Mark P Simmons

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9046529/publications.pdf

Version: 2024-02-01

114 papers 7,997 citations

39 h-index 49909 87 g-index

114 all docs

114 docs citations

times ranked

114

7896 citing authors

#	Article	IF	CITATIONS
1	Gaps as Characters in Sequence-Based Phylogenetic Analyses. Systematic Biology, 2000, 49, 369-381.	5.6	2,312
2	Functional trait niches of North American lotic insects: traits-based ecological applications in light of phylogenetic relationships. Journal of the North American Benthological Society, 2006, 25, 730-755.	3.1	704
3	How Meaningful Are Bayesian Support Values?. Molecular Biology and Evolution, 2004, 21, 188-199.	8.9	326
4	Independence of alignment and tree search. Molecular Phylogenetics and Evolution, 2004, 31, 874-879.	2.7	272
5	A Phylogeny of the Monocots, as Inferred from rbcL and atpA Sequence Variation, and a Comparison of Methods for Calculating Jackknife and Bootstrap Values. Systematic Botany, 2004, 29, 467-510.	0.5	173
6	Incorporation, Relative Homoplasy, and Effect of Gap Characters in Sequence-Based Phylogenetic Analyses. Systematic Biology, 2001, 50, 454-462.	5.6	166
7	Narrow thermal tolerance and low dispersal drive higher speciation in tropical mountains. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12471-12476.	7.1	161
8	Data Decisiveness, Data Quality, and Incongruence in Phylogenetic Analysis: An Example From the Monocotyledons Using Mitochondrial atp A Sequences. Systematic Biology, 1998, 47, 282-310.	5.6	157
9	Incorporation, Relative Homoplasy, and Effect of Gap Characters in Sequence-Based Phylogenetic Analyses. Systematic Biology, 2001, 50, 454-462.	5.6	138
10	Whole-Genome Comparison of Leucine-Rich Repeat Extensins in Arabidopsis and Rice. A Conserved Family of Cell Wall Proteins Form a Vegetative and a Reproductive Clade,. Plant Physiology, 2003, 131, 1313-1326.	4.8	128
11	Phylogeny of the Cucurbitales based on DNA sequences of nine loci from three genomes: Implications for morphological and sexual system evolution. Molecular Phylogenetics and Evolution, 2006, 39, 305-322.	2.7	121
12	New Guinea has the world's richest island flora. Nature, 2020, 584, 579-583.	27.8	108
13	Comprehensive comparative analysis of kinesins in photosynthetic eukaryotes. BMC Genomics, 2006, 7, 18.	2.8	102
14	Phylogeny and Delimitation of the Celastrales Inferred from Nuclear and Plastid Genes. Systematic Botany, 2006, 31, 122-137.	0.5	99
15	Misleading results of likelihoodâ€based phylogenetic analyses in the presence of missing data. Cladistics, 2012, 28, 208-222.	3.3	90
16	Phylogeny of the Celastraceae Inferred from 26S Nuclear Ribosomal DNA, Phytochrome B, rbcL, atpB, and Morphology. Molecular Phylogenetics and Evolution, 2001, 19, 353-366.	2.7	89
17	The relative performance of indel-coding methods in simulations. Molecular Phylogenetics and Evolution, 2007, 44, 724-740.	2.7	88
18	Miocene Dispersal Drives Island Radiations in the Palm Tribe Trachycarpeae (Arecaceae). Systematic Biology, 2012, 61, 426-442.	5.6	77

#	Article	IF	CITATIONS
19	Coalescence vs. concatenation: Sophisticated analyses vs. first principles applied to rooting the angiosperms. Molecular Phylogenetics and Evolution, 2015, 91, 98-122.	2.7	77
20	Spurious 99% bootstrap and jackknife support for unsupported clades. Molecular Phylogenetics and Evolution, 2011, 61, 177-191.	2.7	76
21	Phylogeny of the Celastraceae inferred from phytochrome B gene sequence and morphology. American Journal of Botany, 2001, 88, 313-325.	1.7	7 5
22	Radical instability and spurious branch support by likelihood when applied to matrices with non-random distributions of missing data. Molecular Phylogenetics and Evolution, 2012, 62, 472-484.	2.7	75
23	Molecular analyses of the Chinese herb Leigongteng (Tripterygium wilfordii Hook.f.). Phytochemistry, 2011, 72, 21-26.	2.9	74
24	Resolution of a concatenation/coalescence kerfuffle: partitioned coalescence support and a robust familyâ€level tree for Mammalia. Cladistics, 2017, 33, 295-332.	3.3	70
25	Transcriptomeâ€wide comparison of selenium hyperaccumulator and nonaccumulator <i>Stanleya</i> species provides new insight into key processes mediating the hyperaccumulation syndrome. Plant Biotechnology Journal, 2018, 16, 1582-1594.	8.3	67
26	Phylogeny of the Celastreae (Celastraceae) and the relationships of Catha edulis (qat) inferred from morphological characters and nuclear and plastid genes. Molecular Phylogenetics and Evolution, 2008, 48, 745-757.	2.7	59
27	Amino acid vs. nucleotide characters: challenging preconceived notions. Molecular Phylogenetics and Evolution, 2002, 24, 78-90.	2.7	55
28	A Thorny Dilemma: Testing Alternative Intrageneric Classifications within <i>Ziziphus</i> (Rhamnaceae). Systematic Botany, 2006, 31, 826-842.	0.5	55
29	Characterization of selenium and sulfur accumulation across the genus <i>Stanleya</i> (Brassicaceae): A field survey and commonâ€garden experiment. American Journal of Botany, 2014, 101, 830-839.	1.7	55
30	A confounding effect of missing data on character conflict in maximum likelihood and Bayesian MCMC phylogenetic analyses. Molecular Phylogenetics and Evolution, 2014, 80, 267-280.	2.7	53
31	Rapid Intraspecific Evolution of miRNA and siRNA Genes in the Mosquito Aedes aegypti. PLoS ONE, 2012, 7, e44198.	2.5	52
32	The Complete Plastid Genome of Lagerstroemia fauriei and Loss of rpl2 Intron from Lagerstroemia (Lythraceae). PLoS ONE, 2016, 11, e0150752.	2.5	52
33	A penalty of using anonymous dominant markers (AFLPs, ISSRs, and RAPDs) for phylogenetic inference. Molecular Phylogenetics and Evolution, 2007, 42, 528-542.	2.7	51
34	Relationships and Morphological Character Change among Genera of Celastraceae Sensu Lato (Including Hippocrateaceae). Annals of the Missouri Botanical Garden, 1999, 86, 723.	1.3	50
35	Efficiently resolving the basal clades of a phylogenetic tree using Bayesian and parsimony approaches: a case study using mitogenomic data from 100 higher teleost fishes. Molecular Phylogenetics and Evolution, 2004, 31, 351-362.	2.7	49
36	Divergent maximum-likelihood-branch-support values for polytomies. Molecular Phylogenetics and Evolution, 2014, 73, 87-96.	2.7	49

#	Article	IF	Citations
37	The effects of subsampling gene trees on coalescent methods applied to ancient divergences. Molecular Phylogenetics and Evolution, 2016, 97, 76-89.	2.7	45
38	Congruence of Molecular, Morphological, and Biochemical Profiles in Rutaceae: a Cladistic Analysis of the Subfamilies Rutoideae and Toddalioideae. Systematic Botany, 2007, 32, 837-846.	0.5	43
39	The effects of increasing genetic distance on alignment of, and tree construction from, rDNA internal transcribed spacer sequences. Molecular Phylogenetics and Evolution, 2003, 26, 444-451.	2.7	42
40	Evaluating multiple criteria for species delimitation: an empirical example using Hawaiian palms (Arecaceae: Pritchardia). BMC Evolutionary Biology, 2012, 12, 23.	3.2	42
41	Phylogeny of the Asian Hedyotis–Oldenlandia complex (Spermacoceae, Rubiaceae): Evidence for high levels of polyphyly and the parallel evolution of diplophragmous capsules. Molecular Phylogenetics and Evolution, 2013, 67, 110-122.	2.7	42
42	GEOGRAPHIC AND TAXONOMIC DISPARITIES IN SPECIES DIVERSITY: DISPERSAL AND DIVERSIFICATION RATES ACROSS WALLACE'S LINE. Evolution; International Journal of Organic Evolution, 2013, 67, 2058-2071.	2.3	42
43	Artifacts of Coding Amino Acids and Other Composite Characters for Phylogenetic Analysis. Cladistics, 2002, 18, 354-365.	3.3	40
44	Uninode coding vs gene tree parsimony for phylogenetic reconstruction using duplicate genes. Molecular Phylogenetics and Evolution, 2002, 23, 481-498.	2.7	39
45	Relative character-state space, amount of potential phylogenetic information, and heterogeneity of nucleotide and amino acid characters. Molecular Phylogenetics and Evolution, 2004, 32, 913-926.	2.7	39
46	From basepairs to birdsongs: phylogenetic data in the age of genomics. Cladistics, 2003, 19, 333-347.	3.3	38
47	Delimitation of the Segregate Genera of <i>Maytenus</i> s. l. (Celastraceae) Based on Morphological and Molecular Characters. Systematic Botany, 2011, 36, 922-932.	0.5	38
48	Are mitochondrial genes useful for the analysis of monocot relationships?. Taxon, 2006, 55, 857-870.	0.7	37
49	Evolution of selenium hyperaccumulation in <i>Stanleya</i> (Brassicaceae) as inferred from phylogeny, physiology and Xâ€ray microprobe analysis. New Phytologist, 2015, 205, 583-595.	7.3	37
50	Origin and Evolution of Kinesin-Like Calmodulin-Binding Protein. Plant Physiology, 2005, 138, 1711-1722.	4.8	34
51	A Fundamental Problem with Amino-Acid-Sequence Characters for Phylogenetic Analyses. Cladistics, 2000, 16, 274-282.	3.3	33
52	Character-state space versus rate of evolution in phylogenetic inference. Cladistics, 2004, 20, 191-204.	3.3	33
53	Phylogeny of Celastraceae tribe Euonymeae inferred from morphological characters and nuclear and plastid genes. Molecular Phylogenetics and Evolution, 2012, 62, 9-20.	2.7	33
54	Gene-wise resampling outperforms site-wise resampling in phylogenetic coalescence analyses. Molecular Phylogenetics and Evolution, 2019, 131, 80-92.	2.7	33

#	Article	lF	CITATIONS
55	How Can Third Codon Positions Outperform First and Second Codon Positions in Phylogenetic Inference? An Empirical Example from the Seed Plants. Systematic Biology, 2006, 55, 245-258.	5.6	32
56	Application of DNA barcodes in <i>Hedyotis</i> L. (Spermacoceae, Rubiaceae). Journal of Systematics and Evolution, 2011, 49, 203-212.	3.1	31
57	Partitioned coalescence support reveals biases in species-tree methods and detects gene trees that determine phylogenomic conflicts. Molecular Phylogenetics and Evolution, 2019, 139, 106539.	2.7	31
58	Phylogeny Reconstruction Using Duplicate Genes. Molecular Biology and Evolution, 2000, 17, 469-473.	8.9	30
59	ILS-Aware Analysis of Low-Homoplasy Retroelement Insertions: Inference of Species Trees and Introgression Using Quartets. Journal of Heredity, 2020, 111, 147-168.	2.4	30
60	Linear Plasmids and the Rate of Sequence Evolution in Plant Mitochondrial Genomes. Genome Biology and Evolution, 2016, 8, 364-374.	2.5	29
61	Conflict between Amino Acid and Nucleotide Characters. Cladistics, 2002, 18, 200-206.	3.3	27
62	Quantification and relative severity of inflated branch-support values generated by alternative methods: An empirical example. Molecular Phylogenetics and Evolution, 2013, 67, 277-296.	2.7	27
63	Biogeography of the Malagasy Celastraceae: Multiple independent origins followed by widespread dispersal of genera from Madagascar. Molecular Phylogenetics and Evolution, 2016, 94, 365-382.	2.7	27
64	Quantification of the success of phylogenetic inference in simulations. Cladistics, 2006, 22, 249-255.	3.3	26
65	An artifact caused by undersampling optimal trees in supermatrix analyses of locally sampled characters. Molecular Phylogenetics and Evolution, 2013, 69, 265-275.	2.7	26
66	Dubious resolution and support from published sparse supermatrices: The importance of thorough tree searches. Molecular Phylogenetics and Evolution, 2014, 78, 334-348.	2.7	26
67	Phylogeny of Celastraceae Subfamily Salacioideae and Tribe Lophopetaleae Inferred from Morphological Characters and Nuclear and Plastid Genes. Systematic Botany, 2010, 35, 358-367.	0.5	25
68	Mitochondrial fatty acid βâ€oxidation is required for storageâ€lipid catabolism in a marine diatom. New Phytologist, 2020, 228, 946-958.	7.3	25
69	Relative benefits of aminoâ€acid, codon, degeneracy, DNA, and purineâ€pyrimidine character coding for phylogenetic analyses of exons. Journal of Systematics and Evolution, 2017, 55, 85-109.	3.1	24
70	Collapsing dubiously resolved gene-tree branches in phylogenomic coalescent analyses. Molecular Phylogenetics and Evolution, 2021, 158, 107092.	2.7	24
71	Phylogeny of Celastraceae subfamily Hippocrateoideae inferred from morphological characters and nuclear and plastid loci. Molecular Phylogenetics and Evolution, 2011, 59, 320-330.	2.7	23
72	Systematics of New World <i>Maytenus</i> (Celastraceae) and a New Delimitation of the Genus. Systematic Botany, 2017, 42, 680-693.	0.5	23

#	Article	IF	CITATIONS
73	Co-variation in methanotroph community composition and activity in three temperate grassland soils. Soil Biology and Biochemistry, 2016, 95, 78-86.	8.8	22
74	A phylogeny of Anisophylleaceae based on six nuclear and plastid loci: Ancient disjunctions and recent dispersal between South America, Africa, and Asia. Molecular Phylogenetics and Evolution, 2007, 44, 1057-1067.	2.7	21
75	Alignment of, and phylogenetic inference from, random sequences: The susceptibility of alternative alignment methods to creating artifactual resolution and support. Molecular Phylogenetics and Evolution, 2010, 57, 1004-1016.	2.7	21
76	Phylogeny of Celastraceae Subfamilies Cassinoideae and Tripterygioideae Inferred from Morphological Characters and Nuclear and Plastid Loci. Systematic Botany, 2012, 37, .	0.5	21
77	Limitations of Relative Apparent Synapomorphy Analysis (RASA) for Measuring Phylogenetic Signal. Molecular Biology and Evolution, 2002, 19, 14-23.	8.9	20
78	Phylogeny of the <i>Elaeodendron</i> Group (Celastraceae) Inferred from Morphological Characters and Nuclear and Plastid Genes. Systematic Botany, 2006, 31, 512-524.	0.5	20
79	Divergence and support among slightly suboptimal likelihood gene trees. Cladistics, 2020, 36, 322-340.	3.3	20
80	Disparate parametric branch-support values from ambiguous characters. Molecular Phylogenetics and Evolution, 2014, 78, 66-86.	2.7	18
81	The relative performance of Bayesian and parsimony approaches when sampling characters evolving under homogeneous and heterogeneous sets of parameters. Cladistics, 2006, 22, 171-185.	3.3	17
82	Evaluation of microsatellites of Catha edulis (qat; Celastraceae) identified using pyrosequencing. Biochemical Systematics and Ecology, 2013, 49, 1-9.	1.3	17
83	Mutually exclusive phylogenomic inferences at the root of the angiosperms: <i>Amborella</i> is supported as sister and Observed Variability is biased. Cladistics, 2017, 33, 488-512.	3.3	16
84	Gene-tree misrooting drives conflicts in phylogenomic coalescent analyses of palaeognath birds. Molecular Phylogenetics and Evolution, 2022, 167, 107344.	2.7	16
85	Limitations of locally sampled characters in phylogenetic analyses of sparse supermatrices. Molecular Phylogenetics and Evolution, 2014, 74, 1-14.	2.7	15
86	Molecular phylogeny and revised classification of <scp><i>Eucosma</i> H</scp> übner and related genera (<scp>L</scp> epidoptera: <scp>T</scp> ortricidae: <scp>E</scp> ucosmini). Systematic Entomology, 2014, 39, 49-67.	3.9	14
87	Biases of tree-independent-character-subsampling methods. Molecular Phylogenetics and Evolution, 2016, 100, 424-443.	2.7	11
88	Artifacts of Coding Amino Acids and Other Composite Characters for Phylogenetic Analysis. Cladistics, 2002, 18, 354-365.	3.3	11
89	The deterministic effects of alignment bias in phylogenetic inference. Cladistics, 2011, 27, 402-416.	3.3	10
90	A New Species of <l>Maytenus</l> (Celastraceae) with Fleshy Fruits from Eastern Brazil, with Notes on the Delimitation of <l>Maytenus</l> . Systematic Botany, 2014, 39, 478-484.	0.5	10

#	Article	IF	CITATIONS
91	Thistle be a mess: Untangling the taxonomy of <i>Cirsium</i> (Cardueae: Compositae) in North America. Journal of Systematics and Evolution, 2020, 58, 881-912.	3.1	10
92	Bias in Tree Searches and its Consequences for Measuring Group Supports. Systematic Biology, 2014, 63, 851-861.	5.6	9
93	Phylogeography of the wild and cultivated stimulant plant qat (Catha edulis , Celastraceae) in areas of historical cultivation. American Journal of Botany, 2017, 104, 538-549.	1.7	9
94	Alternative analyses of compensatory base changes in an ITS2 phylogeny of Corydalis (Papaveraceae). Annals of Botany, 2019, 124, 233-243.	2.9	9
95	A Fundamental Problem with Amino-Acid-Sequence Characters for Phylogenetic Analyses. Cladistics, 2000, 16, 274-282.	3.3	9
96	Potential use of host-derived genome signatures to root virus phylogenies. Molecular Phylogenetics and Evolution, 2008, 49, 969-978.	2.7	8
97	Incorporation of gap characters and lineage-specific regions into phylogenetic analyses of gene families from divergent clades: an example from the kinesin superfamily across eukaryotes. Cladistics, 2008, 24, 372-384.	3.3	7
98	The relative sensitivity of different alignment methods and character codings in sensitivity analysis. Cladistics, 2008, 24, 1039-1050.	3.3	7
99	Employing Twoâ€stage Derivatisation and GC–MS to Assay for Cathine and Related Stimulant Alkaloids across the Celastraceae. Phytochemical Analysis, 2017, 28, 257-266.	2.4	7
100	Adenine \hat{A} -cytosine substitutions are an alternative pathway of compensatory mutation in angiosperm ITS2. Rna, 2020, 26, 209-217.	3.5	7
101	Revision of the Cerrado Hemicryptophytic Chamaesyce of Boissier's "Pleiadeniae" (Euphorbiaceae). Brittonia, 1997, 49, 155.	0.2	6
102	<l>Wilczekra</l> , a New Genus of Celastraceae for a Disjunct Lineage of <l>Euonymus</l> . Systematic Botany, 2013, 38, 148-153.	0.5	6
103	Contribution of molecular cladistics to the taxonomy of Rutaceae in China*. Journal of Systematics and Evolution, 2009, 47, 144-150.	3.1	5
104	Wood Anatomy of Amanoa (Euphorbiaceae). IAWA Journal, 1993, 14, 205-213.	2.7	3
105	Development of microsatellites in the Hawaiian endemic palm Pritchardia martii (Arecaceae) and their utility in congeners. American Journal of Botany, 2011, 98, e139-e140.	1.7	3
106	From basepairs to birdsongs: phylogenetic data in the age of genomics. Cladistics, 2003, 19, 333-347.	3.3	3
107	Phylogenetic inference using non-redundant coding of dependent characters versus alternative approaches for protein-coding genes. Cladistics, 2011, 27, 186-196.	3.3	2
108	Haydenoxylon, a Replacement Name forHaydenia(Celastraceae). Novon, 2014, 23, 224-225.	0.3	2

#	Article	IF	CITATIONS
109	Pleurostylia serrulata and Two Allied New Species from Africa are Actually Members of the New World Crossopetalum (Celastraceae). Systematic Botany, 2016, 41, 851-864.	0.5	2
110	Ten Simple Rules for Writing a Reply Paper. PLoS Computational Biology, 2015, 11, e1004536.	3.2	1
111	Benefits of alignment qualityâ€control processing steps and an Angiosperms353 phylogenomics pipeline applied to the Celastrales. Cladistics, 2022, 38, 595-611.	3.3	1
112	Relative character-state space, amount of potential phylogenetic information, and heterogeneity of nucleotide and amino acid characters*1. Molecular Phylogenetics and Evolution, 2004, 32, 913-913.	2.7	0
113	Ten Rules for Associate Editors. Botanical Review, The, 2018, 84, 99-107.	3.9	0
114	Clonal Diversity, Cultivar Traits, Geographic Dispersal, and the Ethnotaxonomy of Cultivated Qat (Catha edulis, Celastraceae). Economic Botany, 2020, 74, 273-291.	1.7	O