets in Highly Eccentric Planetary Systems. <i>Astronomical Journal</i> , 2007, 134, 1276-1284.	4.7	26
79	Planetesimal-driven migration of terrestrial planet embryos. <i>Icarus</i> , 2014, 232, 118-132.	2.5	26
80	Possible Origin and Early Dynamical Evolution of the Pluto-Charon Binary. <i>Icarus</i> , 1995, 116, 315-339.	2.5	25
81	Dynamical and Observational Constraints on Satellites in the Inner Pluto-Charon System. <i>Icarus</i> , 1994, 108, 234-242.	2.5	22
82	Energy Dissipation in Large Collisionsâ€”No Change in Planet Formation Outcomes. <i>Astrophysical Journal</i> , 2019, 876, 103.	4.5	21
83	Lucy Mission to the Trojan Asteroids: Instrumentation and Encounter Concept of Operations. <i>Planetary Science Journal</i> , 2021, 2, 172.	3.6	21
84	Triaxial scale-free models of highly flattened elliptical galaxies with and without massive halos. <i>Astrophysical Journal</i> , 1987, 314, 476.	4.5	21
85	Secular resonances and cometary orbits in the $\hat{\nu}^2$ Pictoris system. <i>Nature</i> , 1994, 372, 441-444.	27.8	20
86	A New Observational Search for Vulcanoids in SOHO/LASCO Coronagraph Images. <i>Icarus</i> , 2000, 148, 312-315.	2.5	18
87	The long-term dynamical behavior of small bodies in the Kuiper belt. <i>Astronomical Journal</i> , 1991, 102, 787.	4.7	18
88	Regarding the Putative Eccentricity of Charon's Orbit. <i>Astronomical Journal</i> , 2003, 125, 902-905.	4.7	13
89	Convex Shape and Rotation Model of Lucy Target (11351) Leucus from Lightcurves and Occultations. <i>Planetary Science Journal</i> , 2020, 1, 73.	3.6	11
90	The Orbit and Density of the Jupiter Trojan Satellite System Eurybatesâ€”Queta. <i>Planetary Science Journal</i> , 2021, 2, 170.	3.6	10

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91	Observable properties of E0 triaxial galaxies - A test for triaxiality. <i>Astrophysical Journal</i> , 1987, 320, L93.	4.5	10
92	The Calibration of the [ITAL]Hubble Space Telescope[/ITAL] Kuiper Belt Object Search:Setting the Record Straight. <i>Astrophysical Journal</i> , 1998, 503, L89-L93.	4.5	10
93	Very Slow Rotators from Tidally Synchronized Binaries. <i>Astrophysical Journal Letters</i> , 2020, 893, L16.	8.3	9
94	Size and Shape of (11351) Leucus from Five Occultations. <i>Planetary Science Journal</i> , 2021, 2, 202.	3.6	7
95	Dynamical instabilities in axisymmetric stellar systems. I - Oblate E6 models. <i>Astrophysical Journal</i> , 1990, 363, 66.	4.5	6
96	Collisional Evolution of Meter- to Kilometer-sized Planetesimals in Mean Motion Resonances: Implications for Inward Planet Shepherding. <i>Astrophysical Journal</i> , 2020, 890, 170.	4.5	4
97	Dynamical models of highly flattened oblate elliptical galaxies with De Vaucouleurs' surface-brightness profiles. <i>Astronomical Journal</i> , 1989, 97, 57.	4.7	4
98	A highly triaxial N-body system tumbling about its intermediate axis. <i>Astrophysical Journal</i> , 1989, 339, L17.	4.5	2
99	Kuiper Belt: Dynamics. , 2007, , 589-604.		1
100	Kuiper Belt. , 2014, , 925-939.		1
101	Opportunities for the Large Synoptic Survey Telescope to Find New $L ₅$ Trojan and Hilda Lucy Encounter Targets. <i>Research Notes of the AAS</i> , 2018, 2, 159.	0.7	1
102	Bending Instabilities in Homogenous Oblate Spheroidal Galaxy Models. <i>Astrophysical Journal</i> , 1997, 489, 49-62.	4.5	1
103	The Long-Term Dynamical Behavior of Small Bodies in the Kuiper Belt. <i>Symposium - International Astronomical Union</i> , 1992, 152, 275-279.	0.1	0
104	A scattered Uranus and Neptune, and implications for the asteroid belt. <i>Symposium - International Astronomical Union</i> , 2004, 202, 241-243.	0.1	0
105	Interaction of planetesimals with the giant planets and the shaping of the trans-Neptunian belt. <i>Proceedings of the International Astronomical Union</i> , 2004, 2004, 303-316.	0.0	0
106	LIPAD Simulations of Giant Planet Core Formation. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 171-172.	0.0	0
107	Cometary Dynamics. <i>Astrophysics and Space Science Library</i> , 2001, , 73-90.	2.7	0
108	Triaxial Scale-Free Models of Highly Flattened Elliptical Galaxies with Massive Halos. , 1987, , 499-500.		0