Ezra T Newman

List of Publications by Year
in descending order

60 papers	3,607 citations	279798 23 h-index	168389 53 g-index
63 all docs	63 docs citations	63 times ranked	1165 citing authors

#	Article	IF	Citations
1	An Approach to Gravitational Radiation by a Method of Spin Coefficients. Journal of Mathematical Physics, 1962, 3, 566-578.	1.1	2,110
2	Behavior of Asymptotically Flat Empty Spaces. Journal of Mathematical Physics, 1962, 3, 891-901.	1.1	333
3	Heaven and its properties. General Relativity and Gravitation, 1976, 7, 107-111.	2.0	113
4	Conformal Einstein spaces. General Relativity and Gravitation, 1985, 17, 343-352.	2.0	75
5	GR via characteristic surfaces. Journal of Mathematical Physics, 1995, 36, 4984-5004.	1.1	70
6	Maxwell's equations and complex Minkowski space. Journal of Mathematical Physics, 1973, 14, 102-103.	1.1	69
7	A Class of Null Flat‑Space Coordinate Systems. Journal of Mathematical Physics, 1963, 4, 1467-1469.	1.1	56
8	Classical, geometric origin of magnetic moments, spin-angular momentum, and the Dirac gyromagnetic ratio. Physical Review D, 2002, 65, .	4.7	52
9	Null Geodesic Congruences, Asymptotically-Flat Spacetimes and Their Physical Interpretation. Living Reviews in Relativity, 2012, 15, 1.	26.7	49
10	Theory of light cone cuts of null infinity. Journal of Mathematical Physics, 1983, 24, 2481-2489.	1.1	46
11	Complexification of the algebraically special gravitational fields. Journal of Mathematical Physics, 1974, 15, 1103-1112.	1.1	44
12	Null Geodesic Congruences, Asymptotically-Flat Spacetimes and Their Physical Interpretation. Living Reviews in Relativity, 2009, 12, 6.	26.7	40
13	Equations of motion for the sources of asymptotically flat spaces. Journal of Mathematical Physics, 1972, 13, 1884-1891.	1.1	39
14	Lorentzian metrics from characteristic surfaces. Journal of Mathematical Physics, 1995, 36, 4975-4983.	1.1	36
15	The theory of caustics and wave front singularities with physical applications. Journal of Mathematical Physics, 2000, 41, 3344-3378.	1.1	36
16	Linearized Einstein theory via null surfaces. Journal of Mathematical Physics, 1995, 36, 5005-5022.	1.1	34
17	A curiosity concerning angular momentum. Journal of Mathematical Physics, 1974, 15, 1113-1115.	1.1	31
18	Spin-coefficient formalism. Scholarpedia Journal, 2009, 4, 7445.	0.3	31

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19	Canonical structures on anti‐self‐dual four‐manifolds and the diffeomorphism group. Journal of Mathematical Physics, 1991, 32, 1458-1464.	1.1	29
20	Maxwell fields and shear-free null geodesic congruences. Classical and Quantum Gravity, 2004, 21, 3197-3221.	4.0	27
21	A complex minkowski space approach to twistors. General Relativity and Gravitation, 1975, 6, 361-385.	2.0	25
22	On Hamiltonian systems with first‐class constraints. Journal of Mathematical Physics, 1991, 32, 2739-2743.	1.1	25
23	Tensorial spin-s harmonics. Classical and Quantum Gravity, 2006, 23, 497-509.	4.0	25
24	The large footprints of H-space on asymptotically flat spacetimes. Classical and Quantum Gravity, 2005, 22, 4659-4665.	4.0	24
25	Twisting null geodesic congruences and the Einstein–Maxwell equations. Classical and Quantum Gravity, 2006, 23, 91-113.	4.0	22
26	Electromagnetic dipole radiation fields, shear-free congruences and complex centre of charge world lines. Classical and Quantum Gravity, 2005, 22, 4667-4678.	4.0	16
27	Note on the Dynamics of Gravitational Sources. Journal of Mathematical Physics, 1965, 6, 1806-1811.	1.1	15
28	The Kerr congruence. Journal of Mathematical Physics, 1974, 15, 426-428.	1.1	14
29	Quantization of the null-surface formulation of general relativity. Physical Review D, 1997, 56, 889-907.	4.7	13
30	Applications of the intertwining operators for representations of the restricted Lorentz group. Journal of Mathematical Physics, 1972, 13, 1879-1883.	1.1	11
31	Variations of the parallel propagator and holonomy operator and the Gauss law constraint. Journal of Mathematical Physics, 1993, 34, 4646-4654.	1.1	11
32	Motion and Structure of Singularities in General Relativity. II. Journal of Mathematical Physics, 1971, 12, 2319-2327.	1.1	10
33	Pseudo-Minkowskian coordinates in asymptotically flat space-times. Physical Review D, 1997, 55, 1971-1976.	4.7	9
34	CR structures and asymptotically flat spacetimes. Classical and Quantum Gravity, 2006, 23, 3123-3127.	4.0	9
35	Diffeomorphism algebras and the Nahm and Ward equations. Journal of Mathematical Physics, 1992, 33, 382-387.	1.1	8
36	A fundamental solution to the CCC equations. General Relativity and Gravitation, 2014, 46, 1.	2.0	7

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37	A note on asymptotically flat spaces. II. General Relativity and Gravitation, 1983, 15, 475-487.	2.0	5
38	Maxwell's equations, linear gravity, and twistors. Foundations of Physics, 1984, 14, 1061-1081.	1.3	5
39	Asymptotic twistor theory and the Kerr theorem. Classical and Quantum Gravity, 2006, 23, 3385-3392.	4.0	5
40	Asymptotically flat space–times: an enigma. Classical and Quantum Gravity, 2016, 33, 145006.	4.0	5
41	Gravitational Radiation Reaction. Physical Review Letters, 1972, 28, 857-858.	7.8	4
42	Light-cones, almost light-cones and almost-complex light-cones. General Relativity and Gravitation, 2017, 49, 1.	2.0	3
43	Characteristic surface data for the eikonal equation. Journal of Mathematical Physics, 1999, 40, 1093-1102.	1.1	2
44	On the physical interpretation of asymptotically flat gravitational fields. General Relativity and Gravitation, 2008, 40, 2043-2050.	2.0	2
45	Newton's second law, radiation reaction and type II Einstein–Maxwell fields. Classical and Quantum Gravity, 2011, 28, 245003.	4.0	2
46	A changed perspective concerning asymptotically flat Einstein/Einstein–Maxwell space–times. General Relativity and Gravitation, 2019, 51, 1.	2.0	2
47	Tensors, spinors, and functions on the unit sphere. General Relativity and Gravitation, 1976, 7, 687-693.	2.0	1
48	On bi–Hamiltonian structures. Journal of Mathematical Physics, 1990, 31, 331-337.	1.1	1
49	Obituary to P. Bergmann. General Relativity and Gravitation, 2003, 35, 941-943.	2.0	1
50	ON THE PHYSICAL INTERPRETATION OF ASYMPTOTICALLY FLAT GRAVITATIONAL FIELDS. International Journal of Modern Physics D, 2008, 17, 2599-2606.	2.1	1
51	Electrodynamic radiation reaction and general relativity. General Relativity and Gravitation, 2009, 41, 1139-1149.	2.0	1
52	Surprising structures hiding in Penrose's future null infinity. Classical and Quantum Gravity, 2017, 34, 135004.	4.0	1
53	Classical mechanics via general relativity and Maxwell's theory: a bit of magic. General Relativity and Gravitation, 2018, 50, 1.	2.0	1
54	DIFFERENTIAL EQUATIONS AND CARTAN CONNECTIONS. , 2006, , .		1

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55	A spinor reformulation of the null surface treatment of GR. Journal of Mathematical Physics, 2000, 41, 6300-6317.	1.1	0
56	Null infinity, H-space and equations of motion. General Relativity and Gravitation, 2006, 38, 1559-1564.	2.0	0
57	NULL INFINITY, H-SPACE AND EQUATIONS OF MOTION. International Journal of Modern Physics D, 2006, 15, 2317-2322.	2.1	0
58	On integrating the left-flat vacuum Einstein equations. Classical and Quantum Gravity, 2014, 31, 015013.	4.0	0
59	GR and classical mechanics: Magic?. International Journal of Modern Physics D, 2018, 27, 1846003.	2.1	0
60	Geometry of flat-space null geodesic congruences. General Relativity and Gravitation, 2020, 52, 1.	2.0	0