Douglas H Erwin

List of Publications by Year
in descending order

124 papers	12,228 citations	36303 51 h-index	26613 107 g-index
209 all docs	209 docs citations	209 times ranked	10319 citing authors

#	Article	IF	Citations
1	Ediacara growing pains: modular addition and development in Dickinsonia costata. Paleobiology, 2022, 48, 83-98.	2.0	5
2	The Global Stratotype Section and Point (GSSP) for the base of the Capitanian Stage (Guadalupian,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.2	1
3	Latitudinal diversity gradient dynamics during Carboniferous to Triassic icehouse and greenhouse climates. Geology, 2022, 50, 1166-1171.	4.4	9
4	A conceptual framework of evolutionary novelty and innovation. Biological Reviews, 2021, 96, 1-15.	10.4	42
5	Developmental processes in Ediacara macrofossils. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20203055.	2.6	7
6	Developmental capacity and the early evolution of animals. Journal of the Geological Society, 2021, 178, .	2.1	4
7	Felsic volcanism as a factor driving the end-Permian mass extinction. Science Advances, 2021, 7, eabh1390.	10.3	63
8	Progress, problems and prospects: An overview of the Guadalupian Series of South China and North America. Earth-Science Reviews, 2020, 211, 103412.	9.1	26
9	On the coâ€evolution of surface oxygen levels and animals. Geobiology, 2020, 18, 260-281.	2.4	82
10	The origin of animal body plans: a view from fossil evidence and the regulatory genome. Development (Cambridge), 2020, 147, .	2.5	69
11	High-precision U-Pb zircon age constraints on the Guadalupian in West Texas, USA. Palaeogeography, Palaeoclimatology, Palaeoecology, 2020, 548, 109668.	2.3	19
12	A high-resolution summary of Cambrian to Early Triassic marine invertebrate biodiversity. Science, 2020, 367, 272-277.	12.6	298
13	Evolutionary dynamics of gene regulation. Current Topics in Developmental Biology, 2020, 139, 407-431.	2.2	12
14	The Invertebrate Tree of Life. By Gonzalo Giribet and Gregory D. Edgecombe. Princeton (New) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Quarterly Review of Biology, 2020, 95, 336-337.	0.1	0
15	Tempos and modes of collectivity in the history of life. Theory in Biosciences, 2019, 140, 343-351.	1.4	0
16	EvoChromo: towards a synthesis of chromatin biology and evolution. Development (Cambridge), 2019, 146, .	2.5	16
17	Prospects for a General Theory of Evolutionary Novelty. Journal of Computational Biology, 2019, 26, 735-744.	1.6	14
18	A sudden end-Permian mass extinction in South China. Bulletin of the Geological Society of America, 2019, 131, 205-223.	3.3	127

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19	Innovation not recovery: dynamic redox promotes metazoan radiations. Biological Reviews, 2018, 93, 863-873.	10.4	71
20	Chemical clues to the earliest animal fossils. Science, 2018, 361, 1198-1199.	12.6	11
21	Ediacaran Extinction and Cambrian Explosion. Trends in Ecology and Evolution, 2018, 33, 653-663.	8.7	152
22	The topology of evolutionary novelty and innovation in macroevolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160422.	4.0	26
23	Developmental push or environmental pull? The causes of macroevolutionary dynamics. History and Philosophy of the Life Sciences, 2017, 39, 36.	1.1	16
24	Eric Davidson and deep time. History and Philosophy of the Life Sciences, 2017, 39, 29.	1.1	1
25	The Evolution of Arthropod Body Plans: Integrating Phylogeny, Fossils, and Developmentâ€"An Introduction to the Symposium. Integrative and Comparative Biology, 2017, 57, 450-454.	2.0	4
26	The role of public goods in planetary evolution. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160359.	3.4	6
27	Snowball Earth climate dynamics and Cryogenian geology-geobiology. Science Advances, 2017, 3, e1600983.	10.3	424
28	A mixed Ediacaran-metazoan assemblage from the Zaris Sub-basin, Namibia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 459, 198-208.	2.3	52
29	Non-detection of C60 fullerene at two mass extinction horizons. Geochimica Et Cosmochimica Acta, 2016, 176, 18-25.	3.9	2
30	Earthâ€™s oxygen cycle and the evolution of animal life. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8933-8938.	7.1	205
31	The origin and evolution of cell types. Nature Reviews Genetics, 2016, 17, 744-757.	16.3	572
32	The Origin of Higher Taxa: Palaeobiological, Developmental and Ecological Perspectives.â€“ by T. S. Kemp.. Systematic Biology, 2016, 65, 558-559.	5.6	0
33	High-resolution SIMS oxygen isotope analysis on conodont apatite from South China and implications for the end-Permian mass extinction. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 448, 26-38.	2.3	133
34	Comparative genomics explains the evolutionary success of reef-forming corals. ELife, 2016, 5, .	6.0	169
35	Eric Davidson (1937â€“2015). Current Biology, 2015, 25, R968-R969.	3.9	0
36	Rarity in mass extinctions and the future of ecosystems. Nature, 2015, 528, 345-351.	27.8	87

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37	David M. Raup (1933â€“2015). Nature, 2015, 524, 36-36.	27.8	0
38	When and how did the terrestrial mid-Permian mass extinction occur? Evidence from the tetrapod record of the Karoo Basin, South Africa. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150834.	2.6	115
39	Was the Ediacaranâ€“Cambrian radiation a unique evolutionary event?. Paleobiology, 2015, 41, 1-15.	2.0	32
40	A public goods approach to major evolutionary innovations. Geobiology, 2015, 13, 308-315.	2.4	19
41	Eric Davidson (1937â€“2015). Science, 2015, 350, 517-517.	12.6	0
42	Novelty and Innovation in the History of Life. Current Biology, 2015, 25, R930-R940.	3.9	117
43	Biotic replacement and mass extinction of the Ediacara biota. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151003.	2.6	103
44	Early metazoan life: divergence, environment and ecology. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20150036.	4.0	98
45	Origin of Metazoan Developmental Toolkits and Their Expression in the Fossil Record. Advances in Marine Genomics, 2015, , 47-77.	1.2	14
46	Temporal acuity and the rate and dynamics of mass extinctions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3203-3204.	7.1	13
47	Quantifying the process and abruptness of the end-Permian mass extinction. Paleobiology, 2014, 40, 113-129.	2.0	80
48	The end of the Ediacara biota: Extinction, biotic replacement, or Cheshire Cat?. Gondwana Research, 2013, 23, 558-573.	6.0	220
49	Niche Construction Theory: A Practical Guide for Ecologists. Quarterly Review of Biology, 2013, 88, 3-28.	0.1	325
50	Novelties That Change Carrying Capacity. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2012, 318, 460-465.	1.3	28
51	Ecological drivers of the Ediacaran-Cambrian diversification of Metazoa. Evolutionary Ecology, 2012, 26, 417-433.	1.2	107
52	Calibrating the End-Permian Mass Extinction. Science, 2011, 334, 1367-1372.	12.6	648
53	Ecospace Utilization During the Ediacaran Radiation and the Cambrian Eco-explosion. Topics in Geobiology, 2011, , 111-133.	0.5	23
54	Otherworldly Earths: The Future of Deep Time Research. Eos, 2011, 92, 55-55.	0.1	0

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55	The Cambrian Conundrum: Early Divergence and Later Ecological Success in the Early History of Animals. Science, 2011, 334, 1091-1097.	12.6	1,055
56	Evolutionary uniformitarianism. Developmental Biology, 2011, 357, 27-34.	2.0	37
57	Macroevolution: Dynamics ofÂDiversity. Current Biology, 2011, 21, R1000-R1001.	3.9	5
58	The challenges and scope of theoretical biology. Journal of Theoretical Biology, 2011, 276, 269-276.	1.7	56
59	Evolutionary innovation and stability in animal gene networks. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2010, 314B, 182-186.	1.3	28
60	Simple model of recovery dynamics after mass extinction. Journal of Theoretical Biology, 2010, 267, 193-200.	1.7	35
61	Possible animal-body fossils in pre-Marinoan limestones from South Australia. Nature Geoscience, 2010, 3, 653-659.	12.9	180
62	CHANGE AND STABILITY IN PERMIAN BRACHIOPOD COMMUNITIES FROM WESTERN TEXAS. Palaios, 2009, 24, 27-40.	1.3	23
63	Climate as a Driver of Evolutionary Change. Current Biology, 2009, 19, R575-R583.	3.9	157
64	A call to the custodians of deep time. Nature, 2009, 462, 282-283.	27.8	11
65	The evolution of hierarchical gene regulatory networks. Nature Reviews Genetics, 2009, 10, 141-148.	16.3	411
66	Diversity, Dilemmas, and Monopolies of Niche Construction. American Naturalist, 2009, 173, 26-40.	2.1	93
67	CRITICAL ISSUES OF SCALE IN PALEOECOLOGY. Palaios, 2009, 24, 1-4.	1.3	39
68	Early origin of the bilaterian developmental toolkit. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 2253-2261.	4.0	89
69	Wonderful Ediacarans, wonderful cnidarians?. Evolution & Development, 2008, 10, 263-264.	2.0	11
70	Macroevolution of ecosystem engineering, niche construction and diversity. Trends in Ecology and Evolution, 2008, 23, 304-310.	8.7	248
71	The Evolution and Distribution of Species Body Size. Science, 2008, 321, 399-401.	12.6	147
72	Extinction as the loss of evolutionary history. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11520-11527.	7.1	61

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73	Compilation and Network Analyses of Cambrian Food Webs. PLoS Biology, 2008, 6, e102.	5.6	211
74	Endless Forms Most Beautiful. Sean B. Carroll. (2005, W. W. Norton.) $25.95. ISBN 0-393-06016-0. Artificial Life, 2007, 13, 87-89.	1.3	0
75	Cambrian Naraoiids (Arthropoda): Morphology, Ontogeny, Systematics, and Evolutionary Relationships. Journal of Paleontology, 2007, 81, 1-52.	0.8	63
76	Increasing returns, ecological feedback and the Early Triassic recovery. Palaeoworld, 2007, 16, 9-15.	1.1	29
77	AUTECOLOGY AND THE FILLING OF ECOSPACE: KEY METAZOAN RADIATIONS. Palaeontology, 2007, 50, 1-22.	2.2	240
78	DISPARITY: MORPHOLOGICAL PATTERN AND DEVELOPMENTAL CONTEXT. Palaeontology, 2007, 50, 57-73.	2.2	298
79	Patterns of convergence in general shell form among Paleozoic gastropods. Paleobiology, 2006, 32, 316-337.	2.0	33
80	DATES AND RATES: Temporal Resolution in the Deep Time Stratigraphic Record. Annual Review of Earth and Planetary Sciences, 2006, 34, 569-590.	11.0	42
81	Gene Regulatory Networks and the Evolution of Animal Body Plans. Science, 2006, 311, 796-800.	12.6	997
82	What can we learn about ecology and evolution from the fossil record?. Trends in Ecology and Evolution, 2006, 21, 322-328.	8.7	85
83	Opportunities and Challenges of a Highly Resolved Geological Timescale. The Paleontological Society Papers, 2006, 12, 171-180.	0.6	0
84	Evolutionary contingency. Current Biology, 2006, 16, R825-R826.	3.9	8
85	FOSSIL FISHES FROM THE LOWER TRIASSIC OF MAJIASHAN, CHAOHU, ANHUI PROVINCE, CHINA. Journal of Paleontology, 2006, 80, 146-161.	0.8	37
86	MACROEVOLUTION: Seeds of Diversity. Science, 2005, 308, 1752-1753.	12.6	39
87	Abrupt and Gradual Extinction Among Late Permian Land Vertebrates in the Karoo Basin, South Africa. Science, 2005, 307, 709-714.	12.6	281
88	EVOLUTION: Insights into Innovation. Science, 2004, 304, 1117-1119.	12.6	59
89	A LATE PERMIAN CHINESE GASTROPOD SPECIES, POSSIBLY LARVAL, IN THE MIDDLE PENNSYLVANIAN OF NEW MEXICO. Journal of Paleontology, 2004, 78, 420-423.	0.8	2
90	Dynamic response of Permian brachiopod communities to long-term environmental change. Nature, 2004, 428, 738-741.	27.8	46

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91	One Very Long Argument. Biology and Philosophy, 2004, 19, 17-28.	1.4	5
92	Late Triassic (Late Norian) gastropods from the Wallowa Terrane (Idaho, USA). Palaontologische Zeitschrift, 2004, 78, 361-416.	1.6	29
93	Impact at the Permo-Triassic Boundary: A Critical Evaluation. Astrobiology, 2003, 3, 67-74.	3.0	30
94	GASTROPODS FROM THE PERMIAN OF GUANGXI AND YUNNAN PROVINCES, SOUTH CHINA. Journal of Paleontology, 2002, 76, 1-49.	0.8	13
95	Recovery after mass extinction: evolutionary assembly in largeâ€“scale biosphere dynamics. Philosophical Transactions of the Royal Society B: Biological Sciences, 2002, 357, 697-707.	4.0	87
96	Battenizyga, a new Early Triassic gastropod genus with a discussion of the caenogastropod evolution at the Permian/Triassic boundary. Palaontologische Zeitschrift, 2002, 76, 21-27.	1.6	13
97	The last common bilaterian ancestor. Development (Cambridge), 2002, 129, 3021-3032.	2.5	239
98	The last common bilaterian ancestor. Development (Cambridge), 2002, 129, 3021-32.	2.5	60
99	New Late Triassic gastropods from the wallowa Terrane (Idaho) and their biogeographic significance. Facies, 2001, 45, 87-92.	1.4	4
100	Macroevolution is more than repeated rounds of microevolution. Evolution & Development, 2000, 2, 78-84.	2.0	149
101	Life's downs and ups. Nature, 2000, 404, 129-130.	27.8	22
102	Presentation of the Charles Schuchert Award of the Paleontological Society to Charles R. Marshall. Journal of Paleontology, 2000, 74, 758-758.	0.8	0
103	PRESENTATION OF THE CHARLES SCHUCHERT AWARD OF THE PALEONTOLOGICAL SOCIETY TO CHARLES R. MARSHALL. Journal of Paleontology, 2000, 74, 758-760.	0.8	0
104	The Origin of Bodyplans. American Zoologist, 1999, 39, 617-629.	0.7	52
105	Biospheric perturbations during Gondwanan times: From theNeoproterozoic-Cambrian radiation to the end-Permian crisis. Journal of African Earth Sciences, 1999, 28, 115-127.	2.0	9
106	The end and the beginning: recoveries from mass extinctions. Trends in Ecology and Evolution, 1998, 13, 344-349.	8.7	236
107	Silica-replaced fossils through the Phanerozoic. Geology, 1997, 25, 1031.	4.4	63
108	Developmental Evolution of Metazoan Bodyplans: The Fossil Evidence. Developmental Biology, 1996, 173, 373-381.	2.0	145

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109	Recoveries and Radiations: Gastropods After the Permo-Triassic Mass Extinction. Geological Society Special Publication, 1996, 102, 223-229.	1.3	28
110	Biotic Reshufflings: The Paleobiogeography of China . Yin Hongfu, Ed. Oxford University Press, New York, 1994. xiv, 370 pp., illus. $120 or Â£80. Oxford Biogeography Series, 8. Translated from the Chinese edition (1988).. Science, 1995, 267, 2012-2012.	12.6	0
111	The Permoâ€“Triassic extinction. Nature, 1994, 367, 231-236.	27.8	626
112	The origin of metazoan development: a palaeobiological perspective. Biological Journal of the Linnean Society, 1993, 50, 255-274.	1.6	35
113	Elvis Taxa. Palaios, 1993, 8, 623.	1.3	42
114	Testing for causal relationships between large pyroclastic volcanic eruptions and mass extinctions. Geophysical Research Letters, 1992, 19, 893-896.	4.0	19
115	A preliminary classification of evolutionary radiations. Historical Biology, 1992, 6, 133-147.	1.4	90
116	Metazoan phylogeny and the Cambrian radiation. Trends in Ecology and Evolution, 1991, 6, 131-134.	8.7	40
117	The Mother of Mass Extinctions. Palaios, 1991, 6, 517.	1.3	0
118	Carboniferous-Triassic gastropod diversity patterns and the Permo-Triassic mass extinction. Paleobiology, 1990, 16, 187-203.	2.0	38
119	The End-Permian mass extinction: What really happened and did it matter?. Trends in Ecology and Evolution, 1989, 4, 225-229.	8.7	8
120	Regional Paleoecology of Permian Gastropod Genera, Southwestern United States and the End-Permian Mass Extinction. Palaios, 1989, 4, 424.	1.3	37
121	Molecular clocks, molecular phylogenies and the origin of phyla. Lethaia, 1989, 22, 251-257.	1.4	14
122	The genus Glyptospira (Gastropoda: Trochacea) from the Permian of the southwestern United States. Journal of Paleontology, 1988, 62, 868-879.	0.8	14
123	A COMPARATIVE STUDY OF DIVERSIFICATION EVENTS: THE EARLY PALEOZOIC VERSUS THE MESOZOIC. Evolution; International Journal of Organic Evolution, 1987, 41, 1177-1186.	2.3	169
124	A Comparative Study of Diversification Events: The Early Paleozoic Versus the Mesozoic. Evolution; International Journal of Organic Evolution, 1987, 41, 1177.	2.3	71