William F Martin

List of Publications by Year in Descending Order

312 papers	28,923 citations	82 h-index	163 g-index
345 ext. papers	33,038 ext. citations	10 avg, IF	7.53 L-index

#	Paper	IF	Citations
312	Energy at Origins: Favorable Thermodynamics of Biosynthetic Reactions in the Last Universal Common Ancestor (LUCA).. *Frontiers in Microbiology*, **2021**, 12, 793664	5.7	3
311	Pyrophosphate and Irreversibility in Evolution, or why PP Is Not an Energy Currency and why Nature Chose Triphosphates. *Frontiers in Microbiology*, **2021**, 12, 759359	5.7	2
310	Gene Duplications Trace Mitochondria to the Onset of Eukaryote Complexity. *Genome Biology and Evolution*, **2021**, 13,	3.9	11
309	The metabolic network of the last bacterial common ancestor. *Communications Biology*, **2021**, 4, 413	6.7	7
308	To What Inanimate Matter Are We Most Closely Related and Does the Origin of Life Harbor Meaning?. *Philosophies*, **2021**, 6, 33	0.7	1
307	Evidence for a Syncytial Origin of Eukaryotes from Ancestral State Reconstruction. *Genome Biology and Evolution*, **2021**, 13,	3.9	4
306	Anomalous Phylogenetic Behavior of Ribosomal Proteins in Metagenome-Assembled Asgard Archaea. *Genome Biology and Evolution*, **2021**, 13,	3.9	9
305	Gene Duplications Are At Least 50 Times Less Frequent than Gene Transfers in Prokaryotic Genomes. *Genome Biology and Evolution*, **2021**, 13,	3.9	3
304	The Autotrophic Core: An Ancient Network of 404 Reactions Converts H, CO, and NH into Amino Acids, Bases, and Cofactors. *Microorganisms*, **2021**, 9,	4.9	7
303	The origin of symbiogenesis: An annotated English translation of Mereschkowsky's 1910 paper on the theory of two plasma lineages. *BioSystems*, **2021**, 199, 104281	1.9	12
302	The ambivalent role of water at the origins of life. *FEBS Letters*, **2020**, 594, 2717-2733	3.8	16
301	Older Than Genes: The Acetyl CoA Pathway and Origins. *Frontiers in Microbiology*, **2020**, 11, 817	5.7	26
300	Autocatalytic chemical networks at the origin of metabolism. *Proceedings of the Royal Society B: Biological Sciences*, **2020**, 287, 20192377	4.4	37
299	Bacterial Genes Outnumber Archaeal Genes in Eukaryotic Genomes. *Genome Biology and Evolution*, **2020**, 12, 282-292	3.9	15
298	A hydrogen-dependent geochemical analogue of primordial carbon and energy metabolism. *Nature Ecology and Evolution*, **2020**, 4, 534-542	12.3	57
297	Physiological limits to life in anoxic subseafloor sediment. *FEMS Microbiology Reviews*, **2020**, 44, 219-231	15.1	10
296	A spectrum of verticality across genes. *PLoS Genetics*, **2020**, 16, e1009200	6	9

295	Phylogenetic analyses with systematic taxon sampling show that mitochondria branch within Alphaproteobacteria. *Nature Ecology and Evolution*, **2020**, 4, 1213-1219	12.3	33
294	Brain energy rescue: an emerging therapeutic concept for neurodegenerative disorders of ageing. *Nature Reviews Drug Discovery*, **2020**, 19, 609-633	64.1	166
293	Nitrogenase Inhibition Limited Oxygenation of Earth's Proterozoic Atmosphere. *Trends in Plant Science*, **2019**, 24, 1022-1031	13.1	15
292	Carbon-Metal Bonds: Rare and Primordial in Metabolism. *Trends in Biochemical Sciences*, **2019**, 44, 807-818	10.3	11
291	Archaeal Histone Contributions to the Origin of Eukaryotes. *Trends in Microbiology*, **2019**, 27, 703-714	12.4	20
290	Sediment, methane and energy. *Nature Microbiology*, **2019**, 4, 547-549	26.6	1
289	Energy metabolism in anaerobic eukaryotes and Earth's late oxygenation. *Free Radical Biology and Medicine*, **2019**, 140, 279-294	7.8	20
288	Oxygen Reductases in Alphaproteobacterial Genomes: Physiological Evolution From Low to High Oxygen Environments. *Frontiers in Microbiology*, **2019**, 10, 499	5.7	19
287	Archaea, the tree of life, and cellular evolution in eukaryotes. *Science China Earth Sciences*, **2019**, 62, 489-506	4.6	2
286	The Evolution of Oxygen-Independent Energy Metabolism in Eukaryotes with Hydrogenosomes and Mitosomes. *Microbiology Monographs*, **2019**, 7-29	0.8	
285	Adaptation to life on land at high O via transition from ferredoxin-to NADH-dependent redox balance. *Proceedings of the Royal Society B: Biological Sciences*, **2019**, 286, 20191491	4.4	7
284	Currency, Exchange, and Inheritance in the Evolution of Symbiosis. *Trends in Microbiology*, **2019**, 27, 836-849	11.4	17
283	Catalysts, autocatalysis and the origin of metabolism. *Interface Focus*, **2019**, 9, 20190072	3.9	16
282	Enlarged and highly repetitive plastome of Lagarostrobos and plastid phylogenomics of Podocarpaceae. *Molecular Phylogenetics and Evolution*, **2019**, 133, 24-32	4.1	5
281	A physiological perspective on the origin and evolution of photosynthesis. *FEMS Microbiology Reviews*, **2018**, 42, 205-231	15.1	65
280	Native metals, electron bifurcation, and CO reduction in early biochemical evolution. *Current Opinion in Microbiology*, **2018**, 43, 77-83	7.9	27
279	Asking endosymbionts to do an enzyme's job. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E4543-E4544	11.5	2
278	Failure to Recover Major Events of Gene Flux in Real Biological Data Due to Method Misapplication. *Genome Biology and Evolution*, **2018**, 10, 1198-1209	3.9	4

277	Eukaryote lateral gene transfer is Lamarckian. *Nature Ecology and Evolution*, **2018**, 2, 754	12.3	13
276	An Algal Greening of Land. *Cell*, **2018**, 174, 256-258	56.2	8
275	The last universal common ancestor between ancient Earth chemistry and the onset of genetics. *PLoS Genetics*, **2018**, 14, e1007518	6	61
274	Mosaic mitochondrial-plastid insertions into the nuclear genome show evidence of both non-homologous end joining and homologous recombination. *BMC Evolutionary Biology*, **2018**, 18, 162	3	5
273	Elusive data underlying debate at the prokaryote-eukaryote divide. *Biology Direct*, **2018**, 13, 21	7.2	4
272	Serpentinization: Connecting Geochemistry, Ancient Metabolism and Industrial Hydrogenation. *Life* , **2018**, 8,	3	28
271	Something special about CO-dependent CO fixation. *FEBS Journal*, **2018**, 285, 4181-4195	5.7	18
270	Lipids Are the Preferred Substrate of the Protist Naegleria gruberi, Relative of a Human Brain Pathogen. *Cell Reports*, **2018**, 25, 537-543.e3	10.6	12
269	Origin and phylogenetic relationships of [4Fe-4S]-containing O sensors of bacteria. *Environmental Microbiology*, **2018**, 20, 4567-4586	5.2	10
268	Physiology, anaerobes, and the origin of mitosing cells 50 years on. *Journal of Theoretical Biology*, **2017**, 434, 2-10	2.3	28
267	Physiology, phylogeny, early evolution, and GAPDH. *Protoplasma*, **2017**, 254, 1823-1834	3.4	20
266	Energy in Ancient Metabolism. *Cell*, **2017**, 168, 953-955	56.2	31
265	The Mitochondrion of Euglena gracilis. *Advances in Experimental Medicine and Biology*, **2017**, 979, 19-37	3.6	16
264	Physiological evolution: Genomic redox footprints. *Nature Plants*, **2017**, 3, 17071	11.5	8
263	Unmiraculous facultative anaerobes (comment on DOI 10.1002/bies.201600174). *BioEssays*, **2017**, 39, 1700041	4.1	4
262	Wo lebten die ersten Zellen und wovon?. *Biologie in Unserer Zeit*, **2017**, 47, 186-192	0.1	2
261	The Physiology of Phagocytosis in the Context of Mitochondrial Origin. *Microbiology and Molecular Biology Reviews*, **2017**, 81,	13.2	61
260	Too Much Eukaryote LGT. *BioEssays*, **2017**, 39, 1700115	4.1	74

259	Quantifying the Number of Independent Organelle DNA Insertions in Genome Evolution and Human Health. *Genome Biology and Evolution*, **2017**, 9, 1190-1203	3.9	18
258	Late Mitochondrial Origin Is an Artifact. *Genome Biology and Evolution*, **2017**, 9, 373-379	3.9	25
257	Symbiogenesis, gradualism, and mitochondrial energy in eukaryote origin. *Periodicum Biologorum*, **2017**, 119, 141-158	1	25
256	On Being the Right Size as an Animal with Plastids. *Frontiers in Plant Science*, **2017**, 8, 1402	6.2	8
255	Reply to 'Is LUCA a thermophilic progenote?'. *Nature Microbiology*, **2016**, 1, 16230	26.6	11
254	Mitochondria, the Cell Cycle, and the Origin of Sex via a Syncytial Eukaryote Common Ancestor. *Genome Biology and Evolution*, **2016**, 8, 1950-70	3.9	51
253	The physiology and habitat of the last universal common ancestor. *Nature Microbiology*, **2016**, 1, 16116	26.6	482
252	Lokiarchaeon is hydrogen dependent. *Nature Microbiology*, **2016**, 1, 16034	26.6	75
251	Symbiotic Associations: All About Chemistry. *Advances in Environmental Microbiology*, **2016**, 3-11	1.3	1
250	Mitochondria, complexity, and evolutionary deficit spending. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E666	11.5	20
249	Why Have Organelles Retained Genomes?. *Cell Systems*, **2016**, 2, 70-2	10.6	10
248	On the Origin of Heterotrophy. *Trends in Microbiology*, **2016**, 24, 12-25	12.4	84
247	Physiology, phylogeny, and LUCA. *Microbial Cell*, **2016**, 3, 582-587	3.9	16
246	Animals, anoxic environments, and reasons to go deep. *BMC Biology*, **2016**, 14, 44	7.3	4
245	Energy for two: New archaeal lineages and the origin of mitochondria. *BioEssays*, **2016**, 38, 850-6	4.1	26
244	A natural barrier to lateral gene transfer from prokaryotes to eukaryotes revealed from genomes: the 70% rule. *BMC Biology*, **2016**, 14, 89	7.3	66
243	Bacterial Vesicle Secretion and the Evolutionary Origin of the Eukaryotic Endomembrane System. *Trends in Microbiology*, **2016**, 24, 525-534	12.4	106
242	AstRoMap European Astrobiology Roadmap. *Astrobiology*, **2016**, 16, 201-43	3.7	75

241	One step beyond a ribosome: The ancient anaerobic core. *Biochimica Et Biophysica Acta - Bioenergetics*, **2016**, 1857, 1027-1038	4.6	37
240	The Entner-Doudoroff pathway is an overlooked glycolytic route in cyanobacteria and plants. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5441-6	11.5	102
239	Big questions and skepsis: Review of In Search of Cell History. *BioEssays*, **2015**, 37, 349-351	4.1	1
238	Protein import and the origin of red complex plastids. *Current Biology*, **2015**, 25, R515-21	6.3	70
237	Algal endosymbionts in European Hydra strains reflect multiple origins of the zoochlorella symbiosis. *Molecular Phylogenetics and Evolution*, **2015**, 93, 55-62	4.1	2
236	The Ribofilm as a Concept for Life's Origins. *Cell*, **2015**, 162, 13-5	56.2	19
235	Autocatalytic sets in metabolism. *Journal of Systems Chemistry*, **2015**, 6, 4		49
234	Endosymbiotic theories for eukaryote origin. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2015**, 370, 20140330	5.8	274
233	Conservation of Transit Peptide-Independent Protein Import into the Mitochondrial and Hydrogenosomal Matrix. *Genome Biology and Evolution*, **2015**, 7, 2716-26	3.9	39
232	Structure and Evolution of the Archaeal Lipid Synthesis Enzyme sn-Glycerol-1-phosphate Dehydrogenase. *Journal of Biological Chemistry*, **2015**, 290, 21690-704	5.4	13
231	Endosymbiotic origin and differential loss of eukaryotic genes. *Nature*, **2015**, 524, 427-32	50.4	190
230	Eukaryotes really are special, and mitochondria are why. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E4823	11.5	27
229	Origins of major archaeal clades correspond to gene acquisitions from bacteria. *Nature*, **2015**, 517, 77-80	50.4	169
228	Early Microbial Evolution: The Age of Anaerobes. *Cold Spring Harbor Perspectives in Biology*, **2015**, 8, a018127	10.2	57
227	Endosymbiotic gene transfer from prokaryotic pangenomes: Inherited chimerism in eukaryotes. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 10139-46	11.5	78
226	The Origin of a Killer Revealed by Bronze Age Yersinia Genomes. *Cell Host and Microbe*, **2015**, 18, 513-4	23.4	4
225	Chloroplast incorporation and long-term photosynthetic performance through the life cycle in laboratory cultures of Elysia timida (Sacoglossa, Heterobranchia). *Frontiers in Zoology*, **2014**, 11, 5	2.8	12
224	Plastid-bearing sea slugs fix CO2 in the light but do not require photosynthesis to survive. *Proceedings of the Royal Society B: Biological Sciences*, **2014**, 281, 20132493	4.4	41

223	Functional kleptoplasty in a limapontioidean genus: phylogeny, food preferences and photosynthesis inCostasiella, with a focus onC. ocellifera(Gastropoda: Sacoglossa). *Journal of Molluscan Studies*, **2014**, 80, 499-507	1.1	18
222	Hydrothermal vents, energy, and the origin of life: On the antiquity of methyl groups. *Biochimica Et Biophysica Acta - Bioenergetics*, **2014**, 1837, e1-e2	4.6	
221	Of early animals, anaerobic mitochondria, and a modern sponge. *BioEssays*, **2014**, 36, 924-32	4.1	23
220	Endosymbiotic theory for organelle origins. *Current Opinion in Microbiology*, **2014**, 22, 38-48	7.9	227
219	Evolution. Energy at life's origin. *Science*, **2014**, 344, 1092-3	33.3	93
218	Using Phylogenetic Networks to Model Chinese Dialect History. *Language Dynamics and Change*, **2014**, 4, 222-252	0.4	22
217	Networks of lexical borrowing and lateral gene transfer in language and genome evolution. *BioEssays*, **2014**, 36, 141-50	4.1	26
216	Subcellular targeting of proteins and pathways during evolution. *New Phytologist*, **2014**, 201, 1-2	9.8	5
215	Concatenated alignments and the case of the disappearing tree. *BMC Evolutionary Biology*, **2014**, 14, 266	3	36
214	Application and comparative performance of network modularity algorithms to ecological communities classification. *Acta Societatis Botanicorum Poloniae*, **2014**, 83, 93-102	1.5	1
213	Plastid origin: who, when and why?. *Acta Societatis Botanicorum Poloniae*, **2014**, 83, 281-289	1.5	7
212	Biochemical fossils of the ancient transition from geoenergetics to bioenergetics in prokaryotic one carbon compound metabolism. *Biochimica Et Biophysica Acta - Bioenergetics*, **2014**, 1837, 964-81	4.6	60
211	Endosymbioses in Sacoglossan Seaslugs: Plastid-Bearing Animals that Keep Photosynthetic Organelles Without Borrowing Genes **2014**, 291-324		18
210	The evolutionary root of flowering plants. *Systematic Biology*, **2013**, 62, 50-61	8.4	60
209	Deep sequencing of Trichomonas vaginalis during the early infection of vaginal epithelial cells and amoeboid transition. *International Journal for Parasitology*, **2013**, 43, 707-19	4.3	62
208	Genomes of Stigonematalean cyanobacteria (subsection V) and the evolution of oxygenic photosynthesis from prokaryotes to plastids. *Genome Biology and Evolution*, **2013**, 5, 31-44	3.9	182
207	Knockout of the abundant Trichomonas vaginalis hydrogenosomal membrane protein TvHMP23 increases hydrogenosome size but induces no compensatory up-regulation of paralogous copies. *FEBS Letters*, **2013**, 587, 1333-9	3.8	8
206	Automated glycopeptide analysis--review of current state and future directions. *Briefings in Bioinformatics*, **2013**, 14, 361-74	13.4	67

205	The N-terminal sequences of four major hydrogenosomal proteins are not essential for import into hydrogenosomes of Trichomonas vaginalis. *Journal of Eukaryotic Microbiology*, **2013**, 60, 89-97	3.6	19
204	Energy, genes and evolution: introduction to an evolutionary synthesis. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2013**, 368, 20120253	5.8	24
203	Anaerobic energy metabolism in unicellular photosynthetic eukaryotes. *Biochimica Et Biophysica Acta - Bioenergetics*, **2013**, 1827, 210-23	4.6	75
202	Massively convergent evolution for ribosomal protein gene content in plastid and mitochondrial genomes. *Genome Biology and Evolution*, **2013**, 5, 2318-29	3.9	69
201	Chlorophyll biosynthesis gene evolution indicates photosystem gene duplication, not photosystem merger, at the origin of oxygenic photosynthesis. *Genome Biology and Evolution*, **2013**, 5, 200-16	3.9	57
200	Is FtsH the key to plastid longevity in sacoglossan slugs?. *Genome Biology and Evolution*, **2013**, 5, 2540-8	3.9	51
199	The actin-based machinery of Trichomonas vaginalis mediates flagellate-amoeboid transition and migration across host tissue. *Cellular Microbiology*, **2013**, 15, 1707-21	3.9	41
198	Early bioenergetic evolution. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2013**, 368, 20130088	5.8	162
197	Endosymbiosis and the evolution of complexity. *Biochemist*, **2013**, 35, 4-8	0.5	
196	The origin of membrane bioenergetics. *Cell*, **2012**, 151, 1406-16	56.2	241
195	Transformation and conjugal transfer of foreign genes into the filamentous multicellular cyanobacteria (subsection V) Fischerella and Chlorogloeopsis. *Current Microbiology*, **2012**, 65, 552-60	2.4	33
194	Acquisition of 1,000 eubacterial genes physiologically transformed a methanogen at the origin of Haloarchaea. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 20537-42	11.5	180
193	Biochemistry and evolution of anaerobic energy metabolism in eukaryotes. *Microbiology and Molecular Biology Reviews*, **2012**, 76, 444-95	13.2	496
192	Hydrogen, metals, bifurcating electrons, and proton gradients: the early evolution of biological energy conservation. *FEBS Letters*, **2012**, 586, 485-93	3.8	80
191	An evolutionary network of genes present in the eukaryote common ancestor polls genomes on eukaryotic and mitochondrial origin. *Genome Biology and Evolution*, **2012**, 4, 466-85	3.9	104
190	A machine learning approach to identify hydrogenosomal proteins in Trichomonas vaginalis. *Eukaryotic Cell*, **2012**, 11, 217-28		20
189	The neglected genome. *EMBO Reports*, **2012**, 13, 473-4	6.5	33
188	Transcriptomic evidence that longevity of acquired plastids in the photosynthetic slugs Elysia timida and Plakobranchus ocellatus does not entail lateral transfer of algal nuclear genes. *Molecular Biology and Evolution*, **2011**, 28, 699-706	8.3	106

187	Red and problematic green phylogenetic signals among thousands of nuclear genes from the photosynthetic and apicomplexa-related Chromera velia. *Genome Biology and Evolution*, **2011**, 3, 1220-30	3.9	71
186	High growth rate, photosynthesis rate and increased hydrogen(ases) in manganese deprived cells of a newly isolated Nostoc-like cyanobacterium (SAG 2306). *International Journal of Hydrogen Energy*, **2011**, 36, 12200-12210	6.7	7
185	Early evolution without a tree of life. *Biology Direct*, **2011**, 6, 36	7.2	47
184	Planctomycetes and eukaryotes: a case of analogy not homology. *BioEssays*, **2011**, 33, 810-7	4.1	73
183	Networks uncover hidden lexical borrowing in Indo-European language evolution. *Proceedings of the Royal Society B: Biological Sciences*, **2011**, 278, 1794-803	4.4	49
182	Directed networks reveal genomic barriers and DNA repair bypasses to lateral gene transfer among prokaryotes. *Genome Research*, **2011**, 21, 599-609	9.7	168
181	Networks of gene sharing among 329 proteobacterial genomes reveal differences in lateral gene transfer frequency at different phylogenetic depths. *Molecular Biology and Evolution*, **2011**, 28, 1057-74	8.3	112
180	ERAD components in organisms with complex red plastids suggest recruitment of a preexisting protein transport pathway for the periplastid membrane. *Genome Biology and Evolution*, **2011**, 3, 140-50	3.9	53
179	Serpentinization as a source of energy at the origin of life. *Geobiology*, **2010**, 8, 355-71	4.3	281
178	Variability of wax ester fermentation in natural and bleached Euglena gracilis Strains in response to oxygen and the elongase inhibitor flufenacet. *Journal of Eukaryotic Microbiology*, **2010**, 57, 63-9	3.6	55
177	The energetics of genome complexity. *Nature*, **2010**, 467, 929-34	50.4	741
176	Evolutionary origins of metabolic compartmentalization in eukaryotes. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2010**, 365, 847-55	5.8	142
175	Molecular poltergeists: mitochondrial DNA copies (numts) in sequenced nuclear genomes. *PLoS Genetics*, **2010**, 6, e1000834	6	389
174	Genetic Diversity, Evolution and Domestication of Wheat and Barley in the Fertile Crescent **2010**, 137-166		19
173	Genome networks root the tree of life between prokaryotic domains. *Genome Biology and Evolution* , **2010**, 2, 379-92	3.9	70
172	The tree of life: introduction to an evolutionary debate. *Biology and Philosophy*, **2010**, 25, 441-453	1.7	50
171	Evolution of spliceosomal introns following endosymbiotic gene transfer. *BMC Evolutionary Biology*, **2010**, 10, 57	3	21
170	Acetate formation in the energy metabolism of parasitic helminths and protists. *International Journal for Parasitology*, **2010**, 40, 387-97	4.3	85

169	How did LUCA make a living? Chemiosmosis in the origin of life. *BioEssays*, **2010**, 32, 271-80	4.1	203
168	Anaerobic animals from an ancient, anoxic ecological niche. *BMC Biology*, **2010**, 8, 32	7.3	30
167	Microbiology. Seeing green and red in diatom genomes. *Science*, **2009**, 324, 1651-2	33.3	26
166	Getting a better picture of microbial evolution en route to a network of genomes. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2009**, 364, 2187-96	5.8	62
165	A machine-learning approach reveals that alignment properties alone can accurately predict inference of lateral gene transfer from discordant phylogenies. *Molecular Biology and Evolution*, **2009**, 26, 1931-9	8.3	10
164	A proteomic survey of Chlamydomonas reinhardtii mitochondria sheds new light on the metabolic plasticity of the organelle and on the nature of the alpha-proteobacterial mitochondrial ancestor. *Molecular Biology and Evolution*, **2009**, 26, 1533-48	8.3	151
163	Hydrothermalquellen und der Ursprung des Lebens. Alles hat einen Anfang, auch die Evolution. *Biologie in Unserer Zeit*, **2009**, 39, 166-174	0.1	3
162	Expression of nucleus-encoded genes for chloroplast proteins in the flagellate Euglena gracilis. *Journal of Eukaryotic Microbiology*, **2009**, 56, 159-66	3.6	18
161	Transketolase from Cyanophora paradoxa: in vitro import into cyanelles and pea chloroplasts and a complex history of a gene often, but not always, transferred in the context of secondary endosymbiosis. *Journal of Eukaryotic Microbiology*, **2009**, 56, 568-76	3.6	6
160	Prokaryotic evolution and the tree of life are two different things. *Biology Direct*, **2009**, 4, 34	7.2	161
159	Hydrothermal vents and the origin of life. *Nature Reviews Microbiology*, **2008**, 6, 805-14	22.2	833
158	Modular networks and cumulative impact of lateral transfer in prokaryote genome evolution. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 10039-44	11.5	285
157	Protein import into hydrogenosomes of Trichomonas vaginalis involves both N-terminal and internal targeting signals: a case study of thioredoxin reductases. *Eukaryotic Cell*, **2008**, 7, 1750-7		42
156	Genes of cyanobacterial origin in plant nuclear genomes point to a heterocyst-forming plastid ancestor. *Molecular Biology and Evolution*, **2008**, 25, 748-61	8.3	176
155	Acetate:succinate CoA-transferase in the hydrogenosomes of Trichomonas vaginalis: identification and characterization. *Journal of Biological Chemistry*, **2008**, 283, 1411-1418	5.4	49
154	Difficulties in testing for covarion-like properties of sequences under the confounding influence of changing proportions of variable sites. *Molecular Biology and Evolution*, **2008**, 25, 1512-20	8.3	29
153	Energy metabolism among eukaryotic anaerobes in light of Proterozoic ocean chemistry. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2008**, 363, 2717-29	5.8	69
152	Sulfide : quinone oxidoreductase (SQR) from the lugworm Arenicola marina shows cyanide- and thioredoxin-dependent activity. *FEBS Journal*, **2008**, 275, 1131-9	5.7	64

151	Evolutionary dynamics of introns in plastid-derived genes in plants: saturation nearly reached but slow intron gain continues. *Molecular Biology and Evolution*, **2008**, 25, 111-9	8.3	23
150	Biochemical and Evolutionary Aspects of Eukaryotes That Inhabit Sulfidic Environments **2008**, 36-45		3
149	Anaerobic Eukaryotes in Pursuit of Phylogenetic Normality: the Evolution of Hydrogenosomes and Mitosomes **2007**, 1-20		7
148	Testing hypotheses without considering predictions. *BioEssays*, **2007**, 29, 500-3	4.1	15
147	Purification, microsequencing and cloning of spinach ATP-dependent phosphofructokinase link sequence and function for the plant enzyme. *FEBS Journal*, **2007**, 274, 429-38	5.7	18
146	A reality check for alignments and trees. *Trends in Genetics*, **2007**, 23, 478-80	8.5	13
145	Ancestral genome sizes specify the minimum rate of lateral gene transfer during prokaryote evolution. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 870-5	11.5	165
144	Rate and polarity of gene fusion and fission in Oryza sativa and Arabidopsis thaliana. *Molecular Biology and Evolution*, **2007**, 24, 110-21	8.3	18
143	Molecular diversity at 18 loci in 321 wild and 92 domesticate lines reveal no reduction of nucleotide diversity during Triticum monococcum (Einkorn) domestication: implications for the origin of agriculture. *Molecular Biology and Evolution*, **2007**, 24, 2657-68	8.3	128
142	On the origin of biochemistry at an alkaline hydrothermal vent. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2007**, 362, 1887-925	5.8	455
141	Eukaryote and Mitochondrial Origins: Two Sides of the Same Coin and Too Much Ado About Oxygen **2007**, 55-73		3
140	Supertrees and symbiosis in eukaryote genome evolution. *Trends in Microbiology*, **2007**, 15, 435-7	12.4	11
139	The evolution of eukaryotes. *Science*, **2007**, 316, 542-3; author reply 542-3	33.3	24
138	The origin of mitochondria in light of a fluid prokaryotic chromosome model. *Biology Letters*, **2007**, 3, 180-4	3.6	74
137	Genome history in the symbiotic hybrid Euglena gracilis. *Gene*, **2007**, 402, 35-9	3.8	40
136	A novel prokaryotic trans-2-enoyl-CoA reductase from the spirochete Treponema denticola. *FEBS Letters*, **2007**, 581, 1561-6	3.8	31
135	Origin of Mitochondria and Hydrogenosomes **2007**,		7
134	Independent wheat B and G genome origins in outcrossing Aegilops progenitor haplotypes. *Molecular Biology and Evolution*, **2007**, 24, 217-27	8.3	149

133	The difference between organelles and endosymbionts. *Current Biology*, **2006**, 16, R1016-7; author reply R1017-8	6.3	77
132	Euglena gracilis ribonucleotide reductase: the eukaryote class II enzyme and the possible antiquity of eukaryote B12 dependence. *Journal of Biological Chemistry*, **2006**, 281, 5604-11	5.4	18
131	Pyruvate formate-lyase and a novel route of eukaryotic ATP synthesis in Chlamydomonas mitochondria. *Journal of Biological Chemistry*, **2006**, 281, 9909-18	5.4	113
130	The tree of one percent. *Genome Biology*, **2006**, 7, 118	18.3	255
129	A positive definition of prokaryotes. *Nature*, **2006**, 442, 868	50.4	33
128	Introns and the origin of nucleus-cytosol compartmentalization. *Nature*, **2006**, 440, 41-5	50.4	385
127	Eukaryotic evolution, changes and challenges. *Nature*, **2006**, 440, 623-30	50.4	730
126	Haplotype structure at seven barley genes: relevance to gene pool bottlenecks, phylogeny of ear type and site of barley domestication. *Molecular Genetics and Genomics*, **2006**, 276, 230-41	3.1	98
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