Ivan I Shevchenko

List of Publications by Year
in descending order

107	1,127	430874	526287
papers	citations	18 h-index	27 g-index

110	110	110	361
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Revisiting the relation between the Lyapunov time and the instability time. Physica D: Nonlinear Phenomena, 2022, 430, 133101.	2.8	5
2	Dynamical environments of MU69 and similar objects. Icarus, 2021, 357, 114178.	2.5	6
3	Host Stars of Planets on the Hertzsprungâ€“Russell Diagram. Astronomy Letters, 2021, 47, 651-660.	1.0	0
4	Massive evaluation and analysis of PoincarÃ© recurrences on grids of initial data: A tool to map chaotic diffusion. Computer Physics Communications, 2020, 246, 106868.	7.5	2
5	Correlations in area preserving maps: A Shannon entropy approach. Physica D: Nonlinear Phenomena, 2020, 402, 132235.	2.8	8
6	Habitable worlds of merging stars. International Journal of Astrobiology, 2020, 19, 500-504.	1.6	0
7	Dynamical Chaos in Planetary Systems. Astrophysics and Space Science Library, 2020, , .	2.7	16
8	Numerical Tools for Studies of Dynamical Chaos. Astrophysics and Space Science Library, 2020, , 35-51.	2.7	0
9	Planetary Systems of Multiple Stars. Astrophysics and Space Science Library, 2020, , 305-324.	2.7	0
10	Multiplanet Systems of Single Stars. Astrophysics and Space Science Library, 2020, , 291-303.	2.7	0
11	Effects of Chaotic Clearing in Planetary Systems. Astrophysics and Space Science Library, 2020, , 273-289.	2.7	0
12	Extents of Chaotic Domains. Astrophysics and Space Science Library, 2020, , 95-117.	2.7	0
13	Diffusion Timescales. Astrophysics and Space Science Library, 2020, , 77-94.	2.7	0
14	Planetary Architecture: Stability, Packing and Ranging. Astrophysics and Space Science Library, 2020, , 235-271.	2.7	0
15	Chaotic Behaviour. Astrophysics and Space Science Library, 2020, , 3-34.	2.7	0
16	Lyapunov Timescales. Astrophysics and Space Science Library, 2020, , 53-76.	2.7	0
17	Orbital Dynamics of Minor Bodies. Astrophysics and Space Science Library, 2020, , 147-208.	2.7	0
18	Rotational Dynamics. Astrophysics and Space Science Library, 2020, , 125-146.	2.7	0

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19	The Lidovâ€“Kozai Effect: Chaotic Implications. Astrophysics and Space Science Library, 2020, , 325-331.	2.7	0
20	Exoplanets: An Overview. Astrophysics and Space Science Library, 2020, , 219-233.	2.7	0
21	Lyapunov and Clearing Timescales in Planetary Chaotic Zones. Astronomical Journal, 2020, 160, 212.	4.7	6
22	Long-Term Dynamics of Planetesimals in Planetary Chaotic Zones. Astronomy Letters, 2020, 46, 774-782.	1.0	6
23	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
24	Dynamical environments of relativistic binaries: The phenomenon of resonance shifting. Physical Review D, 2019, 100, .	4.7	0
25	Circumbinary Planetary Systems in the Solar Neighborhood: Stability and Habitability. Astronomy Letters, 2019, 45, 620-626.	1.0	5
26	Chaotic dynamics around cometary nuclei. Icarus, 2018, 307, 391-399.	2.5	17
27	Dynamical environments of MU69: a state of chaotic clearing. Proceedings of the International Astronomical Union, 2018, 14, 227-229.	0.0	0
28	Resonant multi-lane patterns in circumbinary young debris disks. Proceedings of the International Astronomical Union, 2018, 14, 230-231.	0.0	0
29	Tidal Decay of Circumbinary Planetary Systems. Astronomical Journal, 2018, 156, 52.	4.7	4
30	Simulations of the Dynamics of the Debris Disks in the Systems Kepler-16, Kepler-34, and Kepler-35. Astronomy Letters, 2018, 44, 119-125.	1.0	6
31	Kepler map. Scholarpedia Journal, 2018, 13, 33238.	0.3	5
32	Chaotic Zones around Rotating Small Bodies. Astronomical Journal, 2017, 153, 272.	4.7	15
33	Habitability Properties of Circumbinary Planets. Astronomical Journal, 2017, 153, 273.	4.7	32
34	Dynamical Essence and Historical Background. Astrophysics and Space Science Library, 2017, , 1-11.	2.7	0
35	Averaging and Normalization in Celestial Mechanics. Astrophysics and Space Science Library, 2017, , 13-26.	2.7	0
36	Classical Results. Astrophysics and Space Science Library, 2017, , 27-56.	2.7	0

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37	The Theory Advances. Astrophysics and Space Science Library, 2017, , 57-89.	2.7	0
38	Sungrazing Comets. Astrophysics and Space Science Library, 2017, , 105-115.	2.7	1
39	Asteroids and Kuiper Belt Objects in Inclined Orbits. Astrophysics and Space Science Library, 2017, , 117-137.	2.7	0
40	The Role in Sculpting Exoplanetary Systems. Astrophysics and Space Science Library, 2017, , 139-159.	2.7	0
41	Applications in Stellar Dynamics. Astrophysics and Space Science Library, 2017, , 161-169.	2.7	0
42	The Lidov-Kozai Effect - Applications in Exoplanet Research and Dynamical Astronomy. Astrophysics and Space Science Library, 2017, , .	2.7	71
43	Three-lane and multilane signatures of planets in planetesimal discs. Monthly Notices of the Royal Astronomical Society: Letters, 2016, 463, L22-L25.	3.3	39
44	On possible circumbinary configurations of the planetary systems of Î± Centauri and EZ Aquarii. Astronomy Letters, 2016, 42, 260-267.	1.0	28
45	On the stability of circumbinary planetary systems. Astronomy Letters, 2016, 42, 474-481.	1.0	32
46	CHAOTIC ZONES AROUND GRAVITATING BINARIES. Astrophysical Journal, 2015, 799, 8.	4.5	31
47	SPIRAL PATTERNS IN PLANETESIMAL CIRCUMBINARY DISKS. Astrophysical Journal, 2015, 805, 38.	4.5	37
48	Lyapunov exponents in resonance multiplets. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 34-42.	2.1	44
49	Stability of the multiple star system Î¹ UMa (ADS 7114). Astronomy Reports, 2014, 58, 640-649.	0.9	4
50	Orbital resonances in exoplanetary systems. Journal of Physics: Conference Series, 2014, 572, 012006.	0.4	2
51	International forum â€œAsteroids, Comets, Meteors 2012â€• Solar System Research, 2013, 47, 141-145.	0.7	0
52	Massive identification of asteroids in three-body resonances. Icarus, 2013, 222, 220-228.	2.5	27
53	The Lyapunov exponents in the dynamics of triple star systems. Astronomy Reports, 2013, 57, 429-439.	0.9	8
54	KEPLER-16b: SAFE IN A RESONANCE CELL. Astrophysical Journal, 2013, 769, 152.	4.5	51

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55	Planetary dynamics in the system Î± Centauri: The stability diagrams. Astronomy Letters, 2012, 38, 581-588.	1.0	37
56	Width of the chaotic layer: Maxima due to marginal resonances. Physical Review E, 2012, 85, 066202.	2.1	10
57	LYAPUNOV AND DIFFUSION TIMESCALES IN THE SOLAR NEIGHBORHOOD. Astrophysical Journal, 2011, 733, 39.	4.5	25
58	Planetary Dynamics in the Î± Centauri System: Lyapunov Spectra and Long-term Behaviour. Proceedings of the International Astronomical Union, 2011, 7, 450-451.	0.0	0
59	The Kepler map in the three-body problem. New Astronomy, 2011, 16, 94-99.	1.8	30
60	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
61	The rotation states predominant among the planetary satellites. Icarus, 2010, 209, 786-794.	2.5	26
62	The disruption of three-body gravitational systems: lifetime statistics. Monthly Notices of the Royal Astronomical Society, 2010, 408, 1623-1627.	4.4	13
63	Hamiltonian intermittency and LÃ©vy flights in the three-body problem. Physical Review E, 2010, 81, 066216.	2.1	33
64	On BLR Size Estimates in Reverberation Models. Proceedings of the International Astronomical Union, 2009, 5, 209-209.	0.0	0
65	How do the small planetary satellites rotate?. Proceedings of the International Astronomical Union, 2009, 5, 167-170.	0.0	0
66	On the rotational dynamics of Prometheus and Pandora. Celestial Mechanics and Dynamical Astronomy, 2008, 101, 31-47.	1.4	15
67	The width of a chaotic layer. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 808-816.	2.1	24
68	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
69	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
70	Prometheus and Pandora, the champions of dynamical chaos. Thirty Years of Astronomical Discovery With UKIRT, 2008, , 285-292.	0.3	0
71	The dynamical temperature and the standard map. Physica A: Statistical Mechanics and Its Applications, 2007, 386, 85-91.	2.6	6
72	Unusual rotation modes of minor planetary satellites. Solar System Research, 2007, 41, 483-491.	0.7	10

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73	On the Lyapunov exponents of the asteroidal motion subject to resonances and encounters. Proceedings of the International Astronomical Union, 2006, 2, 15-30.	0.0	5
74	The shapes and rotational dynamics of minor planetary satellites. Solar System Research, 2006, 40, 393-399.	0.7	8
75	Rotational dynamics of planetary satellites: A survey of regular and chaotic behavior. Icarus, 2005, 176, 224-234.	2.5	37
76	Chaotic Dynamics of Satellite Systems. Solar System Research, 2005, 39, 322-332.	0.7	2
77	The â€œstill pointâ€•cosmology. Symposium - International Astronomical Union, 2005, 201, 514-515.	0.1	0
78	On the maximum Lyapunov exponent of the motion in a chaotic layer. JETP Letters, 2004, 79, 523-528.	1.4	14
79	Isentropic perturbations of a chaotic domain. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 333, 408-414.	2.1	10
80	Chaotic Asteroidal Dynamics and Maximum Lyapunov Exponents. Solar System Research, 2003, 37, 74-82.	0.7	3
81	On the chaotic rotation of planetary satellites: The Lyapunov exponents and the energy. Astronomy and Astrophysics, 2003, 410, 749-757.	5.1	24
82	Lyapunov exponents in the HÃ©non-Heiles problem. JETP Letters, 2003, 77, 642-646.	1.4	22
83	On the chaotic rotation of planetary satellites: The Lyapunov spectra and the maximum Lyapunov exponents. Astronomy and Astrophysics, 2002, 394, 663-674.	5.1	43
84	Observations and Theoretical Analysis of Lightcurves of Natural Satellites of Planets. Solar System Research, 2002, 36, 248-259.	0.7	19
85	Maximum Lyapunov Exponents for Chaotic Rotation of Natural Planetary Satellites. Cosmic Research, 2002, 40, 296-304.	0.6	17
86	Geometry of a chaotic layer. Journal of Experimental and Theoretical Physics, 2000, 91, 615-625.	0.9	18
87	ORBITAL RESONANCES AND THE SEPARATRIX ALGORITHMIC MAP. Advanced Series in Astrophysics and Cosmology, 2000, , 599-608.	0.1	5
88	The Separatrix Algorithmic Map: Application to The Spin-Orbit Motion. International Astronomical Union Colloquium, 1999, 172, 259-268.	0.1	0
89	On The Critical Phenomena in The Dynamics of Asteroids. International Astronomical Union Colloquium, 1999, 172, 383-386.	0.1	0
90	The Separatrix Algorithmic Map: Application to the Spin-Orbit Motion. Celestial Mechanics and Dynamical Astronomy, 1999, 73, 259-268.	1.4	20

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91	On the Critical Phenomena in the Dynamics of Asteroids. , 1999, , 383-386.		5
92	The Separatrix Algorithmic Map: Application to the Spin-Orbit Motion. , 1999, , 259-268.		3
93	On the recurrence and Lyapunov time scales of the motion near the chaos border. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 241, 53-60.	2.1	35
94	Marginal Resonances and Intermittent Behaviour in the Motion in the Vicinity of a Separatrix. Physica Scripta, 1998, 57, 185-191.	2.5	34
95	Intermittent Trajectories in the 3/1 Jovian Resonance. Celestial Mechanics and Dynamical Astronomy, 1997, 68, 163-175.	1.4	13
96	Numeric Deduction in Symbolic Computation. Application to Normalizing Transformations. Journal of Symbolic Computation, 1997, 24, 103-111.	0.8	1
97	Chaotic asteroidal trajectories exhibiting multiple bursts of eccentricity: A statistical analysis. Symposium - International Astronomical Union, 1996, 172, 183-186.	0.1	4
98	Spectra of Winding Numbers of Chaotic Asteroidal Motion. , 1996, , 311-314.		5
99	Hyperboloidal precession of a dynamically symmetric satellite. Construction of normal forms of the Hamiltonian. Celestial Mechanics and Dynamical Astronomy, 1995, 62, 289-304.	1.4	5
100	The Amplitudeâ€“Time Lag Relation for Emission-Line Flares of AGN. Symposium - International Astronomical Union, 1994, 159, 173-176.	0.1	0
101	Algorithms for normalization of Hamiltonian systems by means of computer algebra. Computer Physics Communications, 1993, 77, 11-18.	7.5	9
102	On verification of the asymptotic model of the first kind. Astrophysics and Space Science, 1993, 202, 45-56.	1.4	3
103	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
104	Rapid spectral variability of active nuclei of galaxies. Amplitudes of variations in lines. Astrofizika, 1988, 28, 35-42.	0.0	1
105	Stages of evolution and extended radio structures of active nuclei of galaxies. Astrofizika, 1984, 20, 297-302.	0.0	0
106	Optical variability and radio structure of extragalactic sources. Evidence of recurrent activity. Astrofizika, 1982, 18, 150-156.	0.0	0
107	Adiabatic chaos in the Prometheus-Pandora system. Monthly Notices of the Royal Astronomical Society, 0, 384, 1211-1220.	4.4	15