Alan Coley

List of Publications by Year
in descending order

		172457	189892
102 **papers**	2,874 **citations**	29 **h-index**	50 **g-index**
103 **all docs**	103 **docs citations**	103 **times ranked**	995 **citing authors**

#	Article	IF	Citations
1	Curvature invariants in a binary black hole merger. General Relativity and Gravitation, 2022, 54, .	2.0	1
2	Teleparallel geometries not characterized by their scalar polynomial torsion invariants. Journal of Mathematical Physics, 2021, 62, 052501.	1.1	1
3	Geometric horizons in binary black hole mergers. Classical and Quantum Gravity, 2021, 38, 17LT01.	4.0	3
4	Theoretical cosmology. Classical and Quantum Gravity, 2020, 37, 013001.	4.0	24
5	Static spherically symmetric Einstein-Æther models II: Integrability and the modified Tolman–Oppenheimer–Volkoff approach. Annals of Physics, 2020, 412, 168002.	2.8	26
6	Symmetry and equivalence in teleparallel gravity. Journal of Mathematical Physics, 2020, 61, .	1.1	17
7	Persistence in black hole lattice cosmological models. Classical and Quantum Gravity, 2020, 37, 245002.	4.0	1
8	Teleparallel theories of gravity: illuminating a fully invariant approach. Classical and Quantum Gravity, 2019, 36, 183001.	4.0	217
9	Static spherically symmetric Einstein-aether models I: perfect fluids with a linear equation of state and scalar fields with an exponential self-interacting potential. General Relativity and Gravitation, 2019, 51, 1.	2.0	27
10	An invariant characterization of the quasi-spherical Szekeres dust models. General Relativity and Gravitation, 2019, 51, 1.	2.0	13
11	Identification of black hole horizons using scalar curvature invariants. Classical and Quantum Gravity, 2018, 35, 025013.	4.0	25
12	Cartan invariants and event horizon detection. General Relativity and Gravitation, 2018, 50, 1.	2.0	25
13	Geometric horizons in the Kastor-Traschen multi-black-hole solutions. Physical Review D, 2018, 98, .	4.7	11
14	Horizon detection and higher dimensional black rings. Classical and Quantum Gravity, 2017, 34, 035008.	4.0	9
15	Persistent black holes in bouncing cosmologies. Classical and Quantum Gravity, 2017, 34, 135005.	4.0	23
16	The Cartan algorithm in five dimensions. Journal of Mathematical Physics, 2017, 58, 032502.	1.1	10
17	Stiff fluid spike solutions from Bianchi type V seed solutions. Classical and Quantum Gravity, 2017, 34, 235013.	4.0	5
18	Spikes and matter inhomogeneities in massless scalar field models. Classical and Quantum Gravity, 2016, 33, 015009.	4.0	10

#	ARTICLE	IF	CITATIONS
19	On the first G 1 stiff fluid spike solution in General Relativity. Classical and Quantum Gravity, 2016, 33, 215010.	4.0	4
20	On scalar curvature invariants in three dimensional spacetimes. General Relativity and Gravitation, 2016, 48, 1.	2.0	2
21	EINSTEIN-AETHER COSMOLOGICAL MODELS. , 2015, , .		0
22	Is there proof that backreaction of inhomogeneities is irrelevant in cosmology?. Classical and Quantum Gravity, 2015, 32, 215021.	4.0	125
23	Basis for scalar curvature invariants in three dimensions. Classical and Quantum Gravity, 2014, 31, 235010.	4.0	4
24	General relativistic density perturbations. Classical and Quantum Gravity, 2014, 31, 015020.	4.0	6
25	Demonstration of the spike phenomenon using the LTB models. Classical and Quantum Gravity, 2014, 31, 115012.	4.0	6
26	Summary of the parallel session: mathematical cosmology. General Relativity and Gravitation, 2014, 46, 1.	2.0	0
27	Stability of Einstein-aether cosmological models. Physical Review D, 2013, 87, .	4.7	26
28	Backreaction: Gauge and frame dependences. Physical Review D, 2013, 87, .	4.7	8
29	Refinements of the Weyl tensor classification in five dimensions. Classical and Quantum Gravity, 2012, 29, 155016.	4.0	12
30	Observational constraints on the averaged universe. Physical Review D, 2012, 85, .	4.7	21
31	Generating Matter Inhomogeneities in General Relativity. Physical Review Letters, 2012, 108, 191101.	7.8	15
32	Discriminating the Weyl type in higher dimensions using scalar curvature invariants. General Relativity and Gravitation, 2011, 43, 2199-2207.	2.0	12
33	Algebraic classification of five-dimensional spacetimes using scalar invariants. Classical and Quantum Gravity, 2011, 28, 155016.	4.0	11
34	ON THE ALGEBRAIC CLASSIFICATION OF PSEUDO-RIEMANNIAN SPACES. International Journal of Geometric Methods in Modern Physics, 2011, 08, 1679-1685.	2.0	5
35	PERSISTENCE OF BLACK HOLES THROUGH A COSMOLOGICAL BOUNCE. International Journal of Modern Physics D, 2011, 20, 2733-2738.	2.1	19
36	Universality and Constant Scalar Curvature Invariants. ISRN Geometry, 2011, 2011, 1-9.	0.1	6

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37	Lorentzian manifolds and scalar curvature invariants. Classical and Quantum Gravity, 2010, 27, 102001.	4.0	18
38	SCALAR AVERAGING IN COSMOLOGY. International Journal of Modern Physics D, 2010, 19, 2361-2364.	2.1	0
39	Higher dimensional bivectors and classification of the Weyl operator. Classical and Quantum Gravity, 2010, 27, 015002.	4.0	25
40	AVERAGING GEOMETRICAL OBJECTS ON A DIFFERENTIABLE MANIFOLD. International Journal of Modern Physics D, 2010, 19, 1915-1923.	2.1	24
41	Averaging in cosmological models using scalars. Classical and Quantum Gravity, 2010, 27, 245017.	4.0	17
42	Curvature operators and scalar curvature invariants. Classical and Quantum Gravity, 2010, 27, 095014.	4.0	26
43	Lorentzian spacetimes with constant curvature invariants in four dimensions. Classical and Quantum Gravity, 2009, 26, 125011.	4.0	52
44	Spacetimes characterized by their scalar curvature invariants. Classical and Quantum Gravity, 2009, 26, 025013.	4.0	71
45	General Relativistic Tilt and Dark Energy. , 2008, , .		1
46	Metrics with vanishing quantum corrections. Classical and Quantum Gravity, 2008, 25, 145017.	4.0	59
47	Editorial introduction: Malcolm MacCallum at 60. General Relativity and Gravitation, 2006, 38, 997-1002.	2.0	0
48	Gravitational Entropy in Cosmological Models. International Journal of Theoretical Physics, 2006, 45, 1258-1266.	1.2	13
49	Fluid observers and tilting cosmology. Classical and Quantum Gravity, 2006, 23, 3573-3591.	4.0	24
50	On spacetimes with constant scalar invariants. Classical and Quantum Gravity, 2006, 23, 3053-3074.	4.0	108
51	The similarity hypothesis in general relativity. General Relativity and Gravitation, 2005, 37, 2165-2188.	2.0	32
52	Future asymptotic behaviour of tilted Bianchi models of type IV and VII h. Classical and Quantum Gravity, 2005, 22, 607-633.	4.0	35
53	Asymptotic analysis of spatially inhomogeneous stiff and ultra-stiff cosmologies. Classical and Quantum Gravity, 2005, 22, 3073-3082.	4.0	9
54	Cosmological Solutions in Macroscopic Gravity. Physical Review Letters, 2005, 95, 151102.	7.8	103

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55	A dynamical systems approach to the tilted Bianchi models of solvable type. Classical and Quantum Gravity, 2005, 22, 579-605.	4.0	48
56	Isotropic singularity in inhomogeneous brane cosmological models. Classical and Quantum Gravity, 2004, 21, 1311-1342.	4.0	16
57	Large-scale perturbations on the brane and the isotropy of the cosmological singularity. Physical Review D, 2004, 70, .	4.7	17
58	Are braneworlds born isotropic?. Physical Review D, 2004, 69, .	4.7	21
59	Inhomogeneous Cosmologies, the Copernican Principle and the Cosmic Microwave Background: More on the EGS Theorem. General Relativity and Gravitation, 2003, 35, 969-990.	2.0	17
60	Self-Similar Static Spherically Symmetric Scalar Field Models. General Relativity and Gravitation, 2003, 35, 707-749.	2.0	7
61	Dynamical Systems and Cosmology. Astrophysics and Space Science Library, 2003, , .	2.7	229
62	Bianchi type IX brane-world cosmologies. Physical Review D, 2003, 68, .	4.7	29
63	Dynamics of brane-world cosmological models. Physical Review D, 2002, 66, .	4.7	44
64	ASSISTED INFLATION. International Journal of Modern Physics A, 2002, 17, 2755-2755.	1.5	0
65	BRANE-WORLD COSMOLOGY. International Journal of Modern Physics D, 2002, 11, 1609-1614.	2.1	0
66	Timelike self-similar spherically symmetric models with two scalar fields. Classical and Quantum Gravity, 2002, 19, 3901-3925.	4.0	4
67	No chaos in brane-world cosmology. Classical and Quantum Gravity, 2002, 19, L45-L56.	4.0	50
68	A Class of Exact Classical Solutions to String Theory. Physical Review Letters, 2002, 89, 281601.	7.8	38
69	The maximum dimension of the inheriting algebra in perfect fluid space–times. Journal of Mathematical Physics, 2002, 43, 5567-5577.	1.1	2
70	Letter: Mach's Principle and Superfluids in Cosmology. General Relativity and Gravitation, 2002, 34, 549-555.	2.0	2
71	Self-similar spherically symmetric cosmological models with two scalar fields. Classical and Quantum Gravity, 2001, 18, 4213-4237.	4.0	6
72	Magnetic fields and the cosmic microwave background. Classical and Quantum Gravity, 2001, 18, 1305-1310.	4.0	7

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73	The state space and physical interpretation of self-similar spherically symmetric perfect-fluid models. Classical and Quantum Gravity, 2001, 18, 303-324.	4.0	47
74	Cosmic microwave background and scalar-tensor theories of gravity. Physical Review D, 2001, 64, .	4.7	10
75	Qualitative properties of magnetic fields in scalar field cosmology. Physical Review D, 2001, 64, .	4.7	5
76	Self-similar spherically symmetric cosmological models with a perfect fluid and a scalar field. Classical and Quantum Gravity, 2000, 17, 2557-2588.	4.0	23
77	Critical phenomena and a new class of self-similar spherically symmetric perfect-fluid solutions. Physical Review D, 2000, 61, .	4.7	20
78	Complete classification of spherically symmetric self-similar perfect fluid solutions. Physical Review D, 2000, 62, .	4.7	34
79	Scaling solutions in Robertson-Walker spacetimes. Classical and Quantum Gravity, 1999, 16, 1843-1851.	4.0	70
80	Scalar field cosmologies with barotropic matter: models of Bianchi class B. Classical and Quantum Gravity, 1999, 16, 4035-4056.	4.0	28
81	Self-similarity in general relativity. Classical and Quantum Gravity, 1999, 16, R31-R71.	4.0	150
82	On the isotropy of the Universe: do Bianchi cosmologies isotropize?. Classical and Quantum Gravity, 1998, 15, 331-350.	4.0	30
83	Stability of cosmological scaling solutions. Physical Review D, 1998, 58, .	4.7	47
84	Kinematic self-similarity. Classical and Quantum Gravity, 1997, 14, 87-118.	4.0	40
85	Induced matter theory and embeddings in Riemann flat space–times. Journal of Mathematical Physics, 1996, 37, 361-373.	1.1	28
86	Space-times admitting a three-dimensional conformal group. General Relativity and Gravitation, 1996, 28, 311-337.	2.0	14
87	Higher-dimensional vacuum solutions of Einstein's field equations. International Journal of Theoretical Physics, 1995, 34, 293-299.	1.2	1
88	Qualitative analysis of diagonal Bianchi type V imperfect fluid cosmological models. Journal of Mathematical Physics, 1994, 35, 4117-4144.	1.1	29
89	The isotropic singularity in cosmology. Classical and Quantum Gravity, 1992, 9, 445-455.	4.0	54
90	Affine conformal vectors in space–time. Journal of Mathematical Physics, 1992, 33, 1754-1764.	1.1	28

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91	Qualitative analysis of a class of Bianchi V imperfect fluid cosmologies. Journal of Mathematical Physics, 1992, 33, 1772-1779.	1.1	32
92	Qualitative analysis of two-fluid Bianchi cosmologies. Classical and Quantum Gravity, 1992, 9, 651-665.	4.0	45
93	Space–times admitting special affine conformal vectors. Journal of Mathematical Physics, 1990, 31, 649-652.	1.1	12
94	Conformal Killing vectors and FRW spacetimes. General Relativity and Gravitation, 1990, 22, 241-251.	2.0	54
95	Special conformal Killing vector space–times and symmetry inheritance. Journal of Mathematical Physics, 1989, 30, 2616-2625.	1.1	76
96	Primordial nucleosynthesis and ? B ?1 cosmologies with interacting radiation and matter. Astrophysics and Space Science, 1987, 138, 393-401.	1.4	0
97	Observations and FRW Models. Annals of the New York Academy of Sciences, 1986, 470, 369-369.	3.8	0
98	Analysis of Weyl-Affine Theories of Gravity in Terms of the Gravitational Frequency Shift Effect. Annals of the New York Academy of Sciences, 1986, 470, 370-370.	3.8	0
99	Two–fluid cosmological models. Journal of Mathematical Physics, 1986, 27, 406-416.	1.1	49
100	FRW Models as Exact Viscous Magnetohydrodynamical Cosmologies. Annals of the New York Academy of Sciences, 1984, 422, 338-338.	3.8	0
101	A new look at FRW cosmologies. General Relativity and Gravitation, 1983, 15, 977-983.	2.0	14
102	Zero-curvature Friedmann-Robertson-Walker models as exact viscous magnetohydrodynamic cosmologies. Astrophysical Journal, 1983, 271, 1.	4.5	45