Zachariah B Etienne

List of Publications by Year in Descending Order

42 papers	1,784 citations	23 h-index	42 g-index
45 ext. papers	2,089 ext. citations	4.8 avg, IF	4.56 L-index

#	Paper	IF	Citations
42	Electromagnetic emission from a binary black hole merger remnant in plasma: Field alignment and plasma temperature. *Physical Review D*, **2021**, 103,	4.9	4
41	High-Sensitivity Accelerometry with a Feedback-Cooled Magnetically Levitated Microsphere. *Physical Review Applied*, **2021**, 15,	4.3	5
40	HARM3D+NUC: A New Method for Simulating the Post-merger Phase of Binary Neutron Star Mergers with GRMHD, Tabulated EOS, and Neutrino Leakage. *Astrophysical Journal*, **2021**, 919, 95	4.7	6
39	Numerical relativity in spherical coordinates: A new dynamical spacetime and general relativistic MHD evolution framework for the Einstein Toolkit. *Physical Review D*, **2020**, 101,	4.9	5
38	General relativistic hydrodynamics on a moving-mesh I: static spacetimes. *Monthly Notices of the Royal Astronomical Society*, **2020**, 496, 206-214	4.3	1
37	Active optical table tilt stabilization. *Review of Scientific Instruments*, **2020**, 91, 076102	1.7	2
36	Enabling real-time multi-messenger astrophysics discoveries with deep learning. *Nature Reviews Physics*, **2019**, 1, 600-608	23.6	28
35	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. *Astrophysical Journal, Supplement Series*, **2019**, 243, 26	8	96
34	Induced spins from scattering experiments of initially nonspinning black holes. *Physical Review D*, **2019**, 100,	4.9	4
33	Numerical generation of vector potentials from specified magnetic fields. *Journal of Computational Physics*, **2019**, 379, 421-437	4.1	3
32	Numerical relativity in spherical coordinates with the Einstein Toolkit. *Physical Review D*, **2018**, 97,	4.9	7
31	SENR/NRPy+: Numerical relativity in singular curvilinear coordinate systems. *Physical Review D*, **2018**, 97,	4.9	17
30	Improving performance of SEOBNRv3 by ~300 *Classical and Quantum Gravity*, **2018**, 35, 155003	3.3	5
29	GiRaFFE: an open-source general relativistic force-free electrodynamics code. *Classical and Quantum Gravity*, **2017**, 34, 215001	3.3	11
28	Prompt Electromagnetic Transients from Binary Black Hole Mergers. *Physical Review D*, **2017**, 96,	4.9	22
27	Optimizing spinning time-domain gravitational waveforms for advanced LIGO data analysis. *Classical and Quantum Gravity*, **2016**, 33, 125025	3.3	16
26	IllinoisGRMHD: an open-source, user-friendly GRMHD code for dynamical spacetimes. *Classical and Quantum Gravity*, **2015**, 32, 175009	3.3	60

25	Advanced Models of Black Hole–Neutron Star Binaries and Their Astrophysical Impact. *Thirty Years of Astronomical Discovery With UKIRT*, **2015**, 59-74	0.3	
24	Accretion disks around binary black holes of unequal mass: General relativistic magnetohydrodynamic simulations near decoupling. *Physical Review D*, **2014**, 89,	4.9	71
23	Accretion disks around binary black holes of unequal mass: General relativistic MHD simulations of postdecoupling and merger. *Physical Review D*, **2014**, 90,	4.9	44
22	Improved moving puncture gauge conditions for compact binary evolutions. *Physical Review D*, **2014**, 90,	4.9	7
21	General-relativistic simulations of binary black hole-neutron stars: Precursor electromagnetic signals. *Physical Review D*, **2013**, 88,	4.9	64
20	Addendum to "The NINJA-2 catalog of hybrid post-Newtonian/numerical-relativity waveforms for non-precessing black-hole binaries". *Classical and Quantum Gravity*, **2013**, 30, 199401	3.3	21
19	Error-analysis and comparison to analytical models of numerical waveforms produced by the NRAR Collaboration. *Classical and Quantum Gravity*, **2013**, 31, 025012	3.3	104
18	Binary black-hole mergers in magnetized disks: simulations in full general relativity. *Physical Review Letters*, **2012**, 109, 221102	7.4	83
17	The NINJA-2 catalog of hybrid post-Newtonian/numerical-relativity waveforms for non-precessing black-hole binaries. *Classical and Quantum Gravity*, **2012**, 29, 124001	3.3	94
16	Importance of cooling in triggering the collapse of hypermassive neutron stars. *Physical Review D*, **2012**, 86,	4.9	55
15	General relativistic simulations of black-hole–neutron-star mergers: Effects of magnetic fields. *Physical Review D*, **2012**, 85,	4.9	72
14	Relativistic magnetohydrodynamics in dynamical spacetimes: Improved electromagnetic gauge condition for adaptive mesh refinement grids. *Physical Review D*, **2012**, 85,	4.9	57
13	General-relativistic simulations of black-hole–neutron-star mergers: Effects of tilted magnetic fields. *Physical Review D*, **2012**, 86,	4.9	53
12	Merger of binary white dwarf–neutron stars: Simulations in full general relativity. *Physical Review D*, **2011**, 84,	4.9	45
11	Head-on collisions of binary white dwarf-neutron stars: Simulations in full general relativity. *Physical Review D*, **2011**, 83,	4.9	23
10	Relativistic magnetohydrodynamics in dynamical spacetimes: A new adaptive mesh refinement implementation. *Physical Review D*, **2010**, 82,	4.9	81
9	Testing gravitational-wave searches with numerical relativity waveforms: results from the first Numerical INJection Analysis (NINJA) project. *Classical and Quantum Gravity*, **2009**, 26, 165008	3.3	98
8	Status of NINJA: the Numerical INJection Analysis project. *Classical and Quantum Gravity*, **2009**, 26, 114008	3.3	36

7	Evolution of near-extremal-spin black holes using the moving puncture technique. *Physical Review D*, **2009**, 80,	4.9	19
6	General relativistic simulations of black-hole–neutron-star mergers: Effects of black-hole spin. *Physical Review D*, **2009**, 79,	4.9	122
5	Fully general relativistic simulations of black hole-neutron star mergers. *Physical Review D*, **2008**, 77,	4.9	115
4	General relativistic simulations of magnetized binary neutron star mergers. *Physical Review D*, **2008**, 78,	4.9	123
3	Filling the holes: Evolving excised binary black hole initial data with puncture techniques. *Physical Review D*, **2007**, 76,	4.9	55
2	Relativistic hydrodynamics in the presence of puncture black holes. *Physical Review D*, **2007**, 76,	4.9	27
1	General relativistic simulations of slowly and differentially rotating magnetized neutron stars. *Physical Review D*, **2006**, 74,	4.9	23