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	Rotating neutron stars without light cylinders. Monthly Notices of the Royal Astronomical Society, 2022, 513, 1947-1957.	4.4	2
2	On the nature of fast blue optical transients. Monthly Notices of the Royal Astronomical Society, 2022, 515, 2293-2304.	4.4	8
3	Faraday Conversion in Pair-symmetric Winds of Magnetars and Fast Radio Bursts. Astrophysical Journal Letters, 2022, 933, L6.	8.3	4
4	Dynamics and Emission of Wind-powered Afterglows of Gamma-Ray Bursts: Flares, Plateaus, and Steep Decays. Astrophysical Journal, 2021, 907, 109.	4.5	5
5	Peeking Between the Pulses: The Far-UV Spectrum of the Previously Unseen White Dwarf in AR Scorpii. Astrophysical Journal, 2021, 908, 195.	4.5	9
6	Radio afterglow of magnetars' giant flares. Monthly Notices of the Royal Astronomical Society, 2021, 506, 6093-6110.	4.4	2
7	Resolving the Emission Regions of the Crab Pulsar's Giant Pulses. Astrophysical Journal, 2021, 915, 65.	4.5	13
8	Brightness Temperature Constraints on Coherent Processes in Magnetospheres of Neutron Stars. Astrophysical Journal Letters, 2021, 918, L11.	8.3	3
9	Magnetic loading of magnetars' flares. Monthly Notices of the Royal Astronomical Society, 2021, 509, 2689-2695.	4.4	6
10	Coherent Emission in Pulsars, Magnetars, and Fast Radio Bursts: Reconnection-driven Free Electron Laser. Astrophysical Journal, 2021, 922, 166.	4.5	29
11	Magnetic Topology in Coupled Binaries, Spin-orbital Resonances, and Flares. Astrophysical Journal, 2021, 923, 13.	4.5	8
12	Conditions for jet breakout in neutron stars' mergers. Monthly Notices of the Royal Astronomical Society, 2020, 491, 483-487.	4.4	7
13	Fast-moving pulsars as probes of interstellar medium. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2605-2615.	4.4	2
14	Nonlinear self-focusing in strongly magnetized pair plasma. Physical Review E, 2020, 102, 013211.	2.1	4
15	Tilting instability of magnetically confined spheromaks. Journal of Plasma Physics, 2020, 86, .	2.1	5
16	FRB Periodicity: Mild Pulsars in Tight O/B-star Binaries. Astrophysical Journal Letters, 2020, 893, L39.	8.3	85
17	Nonlinear force-free configurations in cylindrical geometry. Journal of Plasma Physics, 2020, 86, .	2.1	1
18	Radius-to-frequency Mapping and FRB Frequency Drifts. Astrophysical Journal, 2020, 889, 135.	4.5	32

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19	Turbulent Model of Crab Nebula Radiation. Astrophysical Journal, 2020, 896, 147.	4.5	9
20	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
21	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
22	Interpreting Crab Nebula's synchrotron spectrum: two acceleration mechanisms. Monthly Notices of the Royal Astronomical Society, 2019, 489, 2403-2416.	4.4	27
23	Driving the Beat: Time-resolved Spectra of the White Dwarf Pulsar AR Scorpii. Astrophysical Journal, 2019, 872, 67.	4.5	16
24	Kinetic â€~jets' from fast-moving pulsars. Monthly Notices of the Royal Astronomical Society, 2019, 485, 2041-2053.	4.4	26
25	3D dynamics and morphology of bow-shock pulsar wind nebulae. Monthly Notices of the Royal Astronomical Society, 2019, 484, 4760-4784.	4.4	35
26	Electrodynamics of binary neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2019, 483, 2766-2777.	4.4	20
27	Particle acceleration in explosive relativistic reconnection events and Crab Nebula gamma-ray flares. Journal of Plasma Physics, 2018, 84, .	2.1	38
28	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
29	GRB 170817A Associated with GW170817: Multi-frequency Observations and Modeling of Prompt Gamma-Ray Emission. Astrophysical Journal Letters, 2018, 852, L30.	8.3	89
30	Radiation- and pair-loaded shocks. Monthly Notices of the Royal Astronomical Society, 2018, 477, 816-829.	4.4	2
31	Ultra-relativistic double explosions. Physics of Fluids, 2017, 29, .	4.0	5
32	Fast Radio Bursts' Emission Mechanism: Implication from Localization. Astrophysical Journal Letters, 2017, 838, L13.	8.3	50
33	Polarization swings in blazars. Monthly Notices of the Royal Astronomical Society, 2017, 467, 3876-3886.	4.4	29
34	Rotation of polarization by a moving gravitational lens. Physical Review D, 2017, 95, .	4.7	3
35	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
36	Early GRB Afterglows from Reverse Shocks in Ultra-relativistic, Long-lasting Winds. Astrophysical Journal, 2017, 835, 206.	4. 5	9

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37	Magnetar-like X-Ray Bursts Suppress Pulsar Radio Emission. Astrophysical Journal Letters, 2017, 849, L20.	8.3	26
38	Explosive X-point collapse in relativistic magnetically dominated plasma. Journal of Plasma Physics, 2017, 83, .	2.1	18
39	Particle acceleration in relativistic magnetic flux-merging events. Journal of Plasma Physics, 2017, 83, .	2.1	32
40	Emission Knots and Polarization Swings of Swinging Jets. Galaxies, 2016, 4, 75.	3.0	0
41	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
42	HOW ELSE CAN WE DETECT FAST RADIO BURSTS?. Astrophysical Journal Letters, 2016, 824, L18.	8.3	22
43	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
44	The inner knot of the Crab nebula. Monthly Notices of the Royal Astronomical Society, 2016, 456, 286-299.	4.4	21
45	Magnetar activity via the density–shear instability in Hall-MHD. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 453, L93-L97.	3.3	22
46	Stationary relativistic jets. Computational Astrophysics and Cosmology, 2015, 2, 9.	22.7	20
47	Magnetar activity mediated by plastic deformations of neutron star crust. Monthly Notices of the Royal Astronomical Society, 2015, 447, 1407-1417.	4.4	31
48	Radio emission region exposed: courtesy of the double pulsar. Monthly Notices of the Royal Astronomical Society, 2014, 441, 690-714.	4.4	10
49	Inverse Compton origin of pulsar $\langle i \rangle \hat{i}^3 \langle i \rangle$ aeray emission and the reconnection model of Crab Nebula flares. Astronomische Nachrichten, 2014, 335, 227-233.	1.2	2
50	Topics in Microphysics of Relativistic Plasmas. Space Science Reviews, 2013, 178, 459-481.	8.1	13
51	Electron magnetohydrodynamics: Dynamics and turbulence. Physical Review E, 2013, 88, 053103.	2.1	14
52	Magnetic fields in \hat{I}^3 -ray bursts. Nature, 2013, 504, 92-93.	27.8	1
53	THE ELECTROMAGNETIC MODEL OF SHORT GRBs, THE NATURE OF PROMPT TAILS, SUPERNOVA-LESS LONG GRBs, AND HIGHLY EFFICIENT EPISODIC ACCRETION. Astrophysical Journal, 2013, 768, 63.	4.5	26
54	Topics in Microphysics of Relativistic Plasmas. Space Sciences Series of ISSI, 2013, , 383-405.	0.0	0

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55	THE VERY HIGH ENERGY EMISSION FROM PULSARS: A CASE FOR INVERSE COMPTON SCATTERING. Astrophysical Journal, 2012, 754, 33.	4.5	50
56	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
57	On the sideways expansion of relativistic non-spherical shocks and gamma-ray burst afterglows. Monthly Notices of the Royal Astronomical Society, 2012, , no-no.	4.4	3
58	Crab GeV flares from the corrugated termination shock. Monthly Notices of the Royal Astronomical Society, 2012, 422, 3118-3129.	4.4	33
59	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
60	Double explosions and jet formation in gamma-ray burst-supernova progenitors. Monthly Notices of the Royal Astronomical Society, 2011, 411, 2054-2058.	4.4	7
61	Coronal Mass Ejections as Expanding Force-Free Structures. Solar Physics, 2011, 270, 537-549.	2.5	9
62	Slowly balding black holes. Physical Review D, 2011, 84, .	4.7	39
63	Electromagnetic power of merging and collapsing compact objects. Physical Review D, 2011, 83, .	4.7	49
64	Structure of magnetic fields in intracluster cavities. Monthly Notices of the Royal Astronomical Society, 2010, 409, 1660-1668.	4.4	16
65	A high-sigma model of pulsar wind nebulae. Monthly Notices of the Royal Astronomical Society, 2010, , no-no.	4.4	17
66	Structure of cosmic ray-modified perpendicular shocks. Monthly Notices of the Royal Astronomical Society, 2010, 407, 1721-1727.	4.4	2
67	Magnetocentrifugal launching of jets from discs around Kerr black holes. Monthly Notices of the Royal Astronomical Society, 2009, 396, 1545-1552.	4.4	20
68	Magnetism in a cosmic blast. Nature, 2009, 462, 728-729.	27.8	0
69	Relativistic Spin Precession in the Double Pulsar. Science, 2008, 321, 104-107.	12.6	152
70	Inductive acceleration of UHECRs in sheared relativistic jets. Astroparticle Physics, 2007, 27, 473-489.	4.3	21
71	Magnetar giant flares and afterglows as relativistic magnetized explosions. Monthly Notices of the Royal Astronomical Society, 2006, 367, 1594-1602.	4.4	141
72	The Electromagnetic Model of Gamma ray Bursts. AIP Conference Proceedings, 2006, , .	0.4	0

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73	Explosive reconnection in magnetars. Monthly Notices of the Royal Astronomical Society, 2003, 346, 540-554.	4.4	196
74	Dynamics of Relativistic Reconnection. Astrophysical Journal, 2003, 589, 893-901.	4.5	110
75	Radio Emission from Magnetars. Astrophysical Journal, 2002, 580, L65-L68.	4.5	68
76	Radio and X-ray signatures of merging neutron stars. Monthly Notices of the Royal Astronomical Society, 2001, 322, 695-701.	4.4	176
77	On the nature of pulsar radio emission. Monthly Notices of the Royal Astronomical Society, 1999, 305, 338-352.	4.4	86
78	Cherenkovâ€Curvature Radiation and Pulsar Radio Emission Generation. Astrophysical Journal, 1999, 512, 804-826.	4.5	50
79	Beam instabilities in a magnetized pair plasma. Journal of Plasma Physics, 1999, 62, 65-86.	2.1	16
80	Waves in a one-dimensional magnetized relativistic pair plasma. Monthly Notices of the Royal Astronomical Society, 1998, 293, 447-468.	4.4	36
81	Induced Raman scattering in pulsar magnetospheres. Monthly Notices of the Royal Astronomical Society, 1998, 298, 1198-1206.	4.4	5
82	On generation of Crab giant pulses. Monthly Notices of the Royal Astronomical Society, 0, 381, 1190-1196.	4.4	46