Rodrigo Fernandez

List of Publications by Year
in descending order

48 papers	3,477 citations	136940 32 h-index	223791 46 g-index
49 all docs	49 docs citations	49 times ranked	2994 citing authors

#	Article	IF	Citations
1	Long-term 3D MHD simulations of black hole accretion discs formed in neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2022, 513, 2689-2707.	4.4	18
2	The impact of r-process heating on the dynamics of neutron star merger accretion disc winds and their electromagnetic radiation. Monthly Notices of the Royal Astronomical Society, 2022, 510, 2968-2979.	4.4	11
3	Probing magnetar emission mechanisms with X-ray spectropolarimetry. Monthly Notices of the Royal Astronomical Society, 2022, 514, 5024-5034.	4.4	8
4	Reconstructing Masses of Merging Neutron Stars from Stellar r-process Abundance Signatures. Astrophysical Journal, 2021, 909, 21.	4.5	13
5	Mass Ejection in Failed Supernovae: Equation of State and Neutrino Loss Dependence. Astrophysical Journal, 2021, 911, 6.	4.5	20
6	From Neutrino- to Photon-cooled in Three Years: Can Fallback Accretion Explain the X-Ray Excess in GW170817?. Astrophysical Journal Letters, 2021, 916, L3.	8.3	16
7	Resolving the Fastest Ejecta from Binary Neutron Star Mergers: Implications for Electromagnetic Counterparts. Astrophysical Journal, 2021, 921, 161.	4.5	11
8	The Challenges Ahead for Multimessenger Analyses of Gravitational Waves and Kilonova: A Case Study on GW190425. Astrophysical Journal, 2021, 922, 269.	4.5	35
9	The landscape of disc outflows from black holeâ€“neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2020, 497, 3221-3233.	4.4	51
10	A Deep CFHT Optical Search for a Counterpart to the Possible Neutron Starâ€“Black Hole Merger GW190814. Astrophysical Journal, 2020, 895, 96.	4.5	40
11	Nuclear-dominated accretion flows in two dimensions â€“ II. Ejecta dynamics and nucleosynthesis for CO and ONe white dwarfs. Monthly Notices of the Royal Astronomical Society, 2019, 488, 259-279.	4.4	28
12	The role of magnetic field geometry in the evolution of neutron star merger accretion discs. Monthly Notices of the Royal Astronomical Society, 2019, 490, 4811-4825.	4.4	102
13	Long-term GRMHD simulations of neutron star merger accretion discs: implications for electromagnetic counterparts. Monthly Notices of the Royal Astronomical Society, 2019, 482, 3373-3393.	4.4	207
14	Mass ejection in failed supernovae: variation with stellar progenitor. Monthly Notices of the Royal Astronomical Society, 2018, 476, 2366-2383.	4.4	76
15	A physical model of mass ejection in failed supernovae. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1225-1238.	4.4	27
16	Subphotospheric fluctuations in magnetized radiative envelopes: contribution from unstable magnetosonic waves. Monthly Notices of the Royal Astronomical Society, 2018, 477, 2286-2297.	4.4	1
17	Hypermassive Neutron Star Disk Outflows and Blue Kilonovae. Astrophysical Journal Letters, 2018, 869, L3.	8.3	39
18	Signatures of hypermassive neutron star lifetimes on r-process nucleosynthesis in the disc ejecta from neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2017, 472, 904-918.	4.4	152

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19	Dynamics, nucleosynthesis, and kilonova signature of black holeâ€"neutron star merger ejecta. Classical and Quantum Gravity, 2017, 34, 154001.	4.0	82
20	Electromagnetic Signatures of Neutron Star Mergers in the Advanced LIGO Era. Annual Review of Nuclear and Particle Science, 2016, 66, 23-45.	10.2	162
21	Production of the entire range ofr-process nuclides by black hole accretion disc outflows from neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2016, 463, 2323-2334.	4.4	147
22	Super-Eddington stellar winds driven by near-surface energy deposition. Monthly Notices of the Royal Astronomical Society, 2016, 458, 1214-1233.	4.4	76
23	X-ray polarimetry with the Polarization Spectroscopic Telescope Array (PolSTAR). Astroparticle Physics, 2016, 75, 8-28.	4.3	42
24	Three-dimensional simulations of SASI- and convection-dominated core-collapse supernovae. Monthly Notices of the Royal Astronomical Society, 2015, 452, 2071-2086.	4.4	60
25	MONTE CARLO NEUTRINO TRANSPORT THROUGH REMNANT DISKS FROM NEUTRON STAR MERGERS. Astrophysical Journal, 2015, 813, 38.	4.5	49
26	The interplay of disc wind and dynamical ejecta in the aftermath of neutron starâ€"black hole mergers. Monthly Notices of the Royal Astronomical Society, 2015, 449, 390-402.	4.4	75
27	Outflows from accretion discs formed in neutron star mergers: effect of black hole spin. Monthly Notices of the Royal Astronomical Society, 2015, 446, 750-758.	4.4	115
28	Kilonova light curves from the disc wind outflows of compact object mergers. Monthly Notices of the Royal Astronomical Society, 2015, 450, 1777-1786.	4.4	264
29	Red or blue? A potential kilonova imprint of the delay until black hole formation following a neutron star merger. Monthly Notices of the Royal Astronomical Society, 2014, 441, 3444-3453.	4.4	320
30	Characterizing SASI- and convection-dominated core-collapse supernova explosions in two dimensions. Monthly Notices of the Royal Astronomical Society, 2014, 440, 2763-2780.	4.4	57
31	Delayed outflows from black hole accretion tori following neutron star binary coalescence. Monthly Notices of the Royal Astronomical Society, 2013, 435, 502-517.	4.4	285
32	HEAD-ON COLLISIONS OF WHITE DWARFS IN TRIPLE SYSTEMS COULD EXPLAIN TYPE Ia SUPERNOVAE. Astrophysical Journal Letters, 2013, 778, L37.	8.3	219
33	NONLINEAR EVOLUTION OF THE RADIATION-DRIVEN MAGNETO-ACOUSTIC INSTABILITY. Astrophysical Journal, 2013, 767, 144.	4.5	4
34	NUCLEAR DOMINATED ACCRETION FLOWS IN TWO DIMENSIONS. I. TORUS EVOLUTION WITH PARAMETRIC MICROPHYSICS. Astrophysical Journal, 2013, 763, 108.	4.5	55
35	HYDRODYNAMICS OF CORE-COLLAPSE SUPERNOVAE AT THE TRANSITION TO EXPLOSION. I. SPHERICAL SYMMETRY. Astrophysical Journal, 2012, 749, 142.	4.5	57
36	THE X-RAY POLARIZATION SIGNATURE OF QUIESCENT MAGNETARS: EFFECT OF MAGNETOSPHERIC SCATTERING AND VACUUM POLARIZATION. Astrophysical Journal, 2011, 730, 131.	4.5	42

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37	THE SPIRAL MODES OF THE STANDING ACCRETION SHOCK INSTABILITY. Astrophysical Journal, 2010, 725, 1563-1580.	4.5	94
38	DYNAMICS OF A SPHERICAL ACCRETION SHOCK WITH NEUTRINO HEATING AND ALPHA-PARTICLE RECOMBINATION. Astrophysical Journal, 2009, 703, 1464-1485.	4.5	57
39	STABILITY OF A SPHERICAL ACCRETION SHOCK WITH NUCLEAR DISSOCIATION. Astrophysical Journal, 2009, 697, 1827-1841.	4.5	57
40	Constraining a possible time-variation of the gravitational constant through â€œgravitochemical heatingâ€•of neutron stars. Proceedings of the International Astronomical Union, 2009, 5, 314-314.	0.0	2
41	Multidimensional Resonant Cyclotron Scattering and the Quiescent X-ray Emission from Magnetars. AIP Conference Proceedings, 2008, , .	0.4	0
42	Resonant Cyclotron Scattering in Three Dimensions and the Quiescent Nonthermal Xâ€•ray Emission of Magnetars. Astrophysical Journal, 2007, 660, 615-640.	4.5	101
43	Internal heating and thermal emission from old neutron stars. Astrophysics and Space Science, 2007, 308, 413-418.	1.4	3
44	Braking the Gas in the Î² Pictoris Disk. Astrophysical Journal, 2006, 643, 509-522.	4.5	72
45	Rotochemical Heating of Neutron Stars: Rigorous Formalism with Electrostatic Potential Perturbations. Astrophysical Journal, 2006, 653, 568-572.	4.5	14
46	Constraining a Possible Time Variation of the Gravitational Constant through â€œGravitochemical Heatingâ€•of Neutron Stars. Physical Review Letters, 2006, 97, 131102.	7.8	44
47	Rotochemical Heating in Millisecond Pulsars: Formalism and Nonsuperfluid Case. Astrophysical Journal, 2005, 625, 291-306.	4.5	57
48	Proper Motion and Kinematics of the Ansae in NGC 7009. Astrophysical Journal, 2004, 603, 595-598.	4.5	10