Zachariah B Etienne

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. Astrophysical Journal, Supplement Series, 2019, 243, 26.	3.0	175
2	General relativistic simulations of magnetized binary neutron star mergers. Physical Review D, 2008, 78, .	1.6	160
3	General relativistic simulations of black-hole–neutron-star mergers: Effects of black-hole spin. Physical Review D, 2009, 79, .	1.6	135
4	Fully general relativistic simulations of black hole-neutron star mergers. Physical Review D, 2008, 77, .	1.6	133
5	Error-analysis and comparison to analytical models of numerical waveforms produced by the NRAR Collaboration. Classical and Quantum Gravity, 2013, 31, 025012.	1.5	123
6	Testing gravitational-wave searches with numerical relativity waveforms: results from the first Numerical INJection Analysis (NINJA) project. Classical and Quantum Gravity, 2009, 26, 165008.	1.5	110
7	The NINJA-2 catalog of hybrid post-Newtonian/numerical-relativity waveforms for non-precessing black-hole binaries. Classical and Quantum Gravity, 2012, 29, 124001.	1.5	106
8	Relativistic magnetohydrodynamics in dynamical spacetimes: A new adaptive mesh refinement implementation. Physical Review D, 2010, 82, .	1.6	101
9	Binary Black-Hole Mergers in Magnetized Disks: Simulations in Full General Relativity. Physical Review Letters, 2012, 109, 221102.	2.9	98
10	IllinoisGRMHD: an open-source, user-friendly GRMHD code for dynamical spacetimes. Classical and Quantum Gravity, 2015, 32, 175009.	1.5	95
11	Accretion disks around binary black holes of unequal mass: General relativistic magnetohydrodynamic simulations near decoupling. Physical Review D, 2014, 89, .	1.6	87
12	General relativistic simulations of black-hole–neutron-star mergers: Effects of magnetic fields. Physical Review D, 2012, 85, .	1.6	85
13	Filling the holes: Evolving excised binary black hole initial data with puncture techniques. Physical Review D, 2007, 76, .	1.6	79
14	General-relativistic simulations of binary black hole-neutron stars: Precursor electromagnetic signals. Physical Review D, 2013, 88, .	1.6	72
15	Relativistic magnetohydrodynamics in dynamical spacetimes: Improved electromagnetic gauge condition for adaptive mesh refinement grids. Physical Review D, 2012, 85, .	1.6	69
16	Accretion disks around binary black holes of unequal mass: General relativistic MHD simulations of postdecoupling and merger. Physical Review D, 2014, 90, .	1.6	64
17	Importance of cooling in triggering the collapse of hypermassive neutron stars. Physical Review D, 2012, 86, .	1.6	63
18	General-relativistic simulations of black-hole–neutron-star mergers: Effects of tilted magnetic fields. Physical Review D, 2012, 86, .	1.6	62

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19	Enabling real-time multi-messenger astrophysics discoveries with deep learning. Nature Reviews Physics, 2019, 1, 600-608.	11.9	53
20	Merger of binary white dwarf–neutron stars: Simulations in full general relativity. Physical Review D, 2011, 84, .	1.6	51
21	Status of NINJA: the Numerical INJection Analysis project. Classical and Quantum Gravity, 2009, 26, 114008.	1.5	39
22	<mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:mrow><mml:mi>SENR</mml:mi><mml:mo>/</mml:mo><mml:mi>NRPy</mml:mi><mm : Numerical relativity in singular curvilinear coordinate systems. Physical Review D, 2018, 97, .</mm </mml:mrow></mml:math>	l:mo ⊵. € <td>ml:880></td>	ml: 88 0>
23	Prompt electromagnetic transients from binary black hole mergers. Physical Review D, 2017, 96, .	1.6	34
24	Relativistic hydrodynamics in the presence of puncture black holes. Physical Review D, 2007, 76, .	1.6	32
25	Head-on collisions of binary white dwarf-neutron stars: Simulations in full general relativity. Physical Review D, 2011, 83, .	1.6	28
26	Addendum to â€~The NINJA-2 catalog of hybrid post-Newtonian/numerical-relativity waveforms for non-precessing black-hole binaries'. Classical and Quantum Gravity, 2013, 30, 199401.	1.5	28
27	Evolution of near-extremal-spin black holes using the moving puncture technique. Physical Review D, 2009, 80, .	1.6	27
28	General relativistic simulations of slowly and differentially rotating magnetized neutron stars. Physical Review D, 2006, 74, .	1.6	24
29	Optimizing spinning time-domain gravitational waveforms for advanced LIGO data analysis. Classical and Quantum Gravity, 2016, 33, 125025.	1.5	24
30	High-Sensitivity Accelerometry with a Feedback-Cooled Magnetically Levitated Microsphere. Physical Review Applied, 2021, 15, .	1.5	24
31	Numerical relativity in spherical coordinates: A new dynamical spacetime and general relativistic MHD evolution framework for the Einstein Toolkit. Physical Review D, 2020, 101, .	1.6	19
32	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.	1.6	17
33	GiRaFFE: an open-source general relativistic force-free electrodynamics code. Classical and Quantum Gravity, 2017, 34, 215001.	1.5	15
34	Numerical relativity in spherical coordinates with the Einstein Toolkit. Physical Review D, 2018, 97, .	1.6	15
35	Improved moving puncture gauge conditions for compact binary evolutions. Physical Review D, 2014, 90, .	1.6	12
36	Improving performance of SEOBNRv3 by â^¼300×. Classical and Quantum Gravity, 2018, 35, 155003.	1.5	10

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37	Induced spins from scattering experiments of initially nonspinning black holes. Physical Review D, 2019, 100, .	1.6	7
38	Electromagnetic emission from a binary black hole merger remnant in plasma: Field alignment and plasma temperature. Physical Review D, 2021, 103, .	1.6	7
39	Numerical generation of vector potentials from specified magnetic fields. Journal of Computational Physics, 2019, 379, 421-437.	1.9	6
40	General relativistic hydrodynamics on a moving-mesh I: static space–times. Monthly Notices of the Royal Astronomical Society, 2020, 496, 206-214.	1.6	6
41	Active optical table tilt stabilization. Review of Scientific Instruments, 2020, 91, 076102.	0.6	3
42	NRPyCritCol & SFcollapse1D: an open-source, user-friendly toolkit to study critical phenomena. Classical and Quantum Gravity, 0, , .	1.5	2
43	Fast hyperbolic relaxation elliptic solver for numerical relativity: Conformally flat, binary puncture initial data. Physical Review D, 2022, 105, .	1.6	2
44	Advanced Models of Black Hole–Neutron Star Binaries and Their Astrophysical Impact. Thirty Years of Astronomical Discovery With UKIRT, 2015, , 59-74.	0.3	0
45	NUMERICAL RELATIVITY SIMULATIONS OF MAGNETIZED BLACK HOLE–NEUTRON STAR MERGERS. , 2015, , .		0