W Ford Doolittle

List of Publications by Year
in descending order

103 papers	10,441 citations	53794 45 h-index	33894 99 g-index
108 all docs	108 docs citations	108 times ranked	7986 citing authors

#	Article	IF	Citations
1	Selfish genes, the phenotype paradigm and genome evolution. Nature, 1980, 284, 601-603.	27.8	1,738
2	Prokaryotic Evolution in Light of Gene Transfer. Molecular Biology and Evolution, 2002, 19, 2226-2238.	8.9	858
3	You are what you eat: a gene transfer ratchet could account for bacterial genes in eukaryotic nuclear genomes. Trends in Genetics, 1998, 14, 307-311.	6.7	571
4	Genes in pieces: were they ever together?. Nature, 1978, 272, 581-582.	27.8	453
5	Pattern pluralism and the Tree of Life hypothesis. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2043-2049.	7.1	440
6	Lateral Gene Transfer and the Origins of Prokaryotic Groups. Annual Review of Genetics, 2003, 37, 283-328.	7.6	357
7	Is junk DNA bunk? A critique of ENCODE. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5294-5300.	7.1	333
8	Phylogenetic analyses of cyanobacterial genomes: Quantification of horizontal gene transfer events. Genome Research, 2006, 16, 1099-1108.	5.5	278
9	The role of lateral gene transfer in the evolution of isoprenoid biosynthesis pathways. Molecular Microbiology, 2000, 37, 703-716.	2.5	247
10	On the chimeric nature, thermophilic origin, and phylogenetic placement of the Thermotogales. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5865-5870.	7.1	221
11	On the origin of prokaryotic species. Genome Research, 2009, 19, 744-756.	5.5	207
12	Irremediable Complexity?. Science, 2010, 330, 920-921.	12.6	204
13	Genomics and the bacterial species problem. Genome Biology, 2006, 7, 116.	9.6	200
14	Transmission of Creutzfeldt-Jakob disease from man to the guinea pig. Science, 1975, 190, 571-572.	12.6	193
15	Microbial rhodopsins: functional versatility and genetic mobility. Trends in Microbiology, 2006, 14, 463-469.	7.7	193
16	Computing prokaryotic gene ubiquity: Rescuing the core from extinction. Genome Research, 2004, 14, 2469-2477.	5.5	170
17	How a neutral evolutionary ratchet can build cellular complexity. IUBMB Life, 2011, 63, 528-537.	3.4	160
18	Itâ€™s the song, not the singer: an exploration of holobiosis and evolutionary theory. Biology and Philosophy, 2017, 32, 5-24.	1.4	155

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19	An Updated and Comprehensive rRNA Phylogeny of (Crown) Eukaryotes Based on Rate-Calibrated Evolutionary Distances. Journal of Molecular Evolution, 2000, 51, 565-576.	1.8	136
20	Unusual physical organization of the Halobacterium genome. Nature, 1982, 295, 384-389.	27.8	128
21	Environmental genomics of "Haloquadratum walsbyi" in a saltern crystallizer indicates a large pool of accessory genes in an otherwise coherent species. BMC Genomics, 2006, 7, 171.	2.8	128
22	Searching for species in haloarchaea. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14092-14097.	7.1	128
23	Phylogenetic reconstruction and lateral gene transfer. Trends in Microbiology, 2004, 12, 406-411.	7.7	124
24	The nature of the universal ancestor and the evolution of the proteome. Current Opinion in Structural Biology, 2000, 10, 355-358.	5.7	123
25	High-frequency genomic rearrangements involving archaebacterial repeat sequence elements. Nature, 1982, 299, 182-185.	27.8	103
26	Redividing the basidiomycetes on the basis of 5S rRNA sequences. Nature, 1982, 299, 723-724.	27.8	101
27	Gene Descent, Duplication, and Horizontal Transfer in the Evolution of Glutamyl- and Glutaminyl-tRNA Synthetases. Journal of Molecular Evolution, 1999, 49, 485-495.	1.8	99
28	Processes and patterns of interaction as units of selection: An introduction to ITSNTS thinking. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4006-4014.	7.1	95
29	Recombination in Thermotoga: Implications for Species Concepts and Biogeography. Genetics, 2006, 172, 759-769.	2.9	87
30	Nucleotide Sequences of Wheatâ€Embryo Cytosol 5â€S and 5.8â€S Ribosomal Ribonucleic Acids. FEBS Journal, 1980, 112, 561-576.	0.2	83
31	Eukaryogenesis, how special really?. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10278-10285.	7.1	83
32	Intertwined Evolutionary Histories of Marine Synechococcus and Prochlorococcus marinus. Genome Biology and Evolution, 2009, 1, 325-339.	2.5	80
33	Distinguishing between "Function" and "Effect" in Genome Biology. Genome Biology and Evolution, 2014, 6, 1234-1237.	2.5	79
34	GENOMICS: Enhanced: Are There Bugs in Our Genome?. Science, 2001, 292, 1848-1850.	12.6	79
35	Defining the Core of Nontransferable Prokaryotic Genes: The Euryarchaeal Core. Journal of Molecular Evolution, 2001, 53, 340-350.	1.8	74
36	Evidence for the early divergence of tryptophanyl- and tyrosyl-tRNA synthetases. Journal of Molecular Evolution, 1997, 45, 9-16.	1.8	67

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37	Rhodoluna lacicola gen. nov., sp. nov., a planktonic freshwater bacterium with stream-lined genome. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 3254-3263.	1.7	66
38	Novel syntaxin gene sequences from<i>Giardia, Trypanosoma</i>and algae: implications for the ancient evolution of the eukaryotic endomembrane system. Journal of Cell Science, 2002, 115, 1635-1642.	2.0	64
39	The practice of classification and the theory of evolution, and what the demise of Charles Darwin's tree of life hypothesis means for both of them. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 2221-2228.	4.0	63
40	Postmaturational Cleavage of 23 s Ribosomal Ribonucleic Acid and Its Metabolic Control in the Blue-Green Alga Anacystis nidulans. Journal of Bacteriology, 1973, 113, 1256-1263.	2.2	63
41	Natural selection through survival alone, and the possibility of Gaia. Biology and Philosophy, 2014, 29, 415-423.	1.4	61
42	The Modern Synthesis in the Light of Microbial Genomics. Annual Review of Microbiology, 2016, 70, 279-297.	7.3	58
43	Darwinizing Gaia. Journal of Theoretical Biology, 2017, 434, 11-19.	1.7	55
44	Evidence for the Heterolobosea from Phylogenetic Analysis of Genes Encoding Glyceraldehyde-3-Phosphate Dehydrogenase. Journal of Eukaryotic Microbiology, 1996, 43, 475-485.	1.7	53
45	Mutational Analysis of Dark Endogenous Metabolism in the Blue-Green Bacterium <i>Anacystis nidulans</i>. Journal of Bacteriology, 1974, 119, 677-683.	2.2	50
46	The Impact of Reticulate Evolution on Genome Phylogeny. Systematic Biology, 2008, 57, 844-856.	5.6	47
47	Archaea. Current Biology, 2015, 25, R851-R855.	3.9	45
48	Sulfolobus islandicus plasmids pRN1 and pRN2 share distant but common evolutionary ancestry. Extremophiles, 1998, 2, 391-393.	2.3	44
49	Ribosomal Ribonucleic Acid Synthesis and Maturation in the Blue-Green Alga Anacystis nidulans. Journal of Bacteriology, 1972, 111, 316-324.	2.2	41
50	Why introns-in-pieces?. Nature, 1993, 364, 289-290.	27.8	40
51	Coral-mucus-associated <i>Vibrio</i> integrons in the Great Barrier Reef: genomic hotspots for environmental adaptation. ISME Journal, 2011, 5, 962-972.	9.8	37
52	Population Genomics: How Bacterial Species Form and Why They Don't Exist. Current Biology, 2012, 22, R451-R453.	3.9	36
53	Multilevel Selection Theory and the Evolutionary Functions of Transposable Elements: Fig. 1.â€". Genome Biology and Evolution, 2015, 7, 2445-2457.	2.5	36
54	The coupling of taxonomy and function in microbiomes. Biology and Philosophy, 2017, 32, 1225-1243.	1.4	36

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55	What Is the Tree of Life?. PLoS Genetics, 2016, 12, e1005912.	3.5	35
56	A ratchet for protein complexity. Nature, 2012, 481, 270-271.	27.8	34
57	Making the Most of Clade Selection. Philosophy of Science, 2017, 84, 275-295.	1.0	32
58	Diversity of bacteriorhodopsins in different hypersaline waters from a single Spanish saltern. Environmental Microbiology, 2003, 5, 1039-1045.	3.8	29
59	Molecular Phylogenetics and the Perennial Problem of Homology. Journal of Molecular Evolution, 2016, 83, 184-192.	1.8	29
60	On causal roles and selected effects: our genome is mostly junk. BMC Biology, 2017, 15, 116.	3.8	29
61	Life and life only: a radical alternative to life definitionism. SynthÃˆse, 2020, 197, 2975-2989.	1.1	28
62	Genes-in-pieces revisited. Nature, 1993, 361, 403-403.	27.8	26
63	Systematic overestimation of gene gain through false diagnosis of gene absence. Genome Biology, 2007, 8, 402.	9.6	23
64	Making Evolutionary Sense of Gaia. Trends in Ecology and Evolution, 2019, 34, 889-894.	8.7	23
65	The attempt on the life of the Tree of Life: science, philosophy and politics. Biology and Philosophy, 2010, 25, 455-473.	1.4	22
66	Getting â€œfunctionâ€•right. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3365.	7.1	22
67	We simply cannot go on being so vague about â€˜functionâ€™. Genome Biology, 2018, 19, 223.	8.8	22
68	Getting clear about the F-word in genomics. PLoS Genetics, 2020, 16, e1008702.	3.5	22
69	TheSulfolobus solfataricusP2 genome project. FEBS Letters, 1996, 389, 88-91.	2.8	21
70	Microbial neopleomorphism. Biology and Philosophy, 2013, 28, 351-378.	1.4	21
71	Eukaryotes first: how could that be?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140322.	4.0	20
72	The generality of Constructive Neutral Evolution. Biology and Philosophy, 2018, 33, 1.	1.4	20

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73	The trouble with (group II) introns. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6536-6537.	7.1	19
74	Microbial Diversity: A Bonanza of Phyla. Current Biology, 2015, 25, R227-R230.	3.9	18
75	Archaebacterial genomics: The complete genome sequence ofMethanococcus jannaschii. BioEssays, 1997, 19, 1-4.	2.5	17
76	Neutral evolution of cellular phenotypes. Current Opinion in Genetics and Development, 2019, 58-59, 87-94.	3.3	17
77	Horizontal persistence and the complexity hypothesis. Biology and Philosophy, 2020, 35, 1.	1.4	17
78	Evolution: Two Domains of Life or Three?. Current Biology, 2020, 30, R177-R179.	3.9	17
79	TRANSFORMATION OF A BOP-HOP-SOP-I-SOP-II-Halobacterium halobium MUTANT TO BOP+: EFFECTS OF BACTERIORHODOPSIN PHOTOACTIVATION ON CELLULAR PROTON FLUXES AND SWIMMING BEHAVIOR. Photochemistry and Photobiology, 1992, 56, 553-561.	2.5	16
80	Evolution: Reducible Complexity â€" The Case for Bacterial Flagella. Current Biology, 2007, 17, R510-R512.	3.9	15
81	Microbial Evolution: Stalking the Wild Bacterial Species. Current Biology, 2008, 18, R565-R567.	3.9	15
82	â€˜Speciesâ€™ without species. Studies in History and Philosophy of Science Part A, 2021, 87, 72-80.	1.2	15
83	The role of purifying selection in the origin and maintenance of complex function. Studies in History and Philosophy of Science Part A, 2021, 87, 125-135.	1.2	12
84	Novel Ribonucleic Acid Species Accumulated in the Dark in the Blue-Green Alga Anacystis nidulans. Journal of Bacteriology, 1974, 118, 351-357.	2.2	12
85	Comment on â€œDoes constructive neutral evolution play an important role in the origin of cellular complexity?â€•DOI 10.1002/bies.201100010. BioEssays, 2011, 33, 427-429.	2.5	10
86	Reply to Lane and Martin: Being and becoming eukaryotes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4824-E4824.	7.1	10
87	Linked Genes for Calmodulin and E2 Ubiquitin-Conjugating Enzyme in Trichomonas vaginalis. Journal of Eukaryotic Microbiology, 1996, 43, 468-474.	1.7	8
88	Sol's world, the RNA world, our world.. FASEB Journal, 1993, 7, 1-2.	0.5	7
89	Microbial Evolution: Xenology (Apparently) Trumps Paralogy. Current Biology, 2016, 26, R1181-R1183.	3.9	7
90	Tubulins in Trichomonas vaginalis: Molecular Characterization of alpha-Tubulin Genes, Posttranslational Modifications, and Homology Modeling of the Tubulin Dimer. Journal of Eukaryotic Microbiology, 2001, 48, 647-654.	1.7	6

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91	Sixty years of genome biology. Genome Biology, 2013, 14, 113.	9.6	6
92	How microbes â€œjeopardizeâ€•the modern synthesis. PLoS Genetics, 2019, 15, e1008166.	3.5	6
93	Mutationism, not Lamarckism, captures the novelty of CRISPRâ€“Cas. Biology and Philosophy, 2019, 34, 1.	1.4	5
94	Carl R. Woese (1928â€“2012). Current Biology, 2013, 23, R183-R185.	3.9	4
95	Systematics of basidiomycetes based on 5S rRNA sequences and other data (reply). Nature, 1983, 303, 732-732.	27.8	3
96	The Evolutionary Significance of the Archaebacteria. Annals of the New York Academy of Sciences, 1987, 503, 72-77.	3.8	3
97	How Natural a Kind Is "Eukaryote?". Cold Spring Harbor Perspectives in Biology, 2014, 6, a015974-a015974.	5.5	3
98	All about levels: transposable elements as selfish DNAs and drivers of evolution. Biology and Philosophy, 2022, 37, .	1.4	2
99	The Root of the Tree: Lateral Gene Transfer and the Nature of the Domains. , 0, , 29-37.		1
100	Biochemical Evolution and the History of Life. Short Courses in Paleontology, 1988, 1, 138-145.	0.2	0
101	Could this pandemic usher in evolutionâ€™s next major transition?. Current Biology, 2020, 30, R846-R848.	3.9	0
102	Some thoughts on the tree of life. Harvey Lectures, 2003, 99, 111-28.	0.2	0
103	A Chemostat Model for Evolution by Persistence: Clade Selection and its Explanatory Autonomy. Philosophy of Science, 0, , 1-47.	1.0	0