

Maxim Lyutikov

List of Publications by Year in descending order

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82
papers

2,502
citations

201674

27
h-index

206112

48
g-index

84
all docs

84
docs citations

84
times ranked

2904
citing authors

#	ARTICLE	IF	CITATIONS
1	Explosive reconnection in magnetars. Monthly Notices of the Royal Astronomical Society, 2003, 346, 540-554.	4.4	196
2	Radio and X-ray signatures of merging neutron stars. Monthly Notices of the Royal Astronomical Society, 2001, 322, 695-701.	4.4	176
3	Relativistic Spin Precession in the Double Pulsar. Science, 2008, 321, 104-107.	12.6	152
4	Magnetar giant flares and afterglows as relativistic magnetized explosions. Monthly Notices of the Royal Astronomical Society, 2006, 367, 1594-1602.	4.4	141
5	Dynamics of Relativistic Reconnection. Astrophysical Journal, 2003, 589, 893-901.	4.5	110
6	Fast radio bursts as giant pulses from young rapidly rotating pulsars. Monthly Notices of the Royal Astronomical Society, 2016, 462, 941-950.	4.4	104
7	GRB 170817A Associated with GW170817: Multi-frequency Observations and Modeling of Prompt Gamma-Ray Emission. Astrophysical Journal Letters, 2018, 852, L30.	8.3	89
8	On the nature of pulsar radio emission. Monthly Notices of the Royal Astronomical Society, 1999, 305, 338-352.	4.4	86
9	FRB Periodicity: Mild Pulsars in Tight O/B-star Binaries. Astrophysical Journal Letters, 2020, 893, L39.	8.3	85
10	On the origin of variable gamma-ray emission from the Crab nebula. Monthly Notices of the Royal Astronomical Society, 2011, 414, 2017-2028.	4.4	74
11	Radio Emission from Magnetars. Astrophysical Journal, 2002, 580, L65-L68.	4.5	68
12	Cherenkov Curvature Radiation and Pulsar Radio Emission Generation. Astrophysical Journal, 1999, 512, 804-826.	4.5	50
13	THE VERY HIGH ENERGY EMISSION FROM PULSARS: A CASE FOR INVERSE COMPTON SCATTERING. Astrophysical Journal, 2012, 754, 33.	4.5	50
14	Fast Radio Bursts' Emission Mechanism: Implication from Localization. Astrophysical Journal Letters, 2017, 838, L13.	8.3	50
15	Electromagnetic power of merging and collapsing compact objects. Physical Review D, 2011, 83, .	4.7	49
16	On generation of Crab giant pulses. Monthly Notices of the Royal Astronomical Society, 0, 381, 1190-1196.	4.4	46
17	On the dynamics of mechanical failures in magnetized neutron star crusts. Monthly Notices of the Royal Astronomical Society, 2012, 427, 1574-1579.	4.4	40
18	Fast-rising blue optical transients and AT2018cow following electron-capture collapse of merged white dwarfs. Monthly Notices of the Royal Astronomical Society, 2019, 487, 5618-5629.	4.4	40

#	ARTICLE	IF	CITATIONS
19	Slowly balding black holes. <i>Physical Review D</i> , 2011, 84, .	4.7	39
20	Particle acceleration in explosive relativistic reconnection events and Crab Nebula gamma-ray flares. <i>Journal of Plasma Physics</i> , 2018, 84, .	2.1	38
21	Waves in a one-dimensional magnetized relativistic pair plasma. <i>Monthly Notices of the Royal Astronomical Society</i> , 1998, 293, 447-468.	4.4	36
22	3D dynamics and morphology of bow-shock pulsar wind nebulae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 484, 4760-4784.	4.4	35
23	Crab GeV flares from the corrugated termination shock. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 422, 3118-3129.	4.4	33
24	Particle acceleration in relativistic magnetic flux-merging events. <i>Journal of Plasma Physics</i> , 2017, 83, .	2.1	32
25	Radius-to-frequency Mapping and FRB Frequency Drifts. <i>Astrophysical Journal</i> , 2020, 889, 135.	4.5	32
26	Magnetar activity mediated by plastic deformations of neutron star crust. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 447, 1407-1417.	4.4	31
27	Polarization swings in blazars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 467, 3876-3886.	4.4	29
28	Coherent Emission in Pulsars, Magnetars, and Fast Radio Bursts: Reconnection-driven Free Electron Laser. <i>Astrophysical Journal</i> , 2021, 922, 166.	4.5	29
29	Interpreting Crab Nebula's synchrotron spectrum: two acceleration mechanisms. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 2403-2416.	4.4	27
30	THE ELECTROMAGNETIC MODEL OF SHORT GRBs, THE NATURE OF PROMPT TAILS, SUPERNOVA-LESS LONG GRBs, AND HIGHLY EFFICIENT EPISODIC ACCRETION. <i>Astrophysical Journal</i> , 2013, 768, 63.	4.5	26
31	Magnetar-like X-Ray Bursts Suppress Pulsar Radio Emission. <i>Astrophysical Journal Letters</i> , 2017, 849, L20.	8.3	26
32	Kinetic "jets" from fast-moving pulsars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 2041-2053.	4.4	26
33	Magnetar activity via the density-shear instability in Hall-MHD. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2015, 453, L93-L97.	3.3	22
34	HOW ELSE CAN WE DETECT FAST RADIO BURSTS?. <i>Astrophysical Journal Letters</i> , 2016, 824, L18.	8.3	22
35	Inductive acceleration of UHECRs in sheared relativistic jets. <i>Astroparticle Physics</i> , 2007, 27, 473-489.	4.3	21
36	The inner knot of the Crab nebula. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 286-299.	4.4	21

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37	Magnetocentrifugal launching of jets from discs around Kerr black holes. Monthly Notices of the Royal Astronomical Society, 2009, 396, 1545-1552.	4.4	20
38	Stationary relativistic jets. Computational Astrophysics and Cosmology, 2015, 2, 9.	22.7	20
39	Electrodynamics of binary neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2019, 483, 2766-2777.	4.4	20
40	Explosive X-point collapse in relativistic magnetically dominated plasma. Journal of Plasma Physics, 2017, 83, .	2.1	18
41	A high-sigma model of pulsar wind nebulae. Monthly Notices of the Royal Astronomical Society, 2010, , no-no.	4.4	17
42	On the linear stability of sheared and magnetized jets without current sheets “ relativistic case. Monthly Notices of the Royal Astronomical Society, 2018, 474, 3954-3966.	4.4	17
43	Beam instabilities in a magnetized pair plasma. Journal of Plasma Physics, 1999, 62, 65-86.	2.1	16
44	Structure of magnetic fields in intracluster cavities. Monthly Notices of the Royal Astronomical Society, 2010, 409, 1660-1668.	4.4	16
45	Driving the Beat: Time-resolved Spectra of the White Dwarf Pulsar AR Scorpii. Astrophysical Journal, 2019, 872, 67.	4.5	16
46	On the linear stability of magnetized jets without current sheets “ relativistic case. Monthly Notices of the Royal Astronomical Society, 2017, 467, 4647-4662.	4.4	15
47	Electron magnetohydrodynamics: Dynamics and turbulence. Physical Review E, 2013, 88, 053103.	2.1	14
48	Topics in Microphysics of Relativistic Plasmas. Space Science Reviews, 2013, 178, 459-481.	8.1	13
49	On the nature of radio filaments near the Galactic Centre. Monthly Notices of the Royal Astronomical Society: Letters, 2019, 489, L28-L31.	3.3	13
50	Resolving the Emission Regions of the Crab Pulsar’s Giant Pulses. Astrophysical Journal, 2021, 915, 65.	4.5	13
51	Radio emission region exposed: courtesy of the double pulsar. Monthly Notices of the Royal Astronomical Society, 2014, 441, 690-714.	4.4	10
52	On the linear stability of sheared and magnetized jets without current sheets “ non-relativistic case. Monthly Notices of the Royal Astronomical Society, 2016, 461, 728-741.	4.4	10
53	Coronal Mass Ejections as Expanding Force-Free Structures. Solar Physics, 2011, 270, 537-549.	2.5	9
54	Early GRB Afterglows from Reverse Shocks in Ultra-relativistic, Long-lasting Winds. Astrophysical Journal, 2017, 835, 206.	4.5	9

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55	Turbulent Model of Crab Nebula Radiation. <i>Astrophysical Journal</i> , 2020, 896, 147.	4.5	9
56	Peeking Between the Pulses: The Far-UV Spectrum of the Previously Unseen White Dwarf in AR Scorpii. <i>Astrophysical Journal</i> , 2021, 908, 195.	4.5	9
57	Magnetic Topology in Coupled Binaries, Spin-orbital Resonances, and Flares. <i>Astrophysical Journal</i> , 2021, 923, 13.	4.5	8
58	On the nature of fast blue optical transients. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 515, 2293-2304.	4.4	8
59	Double explosions and jet formation in gamma-ray burst-supernova progenitors. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 411, 2054-2058.	4.4	7
60	Conditions for jet breakout in neutron starsâ€™ mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 483-487.	4.4	7
61	Magnetic loading of magnetarsâ€™ flares. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 2689-2695.	4.4	6
62	Induced Raman scattering in pulsar magnetospheres. <i>Monthly Notices of the Royal Astronomical Society</i> , 1998, 298, 1198-1206.	4.4	5
63	Ultra-relativistic double explosions. <i>Physics of Fluids</i> , 2017, 29, .	4.0	5
64	Tilting instability of magnetically confined spheromaks. <i>Journal of Plasma Physics</i> , 2020, 86, .	2.1	5
65	Dynamics and Emission of Wind-powered Afterglows of Gamma-Ray Bursts: Flares, Plateaus, and Steep Decays. <i>Astrophysical Journal</i> , 2021, 907, 109.	4.5	5
66	Nonlinear self-focusing in strongly magnetized pair plasma. <i>Physical Review E</i> , 2020, 102, 013211.	2.1	4
67	Faraday Conversion in Pair-symmetric Winds of Magnetars and Fast Radio Bursts. <i>Astrophysical Journal Letters</i> , 2022, 933, L6.	8.3	4
68	On the sideways expansion of relativistic non-spherical shocks and gamma-ray burst afterglows. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, , no-no.	4.4	3
69	Rotation of polarization by a moving gravitational lens. <i>Physical Review D</i> , 2017, 95, .	4.7	3
70	Brightness Temperature Constraints on Coherent Processes in Magnetospheres of Neutron Stars. <i>Astrophysical Journal Letters</i> , 2021, 918, L11.	8.3	3
71	Structure of cosmic ray-modified perpendicular shocks. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 407, 1721-1727.	4.4	2
72	Inverse Compton origin of pulsar γ -ray emission and the reconnection model of Crab Nebula flares. <i>Astronomische Nachrichten</i> , 2014, 335, 227-233.	1.2	2

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73	Radiation- and pair-loaded shocks. Monthly Notices of the Royal Astronomical Society, 2018, 477, 816-829.	4.4	2
74	Fast-moving pulsars as probes of interstellar medium. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2605-2615.	4.4	2
75	Radio afterglow of magnetars's giant flares. Monthly Notices of the Royal Astronomical Society, 2021, 506, 6093-6110.	4.4	2
76	Rotating neutron stars without light cylinders. Monthly Notices of the Royal Astronomical Society, 2022, 513, 1947-1957.	4.4	2
77	Magnetic fields in $\hat{1}^3$ -ray bursts. Nature, 2013, 504, 92-93.	27.8	1
78	Nonlinear force-free configurations in cylindrical geometry. Journal of Plasma Physics, 2020, 86, .	2.1	1
79	The Electromagnetic Model of Gamma ray Bursts. AIP Conference Proceedings, 2006, , .	0.4	0
80	Magnetism in a cosmic blast. Nature, 2009, 462, 728-729.	27.8	0
81	Emission Knots and Polarization Swings of Swinging Jets. Galaxies, 2016, 4, 75.	3.0	0
82	Topics in Microphysics of Relativistic Plasmas. Space Sciences Series of ISSI, 2013, , 383-405.	0.0	0