

George F R Ellis

List of Publications by Year in descending order

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147
papers

6,000
citations

76196

40
h-index

85405

71
g-index

169
all docs

169
docs citations

169
times ranked

2129
citing authors

#	ARTICLE	IF	CITATIONS
1	The data-hypothesis relationship. <i>Genome Biology</i> , 2021, 22, 57.	3.8	7
2	Data bias. <i>Genome Biology</i> , 2021, 22, 59.	3.8	5
3	Tidal forces are gravitational waves. <i>Classical and Quantum Gravity</i> , 2021, 38, 085023.	1.5	10
4	Neuroscience and literacy: an integrative view. <i>Transactions of the Royal Society of South Africa</i> , 2021, 76, 157-188.	0.8	1
5	Why Reductionism does not Work. , 2021, , 51-92.		0
6	The Causal Closure of Physics in Real World Contexts. <i>Foundations of Physics</i> , 2020, 50, 1057-1097.	0.6	16
7	Emergence in Solid State Physics and Biology. <i>Foundations of Physics</i> , 2020, 50, 1098-1139.	0.6	15
8	A Mathematical Cosmologist Reflects on Deep Ethics: Reflections on Values, Ethics, and Morality. <i>Theology and Science</i> , 2020, 18, 175-189.	0.2	2
9	Emergence of Time. <i>Foundations of Physics</i> , 2020, 50, 161-190.	0.6	9
10	Contextual Emergence of Physical Properties. <i>Foundations of Physics</i> , 2020, 50, 481-510.	0.6	10
11	Commentary on "New Project for a Scientific Psychology: General Scheme" by Mark Solms. <i>Neuropsychoanalysis</i> , 2020, 22, 53-56.	0.1	1
12	Top-down effects in the brain. <i>Physics of Life Reviews</i> , 2019, 31, 11-27.	1.5	10
13	How Downwards Causation Occurs in Digital Computers. <i>Foundations of Physics</i> , 2019, 49, 1253-1277.	0.6	13
14	The Dynamical Emergence of Biology From Physics: Branching Causation via Biomolecules. <i>Frontiers in Physiology</i> , 2019, 9, 1966.	1.3	32
15	Stephen William Hawking CH CBE. 8 January 1942–14 March 2018. <i>Biographical Memoirs of Fellows of the Royal Society</i> , 2019, 66, 267-308.	0.1	1
16	Can Science Bridge the Is-Ought gap? A Response to Michael Shermer. <i>Theology and Science</i> , 2018, 16, 1-5.	0.2	2
17	Contextual Wavefunction collapse: an integrated theory of quantum measurement. <i>New Journal of Physics</i> , 2018, 20, 113025.	1.2	28
18	Top-down causation and quantum physics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 11661-11663.	3.3	6

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19	The physics of infinity. Nature Physics, 2018, 14, 770-772.	6.5	42
20	Transferring energy in general relativity. Classical and Quantum Gravity, 2018, 35, 165007.	1.5	5
21	The Standard Cosmological Model: Achievements and Issues. Foundations of Physics, 2018, 48, 1226-1245.	0.6	6
22	Celebrate the scientific hierarchy. Nature Physics, 2017, 13, 1034-1034.	6.5	1
23	Static trace free Einstein equations and stellar distributions. Physical Review D, 2017, 96, .	1.6	21
24	Editorial note to: E. Lifshitz, On the gravitational stability of the expanding universe. General Relativity and Gravitation, 2017, 49, 1.	0.7	4
25	Physics on Edge. Inference, 2017, 3, .	0.0	0
26	Business as Usual. Inference, 2017, 3, .	0.0	0
27	On Testability in Science. Inference, 2017, 3, .	0.0	0
28	Constructing black hole entropy from gravitational collapse. , 2017, , .		0
29	Non-Empirical But Scientific. Inference, 2017, 3, .	0.0	0
30	Theorists Without a Theory. Inference, 2017, 3, .	0.0	0
31	On the Essence of Discovery. Inference, 2017, 3, .	0.0	0
32	An Interesting Scientific Question. Inference, 2017, 3, .	0.0	0
33	Particle creation rate for dynamical black holes. European Physical Journal C, 2016, 76, 1.	1.4	9
34	The Foundations: Physics and Top-Down Causation. The Frontiers Collection, 2016, , 243-290.	0.1	0
35	How Can Physics Underlie the Mind?. The Frontiers Collection, 2016, , .	0.1	23
36	Cosmic matter flux may turn Hawking radiation off. General Relativity and Gravitation, 2015, 47, 1.	0.7	22

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37	Ricci time in the Lemaître-Tolman model and the block universe. <i>General Relativity and Gravitation</i> , 2015, 47, 1.	0.7	2
38	Scientific method: Defend the integrity of physics. <i>Nature</i> , 2014, 516, 321-323.	13.7	156
39	Lectures on cosmology. , 2014, , .		0
40	The evolving block universe and the meshing together of times. <i>Annals of the New York Academy of Sciences</i> , 2014, 1326, 26-41.	1.8	22
41	Discrete Newtonian cosmology. <i>Classical and Quantum Gravity</i> , 2014, 31, 025003.	1.5	19
42	The trace-free Einstein equations and inflation. <i>General Relativity and Gravitation</i> , 2014, 46, 1.	0.7	88
43	Variations on Birkhoff's theorem. <i>General Relativity and Gravitation</i> , 2013, 45, 2123-2142.	0.7	11
44	A gravitational entropy proposal. <i>Classical and Quantum Gravity</i> , 2013, 30, 125009.	1.5	58
45	Revenge and forgiveness in the New South Africa. <i>Behavioral and Brain Sciences</i> , 2013, 36, 37-38.	0.4	2
46	Blackness of the cosmic microwave background spectrum as a probe of the distance-duality relation. <i>Physical Review D</i> , 2013, 87, .	1.6	51
47	Almost Birkhoff theorem. , 2012, , .		1
48	(Mis)interpreting supernovae observations in a lumpy universe. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 426, 1121-1136.	1.6	94
49	Top-down causation: an integrating theme within and across the sciences?. <i>Interface Focus</i> , 2012, 2, 1-3.	1.5	66
50	A New Dawn for Science in Africa. <i>Science</i> , 2012, 337, 889-889.	6.0	0
51	Top-down causation and emergence: some comments on mechanisms. <i>Interface Focus</i> , 2012, 2, 126-140.	1.5	128
52	Editorial note to: H. P. Robertson, Relativistic cosmology. <i>General Relativity and Gravitation</i> , 2012, 44, 2099-2114.	0.7	2
53	Birkhoff theorem and matter. <i>General Relativity and Gravitation</i> , 2012, 44, 2037-2050.	0.7	16
54	Affective Neuronal Selection: The Nature of the Primordial Emotion Systems. <i>Frontiers in Psychology</i> , 2012, 3, 589.	1.1	22

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55	Inhomogeneity effects in cosmology. <i>Classical and Quantum Gravity</i> , 2011, 28, 164001.	1.5	79
56	On the trace-free Einstein equations as a viable alternative to general relativity. <i>Classical and Quantum Gravity</i> , 2011, 28, 225007.	1.5	154
57	Does the growth of structure affect our dynamical models of the Universe? The averaging, backreaction, and fitting problems in cosmology. <i>Reports on Progress in Physics</i> , 2011, 74, 112901.	8.1	161
58	A two-mass expanding exact space-time solution. <i>General Relativity and Gravitation</i> , 2011, 43, 191-205.	0.7	28
59	Editorial note to: Jerome Kristian and Rainer K. Sachs, Observations in cosmology. <i>General Relativity and Gravitation</i> , 2011, 43, 331-336.	0.7	1
60	Almost Birkhoff theorem in general relativity. <i>General Relativity and Gravitation</i> , 2011, 43, 2157-2170.	0.7	21
61	Shear free solutions in general relativity theory. <i>General Relativity and Gravitation</i> , 2011, 43, 3253-3268.	0.7	26
62	Editorial note to: Brandon Carter, Large number coincidences and the anthropic principle in cosmology. <i>General Relativity and Gravitation</i> , 2011, 43, 3213-3223.	0.7	28
63	Shear-free perturbations of Friedmann-Lemaître-Robertson-Walker universes. <i>Physical Review D</i> , 2011, 84, .	1.6	8
64	Fundamental Issues and Problems of Cosmology. <i>Issues in Agroecology</i> , 2011, , 309-320.	0.1	1
65	Time and Spacetime: The Crystallizing Block Universe. <i>International Journal of Theoretical Physics</i> , 2010, 49, 988-1003.	0.5	25
66	Alternative explanations of "dark energy" in cosmology. , 2010, , .		0
67	A note on infinities in eternal inflation. <i>General Relativity and Gravitation</i> , 2009, 41, 1475-1484.	0.7	7
68	Republication of: Relativistic cosmology. <i>General Relativity and Gravitation</i> , 2009, 41, 581-660.	0.7	238
69	Preface to the GRG special issue on quantum gravity. <i>General Relativity and Gravitation</i> , 2009, 41, 673-673.	0.7	1
70	Geometrical order-of-magnitude estimates for spatial curvature in realistic models of the Universe. <i>General Relativity and Gravitation</i> , 2009, 41, 2017-2030.	0.7	26
71	Editorial note to: Pascual Jordan, Jürgen Ehlers and Wolfgang Kundt, Exact solutions of the field equations of the general theory of relativity. <i>General Relativity and Gravitation</i> , 2009, 41, 2179-2189.	0.7	4
72	Editorial on the GRG special issue on dark energy. <i>General Relativity and Gravitation</i> , 2008, 40, 219-220.	0.7	6

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73	Patchy solutions. Nature, 2008, 452, 159-161.	13.7	26
74	Universe or multiverse?. Astronomy and Geophysics, 2008, 49, 2.29-2.33.	0.1	25
75	On the nature of causation in complex systems. Transactions of the Royal Society of South Africa, 2008, 63, 69-84.	0.8	89
76	Commentary on "An Evolutionarily Informed Education Science" by David C. Geary. Educational Psychologist, 2008, 43, 206-213.	4.7	10
77	Time Drift of Cosmological Redshifts as a Test of the Copernican Principle. Physical Review Letters, 2008, 100, 191303.	2.9	145
78	Group classification of the characteristic initial value equations for a radiating axisymmetric, non-rotating, vacuum spacetime. Classical and Quantum Gravity, 2007, 24, 6007-6017.	1.5	1
79	Disgust: Sensory affect or primary emotional system?. Cognition and Emotion, 2007, 21, 1799-1818.	1.2	37
80	ISSUES IN THE PHILOSOPHY OF COSMOLOGY. , 2007, , 1183-1285.		48
81	Criteria for basic emotions: Seeking DISGUST?. Cognition and Emotion, 2007, 21, 1829-1832.	1.2	16
82	The myth of a purely rational life. Theology and Science, 2007, 5, 87-100.	0.2	3
83	On the definition of distance in general relativity: I. M. H. Etherington (Philosophical Magazine ser. 7), Tj ETQq1 1 0,784314 rsgBT /Ovcl	0.7	114
84	Note on varying speed of light cosmologies. General Relativity and Gravitation, 2007, 39, 511-520.	0.7	33
85	Causality and the speed of sound. General Relativity and Gravitation, 2007, 39, 1651-1660.	0.7	82
86	Editorial note: The issue of plagiarism. General Relativity and Gravitation, 2007, 39, 1969-1970.	0.7	3
87	On the Raychaudhuri equation. Pramana - Journal of Physics, 2007, 69, 15-22.	0.9	21
88	Physics and the Real World. Foundations of Physics, 2006, 36, 227-262.	0.6	13
89	Editorial: The GRG Journal. General Relativity and Gravitation, 2006, 38, 395-396.	0.7	0
90	On horizons and the Cosmic Landscape. General Relativity and Gravitation, 2006, 38, 1209-1213.	0.7	4

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91	Physics in the real universe: time and spacetime. <i>General Relativity and Gravitation</i> , 2006, 38, 1797-1824.	0.7	43
92	Bounce behaviour in Kantowskiâ€“Sachs and Bianchi cosmologies. <i>Classical and Quantum Gravity</i> , 2006, 23, 6585-6597.	1.5	44
93	c is the speed of light, isnâ€™t it?. <i>American Journal of Physics</i> , 2005, 73, 240-247.	0.3	118
94	A theory of everything?. <i>Nature</i> , 2005, 433, 257-259.	13.7	20
95	Physics, complexity and causality. <i>Nature</i> , 2005, 435, 743-743.	13.7	119
96	DYNAMICAL PROPERTIES OF COSMOLOGICAL SOLUTIONS. <i>Journal of Hyperbolic Differential Equations</i> , 2005, 02, 381-395.	0.3	1
97	An emergent universe from a loop. <i>Physical Review D</i> , 2005, 71, .	1.6	186
98	THE SPACE OF COSMOLOGICAL SPACEâ€“TIMES. <i>Journal of Hyperbolic Differential Equations</i> , 2005, 02, 331-379.	0.3	0
99	Physics and the Real World. <i>Physics Today</i> , 2005, 58, 49-54.	0.3	53
100	The emergent universe: inflationary cosmology with no singularity. <i>Classical and Quantum Gravity</i> , 2004, 21, 223-232.	1.5	368
101	The emergent universe: an explicit construction. <i>Classical and Quantum Gravity</i> , 2004, 21, 233-249.	1.5	257
102	Closed Trapped Surfaces in Cosmology. <i>General Relativity and Gravitation</i> , 2003, 35, 1309-1319.	0.7	15
103	â€œGolden Oldieâ€ The Bianchi Classification in the SchÃ¼cking-Behr Approach. <i>General Relativity and Gravitation</i> , 2003, 35, 475-489.	0.7	32
104	Wilkinson Microwave Anisotropy Probe data and the curvature of space. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 344, L65-L68.	1.6	87
105	The shape of the Universe. <i>Nature</i> , 2003, 425, 566-567.	13.7	16
106	Past attractor in inhomogeneous cosmology. <i>Physical Review D</i> , 2003, 68, .	1.6	100
107	COMMENTS ON COSMOLOGY 2001. , 2003, , .		0
108	On the stability of the Einstein static universe. <i>Classical and Quantum Gravity</i> , 2003, 20, L155-L164.	1.5	133

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109	Mixed bag of 10 big ideas. <i>Physics World</i> , 2003, 16, 40-41.	0.0	1
110	COSMOLOGY AND LOCAL PHYSICS. <i>International Journal of Modern Physics A</i> , 2002, 17, 2667-2671.	0.5	12
111	THE STATE OF COSMOLOGY 2001: TWO VIEWS AND A MIDDLE WAY. , 2002, , .		0
112	Maintaining the standard. <i>Nature</i> , 2002, 416, 132-133.	13.7	0
113	Note on Signature Change and Colombeau Theory. <i>General Relativity and Gravitation</i> , 2001, 33, 1041-1046.	0.7	14
114	Holonomy in the Schwarzschild-Droste geometry. <i>Classical and Quantum Gravity</i> , 2001, 18, 1217-1233.	1.5	26
115	General relativistic analysis of peculiar velocities. <i>Classical and Quantum Gravity</i> , 2001, 18, 5115-5123.	1.5	18
116	Relativistic Cosmology 1999: Issues and Problems. <i>General Relativity and Gravitation</i> , 2000, 32, 1135-1158.	0.7	10
117	Confronting the meaning of racism. <i>Ecquid Novi: African Journalism Studies</i> , 2000, 21, 269-271.	0.6	0
118	Partially locally rotationally symmetric perfect fluid cosmologies. <i>Classical and Quantum Gravity</i> , 2000, 17, 3135-3156.	1.5	16
119	Propagation of jump discontinuities in relativistic cosmology. <i>Physical Review D</i> , 2000, 62, .	1.6	9
120	Nonperturbative gravitomagnetic fields. <i>Physical Review D</i> , 1999, 60, .	1.6	13
121	83 years of general relativity and cosmology: progress and problems. <i>Classical and Quantum Gravity</i> , 1999, 16, A37-A75.	1.5	34
122	Cosmic microwave background anisotropies: Nonlinear dynamics. <i>Physical Review D</i> , 1999, 59, .	1.6	86
123	Cosmological Models. , 1999, , 1-116.		129
124	Quasi-Newtonian dust cosmologies. <i>Classical and Quantum Gravity</i> , 1998, 15, 3545-3573.	1.5	48
125	Newtonian-like and anti-Newtonian universes. <i>Classical and Quantum Gravity</i> , 1998, 15, 1005-1017.	1.5	43
126	Causal propagation of geometrical fields in relativistic cosmology. <i>Physical Review D</i> , 1998, 59, .	1.6	15

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127	Integrability of irrotational silent cosmological models. <i>Classical and Quantum Gravity</i> , 1997, 14, 1151-1162.	1.5	82
128	Covariant analysis of gravitational waves in a cosmological context. <i>Classical and Quantum Gravity</i> , 1997, 14, 1215-1222.	1.5	88
129	Local freedom in the gravitational field. <i>Classical and Quantum Gravity</i> , 1997, 14, 1927-1936.	1.5	42
130	Consistency of dust solutions with $\text{div}H=0$. <i>Physical Review D</i> , 1997, 55, 5219-5221.	1.6	25
131	Gravity and Signature Change. <i>General Relativity and Gravitation</i> , 1997, 29, 591-597.	0.7	34
132	On general and restricted covariance in general relativity. <i>General Relativity and Gravitation</i> , 1996, 28, 1251-1267.	0.7	27
133	The covariant approach to LRS perfect fluid spacetime geometries. <i>Classical and Quantum Gravity</i> , 1996, 13, 1099-1127.	1.5	115
134	Cosmology in South Africa. <i>Astrophysics and Space Science</i> , 1995, 230, 237-262.	0.5	1
135	Limits on anisotropy and inhomogeneity from the cosmic background radiation. <i>Physical Review D</i> , 1995, 51, 1525-1535.	1.6	72
136	THE GEOMETRY OF CLASSICAL CHANGE OF SIGNATURE. <i>International Journal of Modern Physics D</i> , 1995, 04, 175-187.	0.9	16
137	Comment on "Entropy and the second law: A pedagogical alternative," by Ralph Baierlein [<i>Am. J. Phys.</i> 62 (1), 15-26 (1994)]. <i>American Journal of Physics</i> , 1995, 63, 472-472.	0.3	6
138	Geodesic instability and isotropy of CMWBR. <i>Classical and Quantum Gravity</i> , 1994, 11, 675-688.	1.5	16
139	The case for an open Universe. <i>Nature</i> , 1994, 370, 609-615.	13.7	60
140	Teaching of special relativity. <i>American Journal of Physics</i> , 1994, 62, 775-775.	0.3	1
141	PRIORITIES IN SOUTH AFRICAN SCIENCE POLICY IN A CHANGING ECONOMIC AND POLITICAL CONTEXT. <i>Transactions of the Royal Society of South Africa</i> , 1993, 48, 351-373.	0.8	0
142	Evolution of the density parameter in inflationary cosmology reexamined. <i>Physical Review D</i> , 1992, 46, 1399-1415.	1.6	50
143	Cosmological perturbations and the physical meaning of gauge-invariant variables. <i>Astrophysical Journal</i> , 1992, 395, 34.	1.6	204
144	Covariant perturbations in a multifluid cosmological medium. <i>Astrophysical Journal</i> , 1992, 395, 54.	1.6	109

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145	Relativistic effects in superluminal jets and neutron star winds. <i>Astrophysical Journal</i> , 1990, 361, 470.	1.6	55
146	The elusive anthropic principle. <i>Nature</i> , 1989, 337, 411-412.	13.7	10
147	The Domain of Cosmology and the Testing of Cosmological Theories. , 0, , 3-39.		2