Graham E Budd

List of Publications by Year
in descending order

118 papers	5,476 citations	76196 40 h-index	88477 70 g-index
129 all docs	129 docs citations	129 times ranked	2254 citing authors

#	Article	IF	Citations
1	A critical reappraisal of the fossil record of the bilaterian phyla. Biological Reviews, 2000, 75, 253-295.	4.7	409
2	A palaeontological solution to the arthropod head problem. Nature, 2002, 417, 271-275.	13.7	253
3	The morphology of Opabinia regalis and the reconstruction of the arthropod stemâ€group. Lethaia, 1996, 29, 1-14.	0.6	181
4	Why are arthropods segmented?. Evolution & Development, 2001, 3, 332-342.	1.1	181
5	The origin and evolution of arthropods. Nature, 2009, 457, 812-817.	13.7	159
6	Phylogenomic Insights into Animal Evolution. Current Biology, 2015, 25, R876-R887.	1.8	154
7	Conservation, loss, and redeployment of Wnt ligands in protostomes: implications for understanding the evolution of segment formation. BMC Evolutionary Biology, 2010, 10, 374.	3.2	153
8	The origin of the animals and a â€˜Savannahâ€™ hypothesis for early bilaterian evolution. Biological Reviews, 2017, 92, 446-473.	4.7	150
9	The Burgess Shale Anomalocaridid <i>Hurdia</i> and Its Significance for Early Euarthropod Evolution. Science, 2009, 323, 1597-1600.	6.0	146
10	Tardigrades as â€˜Stem-Group Arthropodsâ€™: The Evidence from the Cambrian Fauna. Zoologischer Anzeiger, 2001, 240, 265-279.	0.4	144
11	Head development in the onychophoranEuperipatoides kanangrensis with particular reference to the central nervous system. Journal of Morphology, 2003, 255, 1-23.	0.6	132
12	A Cambrian gilled lobopod from Greenland. Nature, 1993, 364, 709-711.	13.7	131
13	The morphology and phylogenetic significance of<i>Kerygmachela kierkegaardi</i>Budd (Buen) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Sciences, 1998, 89, 249-290.	1.0	122
14	Arthropod bodyâ€plan evolution in the Cambrian with an example from anomalocaridid muscle. Lethaia, 1998, 31, 197-210.	0.6	114
15	The earliest fossil record of the animals and its significance. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1425-1434.	1.8	106
16	The scleritome of Eccentrotheca from the Lower Cambrian of South Australia: Lophophorate affinities and implications for tommotiid phylogeny. Geology, 2008, 36, 171.	2.0	105
17	Comment on "Small Bilaterian Fossils from 40 to 55 Million Years Before the Cambrian". Science, 2004, 306, 1291a-1291a.	6.0	97
18	The Cambrian Fossil Record and the Origin of the Phyla. Integrative and Comparative Biology, 2003, 43, 157-165.	0.9	94

#	Article	IF	Citations
19	Does evolution in body patterning genes drive morphological change-or vice versa?. BioEssays, 1999, 21, 326-332.	1.2	82
20	New anomalocaridid appendages from the Burgess Shale, Canada. Palaeontology, 2010, 53, 721-738.	1.0	78
21	Origin and evolution of the panarthropod head â€“ A palaeobiological and developmental perspective. Arthropod Structure and Development, 2017, 46, 354-379.	0.8	75
22	Morphology and systematics of the anomalocaridid arthropod<i>Hurdia</i>from the Middle Cambrian of British Columbia and Utah. Journal of Systematic Palaeontology, 2013, 11, 743-787.	0.6	74
23	Deuterostomic Development in the Protostome Priapulus caudatus. Current Biology, 2012, 22, 2161-2166.	1.8	73
24	Head patterning and Hox gene expression in an onychophoran and its implications for the arthropod head problem. Development Genes and Evolution, 2010, 220, 117-122.	0.4	69
25	Deciphering the onychophoran â€˜segmentation gene cascadeâ€™: Gene expression reveals limited involvement of pair rule gene orthologs in segmentation, but a highly conserved segment polarity gene network. Developmental Biology, 2013, 382, 224-234.	0.9	68
26	Experimental taphonomy of <i>Artemia</i> reveals the role of endogenous microbes in mediating decay and fossilization. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150476.	1.2	65
27	Ecological innovations in the Cambrian and the origins of the crown group phyla. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150287.	1.8	64
28	The involvement of engrailed and wingless during segmentation in the onychophoran Euperipatoides kanangrensis (Peripatopsidae: Onychophora) (Reid 1996). Development Genes and Evolution, 2009, 219, 249-264.	0.4	62
29	Gene expression patterns in an onychophoran reveal that regionalization predates limb segmentation in panâ€arthropods. Evolution & Development, 2010, 12, 363-372.	1.1	61
30	Onychophoran Hox genes and the evolution of arthropod Hox gene expression. Frontiers in Zoology, 2014, 11, 22.	0.9	61
31	History is written by the victors: The effect of the push of the past on the fossil record. Evolution; International Journal of Organic Evolution, 2018, 72, 2276-2291.	1.1	61
32	Eggs and embryos in Xenoturbella (phylum uncertain) are not ingested prey. Development Genes and Evolution, 2005, 215, 358-363.	0.4	59
33	The dynamics of stem and crown groups. Science Advances, 2020, 6, eaaz1626.	4.7	57
34	On the origin and evolution of major morphological characters. Biological Reviews, 2006, 81, 609.	4.7	55
35	Arthroaspis n. gen., a common element of the Sirius Passet LagerstÃtte (Cambrian, North Greenland), sheds light on trilobite ancestry. BMC Evolutionary Biology, 2013, 13, 99.	3.2	53
36	HEAD STRUCTURE IN UPPER STEMâ€GROUP EUARTHROPODS. Palaeontology, 2008, 51, 561-573.	1.0	52

#	ARTICLE	IF	CITATIONS
37	Early embryonic development of the priapulid worm <i>Priapulus caudatus</i>. Evolution & Development, 2008, 10, 326-338.	1.1	50
38	Lost children of the Cambrian. Nature, 2004, 427, 205-207.	13.7	48
39	Evidence for Wg-independent tergite boundary formation in the millipede Glomeris marginata. Development Genes and Evolution, 2008, 218, 361-370.	0.4	44
40	Expression of myriapod pair rule gene orthologs. EvoDevo, 2011, 2, 5.	1.3	42
41	Analysis of the Wnt gene repertoire in an onychophoran provides new insights into the evolution of segmentation. EvoDevo, 2014, 5, 14.	1.3	41
42	The place of phylogeny and cladistics in Evo-Devo research. International Journal of Developmental Biology, 2003, 47, 479-90.	0.3	40
43	<i>Campanamuta mantonae</i>gen. et. sp. nov., an exceptionally preserved arthropod from the Sirius Passet Fauna (Buen Formation, lower Cambrian, North Greenland). Journal of Systematic Palaeontology, 2011, 9, 217-260.	0.6	39
44	Along came a sea spider. Nature, 2005, 437, 1099-1101.	13.7	38
45	Gene expression suggests conserved mechanisms patterning the heads of insects and myriapods. Developmental Biology, 2011, 357, 64-72.	0.9	37
46	A sclerite-bearing stem group entoproct from the early Cambrian and its implications. Scientific Reports, 2013, 3, 1066.	1.6	37
47	A nektaspid arthropod from the Early Cambrian Sirius Passet fauna, with a description of retrodeformation based on functional morphology. Palaeontology, 1999, 42, 99-122.	1.0	36
48	Ontogeny and dimorphism of Isoxys auritus (Arthropoda) from the Early Cambrian Chengjiang biota, South China. Gondwana Research, 2014, 25, 975-982.	3.0	36
49	Early animal evolution and the origins of nervous systems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20150037.	1.8	36
50	Survival and selection biases in early animal evolution and a source of systematic overestimation in molecular clocks. Interface Focus, 2020, 10, 20190110.	1.5	36
51	Response to Comment on "Small Bilaterian Fossils from 40 to 55 Million Years Before the Cambrian". Science, 2004, 306, 1291b-1291b.	6.0	35
52	Caught in the act: priapulid burrowers in early Cambrian substrates. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182505.	1.2	35
53	The lobes and lobopods of<i>Opabinia regalis</i>from the middle Cambrian Burgess Shale. Lethaia, 2012, 45, 83-95.	0.6	34
54	At the Origin of Animals: The Revolutionary Cambrian Fossil Record. Current Genomics, 2013, 14, 344-354.	0.7	34

#	Article	IF	Citations
55	Editorial: a renaissance for evolutionary morphology. Acta Zoologica, 2006, 88, 1-1.	0.6	33
56	Phylogenetic analysis and embryonic expression of panarthropod Dmrt genes. Frontiers in Zoology, 2019, 16, 23.	0.9	33
57	Impacts of speciation and extinction measured by an evolutionary decay clock. Nature, 2020, 588, 636-641.	13.7	32
58	Molecular evidence for a single origin of ultrafiltration-based excretory organs. Current Biology, 2021, 31, 3629-3638.e2.	1.8	28
59	<i>Kleptothule rasmusseni gen</i>. et sp. nov.: an ?olenellinid-like trilobite from the Sirius Passet fauna (Buen Formation, Lower Cambrian, North Greenland). Transactions of the Royal Society of Edinburgh: Earth Sciences, 1995, 86, 1-12.	1.0	27
60	Hatching and earliest larval stages of the priapulid worm <i>Priapulus caudatus</i>. Invertebrate Biology, 2009, 128, 157-171.	0.3	27
61	The oldest notostracan (<scp>U</scp>pper <scp>D</scp>evonian <scp>S</scp>trud locality,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.0	27
62	The nature of non-appendicular anterior paired projections in Palaeozoic total-group Euarthropoda. Arthropod Structure and Development, 2016, 45, 185-199.	0.8	27
63	A critical reappraisal of the fossil record of the bilaterian phyla. Biological Reviews, 2000, 75, 253-295.	4.7	26
64	The mouth apparatus of the Cambrian gilled lobopodian <i>Pambdelurion whittingtoni</i>. Palaeontology, 2016, 59, 841-849.	1.0	26
65	The origin and evolution of the euarthropod labrum. Arthropod Structure and Development, 2021, 62, 101048.	0.8	26
66	Invertebrate Evolution: Bringing Order to the Molluscan Chaos. Current Biology, 2011, 21, R964-R966.	1.8	24
67	Expression of collier in the premandibular segment of myriapods: support for the traditional Atelocerata concept or a case of convergence?. BMC Evolutionary Biology, 2011, 11, 50.	3.2	24
68	An ultrastructural investigation of the hypocerebral organ of the adult Euperipatoides kanangrensis (Onychophora, Peripatopsidae). Arthropod Structure and Development, 2005, 34, 407-418.	0.8	23
69	Expression of pair rule gene orthologs in the blastoderm of a myriapod: evidence for pair rule-like mechanisms?. BMC Developmental Biology, 2012, 12, 15.	2.1	23
70	Gene expression suggests conserved aspects of Hox gene regulation in arthropods and provides additional support for monophyletic Myriapoda. EvoDevo, 2010, 1, 4.	1.3	20
71	Aspects of dorsoâ€ventral and proximoâ€distal limb patterning in onychophorans. Evolution & Development, 2015, 17, 21-33.	1.1	20
72	Widespread preservation of small carbonaceous fossils (SCFs) in the early Cambrian of North Greenland. Geology, 2018, 46, 107-110.	2.0	20

#	Article	IF	Citations
73	Climbing life's tree. Nature, 2001, 412, 487-487.	13.7	18
74	Ecdysozoan-like sclerites among Ediacaran microfossils. Geological Magazine, 2015, 152, 1145-1148.	0.9	18
75	Fate and nature of the onychophoran mouthâ€"anus furrow and its contribution to the blastopore. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142628.	1.2	17
76	Columnar shell structures in early linguloid brachiopods â€" new data from the Middle Cambrian of Sweden. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2007, 98, 221-232.	0.3	16
77	The hatching larva of the priapulid worm Halicryptus spinulosus. Frontiers in Zoology, 2009, 6, 8.	0.9	15
78	Gene expression analysis reveals that Delta/Notch signalling is not involved in onychophoran segmentation. Development Genes and Evolution, 2016, 226, 69-77.	0.4	15
79	Burlingiid trilobites from Norway, with a discussion of their affinities and relationships. Palaeontology, 2002, 45, 1171-1195.	1.0	14
80	Embryonic expression of priapulid Wnt genes. Development Genes and Evolution, 2019, 229, 125-135.	0.4	14
81	Expression ofengrailed in the developing brain and appendages of the onychophoraneuperipatoides kanangrensis (Reid). Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2005, 304B, 220-228.	0.6	13
82	A myriapod-like arthropod from the Upper Cambrian of East Siberia. Palaontologische Zeitschrift, 2001, 75, 37-41.	0.8	12
83	18. Ecology of Nontrilobite Arthropods and Lobopods in the Cambrian. , 2000, , 404-427.		11
84	Morphospace. Current Biology, 2021, 31, R1181-R1185.	1.8	11
85	The evolution of biramous appendages revealed by a carapace-bearing Cambrian arthropod. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, 20210034.	1.8	10
86	Investigation of endoderm marker-genes during gastrulation and gut-development in the velvet worm Euperipatoides kanangrensis. Developmental Biology, 2017, 427, 155-164.	0.9	8
87	Intraspecific morphological variation of<i>Agnostus pisiformis</i>, a Cambrian Series 3 trilobite-like arthropod. Lethaia, 2017, 50, 467-485.	0.6	8
88	Habitat and developmental constraints drove 330 million years of horseshoe crab evolution. Biological Journal of the Linnean Society, 2022, 136, 155-172.	0.7	8
89	Progress and problems in arthropod phylogeny. Trends in Ecology and Evolution, 1996, 11, 356-358.	4.2	7
90	An intermittent mode of formation for the trace fossil<i>Cruziana</i>as a serial repetition of<i>Rusophycus</i>: the case of<i>Cruziana tenella</i>(Linnarsson). Lethaia, 2019, 52, 133-148.	0.6	7

#	Article	IF	Citations
91	Stylonurine eurypterids from the Strud locality (Upper Devonian, Belgium): new insights into the ecology of freshwater sea scorpions. Geological Magazine, 2019, 156, 1708-1714.	0.9	6
92	Animal Phylogeny: Resolving the Slugfest ofÂCtenophores, Sponges and Acoels?. Current Biology, 2021, 31, R202-R204.	1.8	6
93	Mesozoic fossil sustainability: synoptic case studies of resource management. Gff, 2013, 135, 131-143.	0.4	5
94	The first dorsal-eyed bivalved arthropod and its significance for early arthropod evolution. Gff, 2014, 136, 80-84.	0.4	5
95	Modeling durophagous predation and mortality rates from the fossil record of gastropods. Paleobiology, 2019, 45, 246-264.	1.3	5
96	The last common ancestor of Ecdysozoa had an adult terminal mouth. Arthropod Structure and Development, 2019, 49, 155-158.	0.8	5
97	On the origin and evolution of major morphological characters. Biological Reviews, 2006, 81, 609-628.	4.7	4
98	Gene Expression Patterns in Brachiopod Larvae Refute the â€œBrachiopod-Foldâ€•Hypothesis. Frontiers in Cell and Developmental Biology, 2017, 5, 74.	1.8	4
99	Gene expression analysis of potential morphogen signalling modifying factors in Panarthropoda. EvoDevo, 2018, 9, 20.	1.3	4
100	Comment on: Tang et al. [2019]: A problematic animal fossil from the early Cambrian Hetang Formation, South China. Journal of Paleontology, 2019, 93, 1276-1278.	0.5	4
101	Bonnet's challenge. Lethaia, 2007, 31, 167-168.	0.6	3
102	Evolution: Mapping Out Early Echinoderms. Current Biology, 2020, 30, R780-R782.	1.8	3
103	Oscillating waves of Fox, Cyclin and CDK gene expression indicate unique spatiotemporal control of cell cycling during nervous system development in onychophorans. Arthropod Structure and Development, 2021, 62, 101042.	0.8	3
104	Expression of <i>netrin</i> and its receptors <i>uncoordinatedâ€5</i> and <i>frazzled</i> in arthropods and onychophorans suggests conserved and diverged functions in neuronal pathfinding and synaptogenesis. Developmental Dynamics, 2023, 252, 172-185.	0.8	3
105	A comprehensive study of arthropod and onychophoran Fox gene expression patterns. PLoS ONE, 2022, 17, e0270790.	1.1	3
106	Trace fossils and the Cambrian explosion. Trends in Ecology and Evolution, 1998, 13, 507.	4.2	2
107	Cambrian nervous wrecks. Nature, 2012, 490, 180-181.	13.7	2
108	Animal Evolution: Trilobites on Speed. Current Biology, 2013, 23, R878-R880.	1.8	2

#	Article	IF	Citations
109	The Cambrian Explosion: The Reconstruction of Animal Biodiversity.â€" By Douglas H. Erwin and James W. Valentine.. Systematic Biology, 2013, 62, 915-917.	2.7	2
110	New perspectives on ancient marine reptiles. Geological Magazine, 2014, 151, 5-6.	0.9	2
111	Panarthropod tiptop/teashirt and spalt orthologs and their potential role as â€œtrunkâ€•selector genes. EvoDevo, 2021, 12, 7.	1.3	1
112	Expression of the zinc finger transcription factor Sp6â€"9 in the velvet worm Euperipatoides kanangrensis suggests a conserved role in appendage development in Panarthropoda. Development Genes and Evolution, 2020, 230, 239-245.	0.4	1
113	Arthropods from North Greenland: exceptional data in the â€˜Cambrian explosionâ€™ debate. The Paleontological Society Special Publications, 1992, 6, 44-44.	0.0	0
114	Ecology and Evolutionary Significance of the Sirius Passet Fauna Arthropods (Lower Cambrian of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.0	0
115	A review of Evolutionary patterns: growth, form and tempo in the fossil record. Evolution & Development, 2002, 4, 316-317.	1.1	0
116	BIO. Evolution & Development, 2009, 11, 462-464.	1.1	0
117	International Congress on Invertebrate Morphology Ã¢Â€Â" plenary papers. Acta Zoologica, 2010, 91, 1-1.	0.6	0
118	The earliest fossil record of the animals and its significance. , 2009, , 3-14.		0