

Ivan I Shevchenko

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7039977/publications.pdf>

Version: 2024-02-01

107
papers

1,127
citations

430874

18
h-index

526287

27
g-index

110
all docs

110
docs citations

110
times ranked

361
citing authors

#	ARTICLE	IF	CITATIONS
1	The Lidov-Kozai Effect - Applications in Exoplanet Research and Dynamical Astronomy. <i>Astrophysics and Space Science Library</i> , 2017, , .	2.7	71
2	KEPLER-16b: SAFE IN A RESONANCE CELL. <i>Astrophysical Journal</i> , 2013, 769, 152.	4.5	51
3	Lyapunov exponents in resonance multiplets. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2014, 378, 34-42.	2.1	44
4	On the chaotic rotation of planetary satellites: The Lyapunov spectra and the maximum Lyapunov exponents. <i>Astronomy and Astrophysics</i> , 2002, 394, 663-674.	5.1	43
5	Three-lane and multilane signatures of planets in planetesimal discs. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2016, 463, L22-L25.	3.3	39
6	Rotational dynamics of planetary satellites: A survey of regular and chaotic behavior. <i>Icarus</i> , 2005, 176, 224-234.	2.5	37
7	Planetary dynamics in the system $\hat{\pm}$ Centauri: The stability diagrams. <i>Astronomy Letters</i> , 2012, 38, 581-588.	1.0	37
8	SPIRAL PATTERNS IN PLANETESIMAL CIRCUMBINARY DISKS. <i>Astrophysical Journal</i> , 2015, 805, 38.	4.5	37
9	On the recurrence and Lyapunov time scales of the motion near the chaos border. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1998, 241, 53-60.	2.1	35
10	Marginal Resonances and Intermittent Behaviour in the Motion in the Vicinity of a Separatrix. <i>Physica Scripta</i> , 1998, 57, 185-191.	2.5	34
11	Hamiltonian intermittency and $L\tilde{\infty}$ vy flights in the three-body problem. <i>Physical Review E</i> , 2010, 81, 066216.	2.1	33
12	On the stability of circumbinary planetary systems. <i>Astronomy Letters</i> , 2016, 42, 474-481.	1.0	32
13	Habitability Properties of Circumbinary Planets. <i>Astronomical Journal</i> , 2017, 153, 273.	4.7	32
14	CHAOTIC ZONES AROUND GRAVITATING BINARIES. <i>Astrophysical Journal</i> , 2015, 799, 8.	4.5	31
15	The Kepler map in the three-body problem. <i>New Astronomy</i> , 2011, 16, 94-99.	1.8	30
16	On possible circumbinary configurations of the planetary systems of $\hat{\pm}$ Centauri and EZ Aquarii. <i>Astronomy Letters</i> , 2016, 42, 260-267.	1.0	28
17	Massive identification of asteroids in three-body resonances. <i>Icarus</i> , 2013, 222, 220-228.	2.5	27
18	The rotation states predominant among the planetary satellites. <i>Icarus</i> , 2010, 209, 786-794.	2.5	26

#	ARTICLE	IF	CITATIONS
19	LYAPUNOV AND DIFFUSION TIMESCALES IN THE SOLAR NEIGHBORHOOD. <i>Astrophysical Journal</i> , 2011, 733, 39.	4.5	25
20	On the chaotic rotation of planetary satellites: The Lyapunov exponents and the energy. <i>Astronomy and Astrophysics</i> , 2003, 410, 749-757.	5.1	24
21	The width of a chaotic layer. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 808-816.	2.1	24
22	Lyapunov exponents in the H \dot{A} non-Heiles problem. <i>JETP Letters</i> , 2003, 77, 642-646.	1.4	22
23	The Separatrix Algorithmic Map: Application to the Spin-Orbit Motion. <i>Celestial Mechanics and Dynamical Astronomy</i> , 1999, 73, 259-268.	1.4	20
24	Observations and Theoretical Analysis of Lightcurves of Natural Satellites of Planets. <i>Solar System Research</i> , 2002, 36, 248-259.	0.7	19
25	Geometry of a chaotic layer. <i>Journal of Experimental and Theoretical Physics</i> , 2000, 91, 615-625.	0.9	18
26	Maximum Lyapunov Exponents for Chaotic Rotation of Natural Planetary Satellites. <i>Cosmic Research</i> , 2002, 40, 296-304.	0.6	17
27	Chaotic dynamics around cometary nuclei. <i>Icarus</i> , 2018, 307, 391-399.	2.5	17
28	Dynamical Chaos in Planetary Systems. <i>Astrophysics and Space Science Library</i> , 2020, , .	2.7	16
29	On the rotational dynamics of Prometheus and Pandora. <i>Celestial Mechanics and Dynamical Astronomy</i> , 2008, 101, 31-47.	1.4	15
30	Adiabatic chaos in the Prometheus-Pandora system. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, 384, 1211-1220.	4.4	15
31	Chaotic Zones around Rotating Small Bodies. <i>Astronomical Journal</i> , 2017, 153, 272.	4.7	15
32	On the maximum Lyapunov exponent of the motion in a chaotic layer. <i>JETP Letters</i> , 2004, 79, 523-528.	1.4	14
33	Intermittent Trajectories in the 3/1 Jovian Resonance. <i>Celestial Mechanics and Dynamical Astronomy</i> , 1997, 68, 163-175.	1.4	13
34	The disruption of three-body gravitational systems: lifetime statistics. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 408, 1623-1627.	4.4	13
35	Isentropic perturbations of a chaotic domain. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2004, 333, 408-414.	2.1	10
36	Unusual rotation modes of minor planetary satellites. <i>Solar System Research</i> , 2007, 41, 483-491.	0.7	10

#	ARTICLE	IF	CITATIONS
37	Width of the chaotic layer: Maxima due to marginal resonances. <i>Physical Review E</i> , 2012, 85, 066202.	2.1	10
38	Algorithms for normalization of Hamiltonian systems by means of computer algebra. <i>Computer Physics Communications</i> , 1993, 77, 11-18.	7.5	9
39	The shapes and rotational dynamics of minor planetary satellites. <i>Solar System Research</i> , 2006, 40, 393-399.	0.7	8
40	The Lyapunov exponents in the dynamics of triple star systems. <i>Astronomy Reports</i> , 2013, 57, 429-439.	0.9	8
41	Correlations in area preserving maps: A Shannon entropy approach. <i>Physica D: Nonlinear Phenomena</i> , 2020, 402, 132235.	2.8	8
42	The dynamical temperature and the standard map. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2007, 386, 85-91.	2.6	6
43	Simulations of the Dynamics of the Debris Disks in the Systems Kepler-16, Kepler-34, and Kepler-35. <i>Astronomy Letters</i> , 2018, 44, 119-125.	1.0	6
44	Dynamical environments of MU69 and similar objects. <i>Icarus</i> , 2021, 357, 114178.	2.5	6
45	Lyapunov and Clearing Timescales in Planetary Chaotic Zones. <i>Astronomical Journal</i> , 2020, 160, 212.	4.7	6
46	Long-Term Dynamics of Planetesimals in Planetary Chaotic Zones. <i>Astronomy Letters</i> , 2020, 46, 774-782.	1.0	6
47	Hyperboloidal precession of a dynamically symmetric satellite. Construction of normal forms of the Hamiltonian. <i>Celestial Mechanics and Dynamical Astronomy</i> , 1995, 62, 289-304.	1.4	5
48	On the Lyapunov exponents of the asteroidal motion subject to resonances and encounters. <i>Proceedings of the International Astronomical Union</i> , 2006, 2, 15-30.	0.0	5
49	Circumbinary Planetary Systems in the Solar Neighborhood: Stability and Habitability. <i>Astronomy Letters</i> , 2019, 45, 620-626.	1.0	5
50	Spectra of Winding Numbers of Chaotic Asteroidal Motion. , 1996, , 311-314.		5
51	On the Critical Phenomena in the Dynamics of Asteroids. , 1999, , 383-386.		5
52	ORBITAL RESONANCES AND THE SEPARATRIX ALGORITHMIC MAP. <i>Advanced Series in Astrophysics and Cosmology</i> , 2000, , 599-608.	0.1	5
53	Kepler map. <i>Scholarpedia Journal</i> , 2018, 13, 33238.	0.3	5
54	Revisiting the relation between the Lyapunov time and the instability time. <i>Physica D: Nonlinear Phenomena</i> , 2022, 430, 133101.	2.8	5

#	ARTICLE	IF	CITATIONS
55	Chaotic asteroidal trajectories exhibiting multiple bursts of eccentricity: A statistical analysis. Symposium - International Astronomical Union, 1996, 172, 183-186.	0.1	4
56	Stability of the multiple star system $\hat{1}$ UMa (ADS 7114). Astronomy Reports, 2014, 58, 640-649.	0.9	4
57	Tidal Decay of Circumbinary Planetary Systems. Astronomical Journal, 2018, 156, 52.	4.7	4
58	On verification of the asymptotic model of the first kind. Astrophysics and Space Science, 1993, 202, 45-56.	1.4	3
59	Chaotic Asteroidal Dynamics and Maximum Lyapunov Exponents. Solar System Research, 2003, 37, 74-82.	0.7	3
60	Symbolic computation of the Birkhoff normal form in the problem of stability of the triangular libration points. Computer Physics Communications, 2008, 178, 665-672.	7.5	3
61	On reverberation and cross-correlation estimates of the size of the broad-line region in active galactic nuclei. Monthly Notices of the Royal Astronomical Society, 2008, 389, 478-488.	4.4	3
62	The Separatrix Algorithmic Map: Application to the Spin-Orbit Motion. , 1999, , 259-268.		3
63	Algorithms of numeric deduction of analytical expressions. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 1993, 27, 1-3.	0.3	2
64	Chaotic Dynamics of Satellite Systems. Solar System Research, 2005, 39, 322-332.	0.7	2
65	Orbital resonances in exoplanetary systems. Journal of Physics: Conference Series, 2014, 572, 012006.	0.4	2
66	Massive evaluation and analysis of Poincaré recurrences on grids of initial data: A tool to map chaotic diffusion. Computer Physics Communications, 2020, 246, 106868.	7.5	2
67	Rapid spectral variability of active nuclei of galaxies. Amplitudes of variations in lines. Astrofizika, 1988, 28, 35-42.	0.0	1
68	Numeric Deduction in Symbolic Computation. Application to Normalizing Transformations. Journal of Symbolic Computation, 1997, 24, 103-111.	0.8	1
69	Sungrazing Comets. Astrophysics and Space Science Library, 2017, , 105-115.	2.7	1
70	Optical variability and radio structure of extragalactic sources. Evidence of recurrent activity. Astrofizika, 1982, 18, 150-156.	0.0	0
71	Stages of evolution and extended radio structures of active nuclei of galaxies. Astrofizika, 1984, 20, 297-302.	0.0	0
72	The Amplitude-Time Lag Relation for Emission-Line Flares of AGN. Symposium - International Astronomical Union, 1994, 159, 173-176.	0.1	0

#	ARTICLE	IF	CITATIONS
73	The Separatrix Algorithmic Map: Application to The Spin-Orbit Motion. International Astronomical Union Colloquium, 1999, 172, 259-268.	0.1	0
74	On The Critical Phenomena in The Dynamics of Asteroids. International Astronomical Union Colloquium, 1999, 172, 383-386.	0.1	0
75	The "œstill point" cosmology. Symposium - International Astronomical Union, 2005, 201, 514-515.	0.1	0
76	On BLR Size Estimates in Reverberation Models. Proceedings of the International Astronomical Union, 2009, 5, 209-209.	0.0	0
77	How do the small planetary satellites rotate?. Proceedings of the International Astronomical Union, 2009, 5, 167-170.	0.0	0
78	The XXVII general assembly of the IAU: The central event of the international year of astronomy. Solar System Research, 2010, 44, 348-353.	0.7	0
79	Planetary Dynamics in the $\hat{1}\pm$ Centauri System: Lyapunov Spectra and Long-term Behaviour. Proceedings of the International Astronomical Union, 2011, 7, 450-451.	0.0	0
80	International forum "œAsteroids, Comets, Meteors 2012"œ. Solar System Research, 2013, 47, 141-145.	0.7	0
81	Dynamical Essence and Historical Background. Astrophysics and Space Science Library, 2017, , 1-11.	2.7	0
82	Averaging and Normalization in Celestial Mechanics. Astrophysics and Space Science Library, 2017, , 13-26.	2.7	0
83	Classical Results. Astrophysics and Space Science Library, 2017, , 27-56.	2.7	0
84	The Theory Advances. Astrophysics and Space Science Library, 2017, , 57-89.	2.7	0
85	Asteroids and Kuiper Belt Objects in Inclined Orbits. Astrophysics and Space Science Library, 2017, , 117-137.	2.7	0
86	The Role in Sculpting Exoplanetary Systems. Astrophysics and Space Science Library, 2017, , 139-159.	2.7	0
87	Applications in Stellar Dynamics. Astrophysics and Space Science Library, 2017, , 161-169.	2.7	0
88	Dynamical environments of MU69: a state of chaotic clearing. Proceedings of the International Astronomical Union, 2018, 14, 227-229.	0.0	0
89	Resonant multi-lane patterns in circumbinary young debris disks. Proceedings of the International Astronomical Union, 2018, 14, 230-231.	0.0	0
90	General Assembly of the International Astronomical Union in Vienna: in the Lead-Up to the Centenary of the IAU. Solar System Research, 2019, 53, 146-150.	0.7	0

#	ARTICLE	IF	CITATIONS
91	Dynamical environments of relativistic binaries: The phenomenon of resonance shifting. <i>Physical Review D</i> , 2019, 100, .	4.7	0
92	Habitable worlds of merging stars. <i>International Journal of Astrobiology</i> , 2020, 19, 500-504.	1.6	0
93	Prometheus and Pandora, the champions of dynamical chaos. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2008, , 285-292.	0.3	0
94	Numerical Tools for Studies of Dynamical Chaos. <i>Astrophysics and Space Science Library</i> , 2020, , 35-51.	2.7	0
95	Planetary Systems of Multiple Stars. <i>Astrophysics and Space Science Library</i> , 2020, , 305-324.	2.7	0
96	Multiplanet Systems of Single Stars. <i>Astrophysics and Space Science Library</i> , 2020, , 291-303.	2.7	0
97	Effects of Chaotic Clearing in Planetary Systems. <i>Astrophysics and Space Science Library</i> , 2020, , 273-289.	2.7	0
98	Extents of Chaotic Domains. <i>Astrophysics and Space Science Library</i> , 2020, , 95-117.	2.7	0
99	Diffusion Timescales. <i>Astrophysics and Space Science Library</i> , 2020, , 77-94.	2.7	0
100	Planetary Architecture: Stability, Packing and Ranging. <i>Astrophysics and Space Science Library</i> , 2020, , 235-271.	2.7	0
101	Chaotic Behaviour. <i>Astrophysics and Space Science Library</i> , 2020, , 3-34.	2.7	0
102	Lyapunov Timescales. <i>Astrophysics and Space Science Library</i> , 2020, , 53-76.	2.7	0
103	Orbital Dynamics of Minor Bodies. <i>Astrophysics and Space Science Library</i> , 2020, , 147-208.	2.7	0
104	Rotational Dynamics. <i>Astrophysics and Space Science Library</i> , 2020, , 125-146.	2.7	0
105	The Lidovâ€™Kozai Effect: Chaotic Implications. <i>Astrophysics and Space Science Library</i> , 2020, , 325-331.	2.7	0
106	Exoplanets: An Overview. <i>Astrophysics and Space Science Library</i> , 2020, , 219-233.	2.7	0
107	Host Stars of Planets on the Hertzsprungâ€™Russell Diagram. <i>Astronomy Letters</i> , 2021, 47, 651-660.	1.0	0