David A Nichols

List of Publications by Year
in descending order

33 papers	2,540 citations	304743 22 h-index	361022 35 g-index
35 all docs	35 docs citations	35 times ranked	3304 citing authors

#	Article	IF	Citations
1	Persistent gravitational wave observables: Curve deviation in asymptotically flat spacetimes. Physical Review D, 2022, 105, .	4.7	15
2	Measuring the dark matter environments of black hole binaries with gravitational waves. Physical Review D, 2022, 105, .	4.7	29
3	Brans-Dicke theory in Bondi-Sachs form: Asymptotically flat solutions, asymptotic symmetries, and gravitational-wave memory effects. Physical Review D, 2021, 103, .	4.7	24
4	Definitions of angular momentum and super angular momentum in asymptotically flat spacetimes: Properties and applications to compact-binary mergers. Physical Review D, 2021, 104, .	4.7	5
5	Gravitational-wave memory effects in Brans-Dicke theory: Waveforms and effects in the post-Newtonian approximation. Physical Review D, 2021, 104, .	4.7	18
6	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	26.7	447
7	Detecting dark matter around black holes with gravitational waves: Effects of dark-matter dynamics on the gravitational waveform. Physical Review D, 2020, 102, .	4.7	63
8	Persistent gravitational wave observables: Nonlinear plane wave spacetimes. Physical Review D, 2020, 101, .	4.7	7
9	Forecasts for detecting the gravitational-wave memory effect with Advanced LIGO and Virgo. Physical Review D, 2020, 101, .	4.7	41
10	Calibration of advanced Virgo and reconstruction of the gravitational wave signal <i>h</i> (<i>t</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.0	41
11	Center-of-mass angular momentum and memory effect in asymptotically flat spacetimes. Physical Review D, 2018, 98, .	4.7	45
12	Status of Advanced Virgo. EPJ Web of Conferences, 2018, 182, 02003.	0.3	9
13	Conserved charges of the extended Bondi-Metzner-Sachs algebra. Physical Review D, 2017, 95, .	4.7	117
14	Illuminating gravitational waves: A concordant picture of photons from a neutron star merger. Science, 2017, 358, 1559-1565.	12.6	559
15	A radio counterpart to a neutron star merger. Science, 2017, 358, 1579-1583.	12.6	390
16	Spin memory effect for compact binaries in the post-Newtonian approximation. Physical Review D, 2017, 95, .	4.7	56
17	Testing general relativity using golden black-hole binaries. Physical Review D, 2016, 94, .	4.7	80
18	Properties of an affine transport equation and its holonomy. General Relativity and Gravitation, 2016, 48, 1.	2.0	3

#	Article	IF	Citations
19	Prescriptions for measuring and transporting local angular momenta in general relativity. Physical Review D, 2016, 93, .	4.7	11
20	Observer dependence of angular momentum in general relativity and its relationship to the gravitational-wave memory effect. Physical Review D, 2015, 92, .	4.7	24
21	Comparison of electromagnetic and gravitational radiation: What we can learn about each from the other. American Journal of Physics, 2013, 81, 575-584.	0.7	8
22	Branching of quasinormal modes for nearly extremal Kerr black holes. Physical Review D, 2013, 87, .	4.7	66
23	Quasinormal-mode spectrum of Kerr black holes and its geometric interpretation. Physical Review D, 2012, 86, .	4.7	137
24	Hybrid method for understanding black-hole mergers: Inspiralling case. Physical Review D, 2012, 85, .	4.7	13
25	Visualizing spacetime curvature via frame-drag vortexes and tidal tendexes. III. Quasinormal pulsations of Schwarzschild and Kerr black holes. Physical Review D, 2012, 86, .	4.7	29
26	Visualizing spacetime curvature via frame-drag vortexes and tidal tendexes. II. Stationary black holes. Physical Review D, 2012, 86, .	4.7	25
27	Visualizing spacetime curvature via frame-drag vortexes and tidal tendexes: General theory and weak-gravity applications. Physical Review D, 2011, 84, .	4.7	64
28	Frame-Dragging Vortexes and Tidal Tendexes Attached to Colliding Black Holes: Visualizing the Curvature of Spacetime. Physical Review Letters, 2011, 106, 151101.	7.8	66
29	Classifying the isolated zeros of asymptotic gravitational radiation by tendex and vortex lines. Physical Review D, 2011, 84, .	4.7	16
30	Momentum flow in black-hole binaries. II. Numerical simulations of equal-mass, head-on mergers with antiparallel spins. Physical Review D, 2010, 82, .	4.7	30
31	Hybrid method for understanding black-hole mergers: Head-on case. Physical Review D, 2010, 82, .	4.7	13
32	Momentum flow in black-hole binaries. I. Post-Newtonian analysis of the inspiral and spin-induced bobbing. Physical Review D, 2009, 80, .	4.7	20
33	Post-Newtonian approximation in Maxwell-like form. Physical Review D, 2009, 80, .	4.7	28