

# Harold F Levison

## List of Publications by Year in descending order

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Version: 2024-02-01

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  | Lucy Mission to the Trojan Asteroids: Science Goals. <i>Planetary Science Journal</i> , 2021, 2, 171.                                                                                                     | 3.6  | 54        |
| 2  | The Orbit and Density of the Jupiter Trojan Satellite System Eurybatesâ€“Queta. <i>Planetary Science Journal</i> , 2021, 2, 170.                                                                          | 3.6  | 10        |
| 3  | Lucy Mission to the Trojan Asteroids: Instrumentation and Encounter Concept of Operations. <i>Planetary Science Journal</i> , 2021, 2, 172.                                                               | 3.6  | 21        |
| 4  | Size and Shape of (11351) Leucus from Five Occultations. <i>Planetary Science Journal</i> , 2021, 2, 202.                                                                                                 | 3.6  | 7         |
| 5  | Very Slow Rotators from Tidally Synchronized Binaries. <i>Astrophysical Journal Letters</i> , 2020, 893, L16.                                                                                             | 8.3  | 9         |
| 6  | 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         |
| 7  | 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        |
| 8  | Energy Dissipation in Large Collisionsâ€“No Change in Planet Formation Outcomes. <i>Astrophysical Journal</i> , 2019, 876, 103.                                                                           | 4.5  | 21        |
| 9  | Planetesimals to terrestrial planets: Collisional evolution amidst a dissipating gas disk. <i>Icarus</i> , 2019, 329, 88-100.                                                                             | 2.5  | 44        |
| 10 | Evidence for very early migration of the Solar System planets from the Patroclusâ€“Menoetius binary Jupiter Trojan. <i>Nature Astronomy</i> , 2018, 2, 878-882.                                           | 10.1 | 104       |
| 11 | Opportunities for the Large Synoptic Survey Telescope to Find New $L_{<sub>5</sub>}$ Trojan and Hilda Lucy Encounter Targets. <i>Research Notes of the AAS</i> , 2018, 2, 159.                            | 0.7  | 1         |
| 12 | Origin and Evolution of Short-period Comets. <i>Astrophysical Journal</i> , 2017, 845, 27.                                                                                                                | 4.5  | 106       |
| 13 | Timing of the formation and migration of giant planets as constrained by CB chondrites. <i>Science Advances</i> , 2016, 2, e1601658.                                                                      | 10.3 | 38        |
| 14 | TERRESTRIAL PLANET FORMATION FROM AN ANNULUS. <i>Astronomical Journal</i> , 2016, 152, 68.                                                                                                                | 4.7  | 63        |
| 15 | 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        |
| 16 | FORMATION AND EVOLUTION OF PLUTOâ€™S SMALL SATELLITES. <i>Astronomical Journal</i> , 2015, 150, 11.                                                                                                       | 4.7  | 40        |
| 17 | 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       |
| 18 | Growing the gas-giant planets by the gradual accumulation of pebbles. <i>Nature</i> , 2015, 524, 322-324.                                                                                                 | 27.8 | 208       |

| #  | ARTICLE                                                                                                                                                                 | IF   | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Kuiper Belt. , 2014, , 925-939.                                                                                                                                         |      | 1         |
| 20 | Planetesimal-driven migration of terrestrial planet embryos. <i>Icarus</i> , 2014, 232, 118-132.                                                                        | 2.5  | 26        |
| 21 | LIPAD Simulations of Giant Planet Core Formation. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 171-172.                                        | 0.0  | 0         |
| 22 | A LAGRANGIAN INTEGRATOR FOR PLANETARY ACCRETION AND DYNAMICS (LIPAD). <i>Astronomical Journal</i> , 2012, 144, 119.                                                     | 4.7  | 44        |
| 23 | An Archaean heavy bombardment from a destabilized extension of the asteroid belt. <i>Nature</i> , 2012, 485, 78-81.                                                     | 27.8 | 345       |
| 24 | Planetesimal-driven planet migration in the presence of a gas disk. <i>Icarus</i> , 2011, 211, 819-831.                                                                 | 2.5  | 43        |
| 25 | 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        |
| 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 | 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       |
| 28 | MODELING THE FORMATION OF GIANT PLANET CORES. I. EVALUATING KEY PROCESSES. <i>Astronomical Journal</i> , 2010, 139, 1297-1314.                                          | 4.7  | 125       |
| 29 | Capture of the Sun's Oort Cloud from Stars in Its Birth Cluster. <i>Science</i> , 2010, 329, 187-190.                                                                   | 12.6 | 136       |
| 30 | 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       |
| 31 | Asteroids were born big. <i>Icarus</i> , 2009, 204, 558-573.                                                                                                            | 2.5  | 424       |
| 32 | 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        |
| 33 | Contamination of the asteroid belt by primordial trans-Neptunian objects. <i>Nature</i> , 2009, 460, 364-366.                                                           | 27.8 | 250       |
| 34 | Simulations of planet migration driven by planetesimal scattering. <i>Icarus</i> , 2009, 199, 197-209.                                                                  | 2.5  | 94        |
| 35 | Considerations on the magnitude distributions of the Kuiper belt and of the Jupiter Trojans. <i>Icarus</i> , 2009, 202, 310-315.                                        | 2.5  | 55        |
| 36 | A SEARCH FOR MULTI-PLANET SYSTEMS USING THE HOBBY-EBERLY TELESCOPE. <i>Astrophysical Journal, Supplement Series</i> , 2009, 182, 97-119.                                | 7.7  | 93        |

| #  | ARTICLE                                                                                                                                                                                                     | IF   | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | 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       |
| 38 | 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       |
| 39 | IRREGULAR SATELLITE CAPTURE BY EXCHANGE REACTIONS. <i>Astronomical Journal</i> , 2008, 136, 1463-1476.                                                                                                      | 4.7  | 39        |
| 40 | ON A SCATTERED-DISK ORIGIN FOR THE 2003 EL <sub>61</sub> 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        |
| 41 | Dynamical and Observational Constraints on Additional Planets in Highly Eccentric Planetary Systems. <i>Astronomical Journal</i> , 2007, 134, 1276-1284.                                                    | 4.7  | 26        |
| 42 | 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       |
| 43 | Kuiper Belt: Dynamics. , 2007, , 589-604.                                                                                                                                                                   |      | 1         |
| 44 | Models of the collisional damping scenario for ice-giant planets and Kuiper belt formation. <i>Icarus</i> , 2007, 189, 196-212.                                                                             | 2.5  | 38        |
| 45 | Can planetesimals left over from terrestrial planet formation produce the lunar Late Heavy Bombardment?. <i>Icarus</i> , 2007, 190, 203-223.                                                                | 2.5  | 119       |
| 46 | On the origin of the unusual orbit of Comet 2P/Encke. <i>Icarus</i> , 2006, 182, 161-168.                                                                                                                   | 2.5  | 77        |
| 47 | Terrestrial planet formation with strong dynamical friction. <i>Icarus</i> , 2006, 184, 39-58.                                                                                                              | 2.5  | 372       |
| 48 | The scattered disk as a source of Halley-type comets. <i>Icarus</i> , 2006, 184, 619-633.                                                                                                                   | 2.5  | 80        |
| 49 | Discovery of a binary Centaur. <i>Icarus</i> , 2006, 184, 611-618.                                                                                                                                          | 2.5  | 28        |
| 50 | Effects of Type I Migration on Terrestrial Planet Formation. <i>Astronomical Journal</i> , 2005, 130, 2884-2899.                                                                                            | 4.7  | 74        |
| 51 | The fossilized size distribution of the main asteroid belt. <i>Icarus</i> , 2005, 175, 111-140.                                                                                                             | 2.5  | 479       |
| 52 | 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       |
| 53 | Origin of the orbital architecture of the giant planets of the Solar System. <i>Nature</i> , 2005, 435, 459-461.                                                                                            | 27.8 | 1,186     |
| 54 | Origin of the cataclysmic Late Heavy Bombardment period of the terrestrial planets. <i>Nature</i> , 2005, 435, 466-469.                                                                                     | 27.8 | 1,444     |

| #  | ARTICLE                                                                                                                                                                            | IF   | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Impact Seeding and Reseeding in the Inner Solar System. <i>Astrobiology</i> , 2005, 5, 483-496.                                                                                    | 3.0  | 62        |
| 56 | A scattered Uranus and Neptune, and implications for the asteroid belt. <i>Symposium - International Astronomical Union</i> , 2004, 202, 241-243.                                  | 0.1  | 0         |
| 57 | Planetary migration in a planetesimal disk: why did Neptune stop at 30 AU?. <i>Icarus</i> , 2004, 170, 492-507.                                                                    | 2.5  | 197       |
| 58 | 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       |
| 59 | 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        |
| 60 | 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         |
| 61 | Oort Cloud Formation and Dynamics. , 2004, , 153-174.                                                                                                                              |      | 110       |
| 62 | Cratering rates in the outer Solar System. <i>Icarus</i> , 2003, 163, 263-289.                                                                                                     | 2.5  | 497       |
| 63 | 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       |
| 64 | Orbital and Collisional Evolution of the Irregular Satellites. <i>Astronomical Journal</i> , 2003, 126, 398-429.                                                                   | 4.7  | 173       |
| 65 | The Role of Giant Planets in Terrestrial Planet Formation. <i>Astronomical Journal</i> , 2003, 125, 2692-2713.                                                                     | 4.7  | 92        |
| 66 | Recent Origin of the Solar System Dust Bands. <i>Astrophysical Journal</i> , 2003, 591, 486-497.                                                                                   | 4.5  | 150       |
| 67 | The USNO-B Catalog. <i>Astronomical Journal</i> , 2003, 125, 984-993.                                                                                                              | 4.7  | 1,832     |
| 68 | Regarding the Putative Eccentricity of Charon's Orbit. <i>Astronomical Journal</i> , 2003, 125, 902-905.                                                                           | 4.7  | 13        |
| 69 | The Mass Disruption of Oort Cloud Comets. <i>Science</i> , 2002, 296, 2212-2215.                                                                                                   | 12.6 | 82        |
| 70 | Regarding the Criteria for Planethood and Proposed Planetary Classification Schemes. <i>Highlights of Astronomy</i> , 2002, 12, 205-213.                                           | 0.0  | 27        |
| 71 | Debiased Orbital and Absolute Magnitude Distribution of the Near-Earth Objects. <i>Icarus</i> , 2002, 156, 399-433.                                                                | 2.5  | 605       |
| 72 | The recent breakup of an asteroid in the main-belt region. <i>Nature</i> , 2002, 417, 720-721.                                                                                     | 27.8 | 243       |

| #  | ARTICLE                                                                                                                                                               | IF   | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 73 | On the Size Dependence of the Inclination Distribution of the Main Kuiper Belt. <i>Astronomical Journal</i> , 2001, 121, 1730-1735.                                   | 4.7  | 133       |
| 74 | The Origin of Halley-Type Comets: Probing the Inner Oort Cloud. <i>Astronomical Journal</i> , 2001, 121, 2253-2267.                                                   | 4.7  | 136       |
| 75 | 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       |
| 76 | Cometary Dynamics. <i>Astrophysics and Space Science Library</i> , 2001, , 73-90.                                                                                     | 2.7  | 0         |
| 77 | Planetary Impact Rates from Ecliptic Comets. <i>Icarus</i> , 2000, 143, 415-420.                                                                                      | 2.5  | 85        |
| 78 | A New Observational Search for Vulcanoids in SOHO/LASCO Coronagraph Images. <i>Icarus</i> , 2000, 148, 312-315.                                                       | 2.5  | 18        |
| 79 | Symplectically Integrating Close Encounters with the Sun. <i>Astronomical Journal</i> , 2000, 120, 2117-2123.                                                         | 4.7  | 70        |
| 80 | Evolution of a Terrestrial Multiple-Moon System. <i>Astronomical Journal</i> , 1999, 117, 603-620.                                                                    | 4.7  | 65        |
| 81 | 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       |
| 82 | 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       |
| 83 | Cratering Rates on the Galilean Satellites. <i>Icarus</i> , 1998, 136, 202-222.                                                                                       | 2.5  | 232       |
| 84 | A Multiple Time Step Symplectic Algorithm for Integrating Close Encounters. <i>Astronomical Journal</i> , 1998, 116, 2067-2077.                                       | 4.7  | 467       |
| 85 | Modeling the Diversity of Outer Planetary Systems. <i>Astronomical Journal</i> , 1998, 116, 1998-2014.                                                                | 4.7  | 123       |
| 86 | 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        |
| 87 | 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        |
| 88 | A Disk of Scattered Icy Objects and the Origin of Jupiter-Family Comets. <i>Science</i> , 1997, 276, 1670-1672.                                                       | 12.6 | 413       |
| 89 | Dynamical Lifetimes of Objects Injected into Asteroid Belt Resonances. <i>Science</i> , 1997, 277, 197-201.                                                           | 12.6 | 399       |
| 90 | Dynamical evolution of Jupiter's Trojan asteroids. <i>Nature</i> , 1997, 385, 42-44.                                                                                  | 27.8 | 139       |

| #   | ARTICLE                                                                                                                                                       | IF   | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 91  | From the Kuiper Belt to Jupiter-Family Comets: The Spatial Distribution of Ecliptic Comets. <i>Icarus</i> , 1997, 127, 13-32.                                 | 2.5  | 551       |
| 92  | Bending Instabilities in Homogenous Oblate Spheroidal Galaxy Models. <i>Astrophysical Journal</i> , 1997, 489, 49-62.                                         | 4.5  | 1         |
| 93  | Possible Origin and Early Dynamical Evolution of the Pluto-Charon Binary. <i>Icarus</i> , 1995, 116, 315-339.                                                 | 2.5  | 25        |
| 94  | The Dynamical Evolution of Lunar Impact Ejecta. <i>Icarus</i> , 1995, 118, 302-321.                                                                           | 2.5  | 87        |
| 95  | The Dynamical Structure of the Kuiper Belt. <i>Astronomical Journal</i> , 1995, 110, 3073.                                                                    | 4.7  | 238       |
| 96  | The Discovery of Halley-sized Kuiper Belt Objects Using the Hubble Space Telescope. <i>Astrophysical Journal</i> , 1995, 455, 342.                            | 4.5  | 66        |
| 97  | The Long-Term Dynamical Behavior of Short-Period Comets. <i>Icarus</i> , 1994, 108, 18-36.                                                                    | 2.5  | 778       |
| 98  | Dynamical and Observational Constraints on Satellites in the Inner Pluto-Charon System. <i>Icarus</i> , 1994, 108, 234-242.                                   | 2.5  | 22        |
| 99  | Secular resonances and cometary orbits in the $\hat{1}^2$ Pictoris system. <i>Nature</i> , 1994, 372, 441-444.                                                | 27.8 | 20        |
| 100 | The Long-Term Dynamical Behavior of Small Bodies in the Kuiper Belt. Symposium - International Astronomical Union, 1992, 152, 275-279.                        | 0.1  | 0         |
| 101 | The long-term dynamical behavior of small bodies in the Kuiper belt. <i>Astronomical Journal</i> , 1991, 102, 787.                                            | 4.7  | 18        |
| 102 | A search for proto-comets in the outer regions of the solar system. <i>Astronomical Journal</i> , 1990, 100, 1669.                                            | 4.7  | 45        |
| 103 | Dynamical instabilities in axisymmetric stellar systems. I - Oblate E6 models. <i>Astrophysical Journal</i> , 1990, 363, 66.                                  | 4.5  | 6         |
| 104 | Dynamical models of highly flattened oblate elliptical galaxies with De Vaucouleurs' surface-brightness profiles. <i>Astronomical Journal</i> , 1989, 97, 57. | 4.7  | 4         |
| 105 | A highly triaxial N-body system tumbling about its intermediate axis. <i>Astrophysical Journal</i> , 1989, 339, L17.                                          | 4.5  | 2         |
| 106 | Triaxial scale-free models of highly flattened elliptical galaxies with and without massive halos. <i>Astrophysical Journal</i> , 1987, 314, 476.             | 4.5  | 21        |
| 107 | Observable properties of E0 triaxial galaxies - A test for triaxiality. <i>Astrophysical Journal</i> , 1987, 320, L93.                                        | 4.5  | 10        |
| 108 | Triaxial Scale-Free Models of Highly Flattened Elliptical Galaxies with Massive Halos. , 1987, , 499-500.                                                     |      | 0         |