

# William F Martin

## List of Publications by Citations

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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	Endosymbiotic gene transfer: organelle genomes forge eukaryotic chromosomes. <i>Nature Reviews Genetics</i> , <b>2004</b> , 5, 123-35	30.1	1028
311	The hydrogen hypothesis for the first eukaryote. <i>Nature</i> , <b>1998</b> , 392, 37-41	50.4	992
310	Evolutionary analysis of Arabidopsis, cyanobacterial, and chloroplast genomes reveals plastid phylogeny and thousands of cyanobacterial genes in the nucleus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 12246-51	11.5	947
309	Hydrothermal vents and the origin of life. <i>Nature Reviews Microbiology</i> , <b>2008</b> , 6, 805-14	22.2	833
308	The energetics of genome complexity. <i>Nature</i> , <b>2010</b> , 467, 929-34	50.4	741
307	Eukaryotic evolution, changes and challenges. <i>Nature</i> , <b>2006</b> , 440, 623-30	50.4	730
306	Gene transfer to the nucleus and the evolution of chloroplasts. <i>Nature</i> , <b>1998</b> , 393, 162-5	50.4	638
305	Phylogenomics of the reproductive parasite Wolbachia pipientis wMel: a streamlined genome overrun by mobile genetic elements. <i>PLoS Biology</i> , <b>2004</b> , 2, E69	9.7	613
304	Isoprenoid biosynthesis: the evolution of two ancient and distinct pathways across genomes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2000</b> , 97, 13172-7	11.5	606
303	Gene transfer from organelles to the nucleus: how much, what happens, and Why?. <i>Plant Physiology</i> , <b>1998</b> , 118, 9-17	6.6	556
302	Reading the entrails of chickens: molecular timescales of evolution and the illusion of precision. <i>Trends in Genetics</i> , <b>2004</b> , 20, 80-6	8.5	533
301	On the origins of cells: a hypothesis for the evolutionary transitions from abiotic geochemistry to chemoautotrophic prokaryotes, and from prokaryotes to nucleated cells. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2003</b> , 358, 59-83; discussion 83-5	5.8	533
300	Biochemistry and evolution of anaerobic energy metabolism in eukaryotes. <i>Microbiology and Molecular Biology Reviews</i> , <b>2012</b> , 76, 444-95	13.2	496
299	The physiology and habitat of the last universal common ancestor. <i>Nature Microbiology</i> , <b>2016</b> , 1, 16116	26.6	482
298	Genetics and geography of wild cereal domestication in the near east. <i>Nature Reviews Genetics</i> , <b>2002</b> , 3, 429-41	30.1	473
297	On the origin of biochemistry at an alkaline hydrothermal vent. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2007</b> , 362, 1887-925	5.8	455
296	Molecular poltergeists: mitochondrial DNA copies (numts) in sequenced nuclear genomes. <i>PLoS Genetics</i> , <b>2010</b> , 6, e1000834	6	389

295	Introns and the origin of nucleus-cytosol compartmentalization. <i>Nature</i> , <b>2006</b> , 440, 41-5	50.4	385
294	Island colonization and evolution of the insular woody habit in <i>Echium</i> L. (Boraginaceae). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1996</b> , 93, 11740-5	11.5	314
293	The rocky roots of the acetyl-CoA pathway. <i>Trends in Biochemical Sciences</i> , <b>2004</b> , 29, 358-63	10.3	287
292	Mitochondria as we don't know them. <i>Trends in Biochemical Sciences</i> , <b>2002</b> , 27, 564-72	10.3	286
291	Modular networks and cumulative impact of lateral transfer in prokaryote genome evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 10039-44	11.5	285
290	On the origin of genomes and cells within inorganic compartments. <i>Trends in Genetics</i> , <b>2005</b> , 21, 647-54	8.5	284
289	Serpentinization as a source of energy at the origin of life. <i>Geobiology</i> , <b>2010</b> , 8, 355-71	4.3	281
288	A genome phylogeny for mitochondria among alpha-proteobacteria and a predominantly eubacterial ancestry of yeast nuclear genes. <i>Molecular Biology and Evolution</i> , <b>2004</b> , 21, 1643-60	8.3	277
287	Endosymbiotic theories for eukaryote origin. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2015</b> , 370, 20140330	5.8	274
286	The tree of one percent. <i>Genome Biology</i> , <b>2006</b> , 7, 118	18.3	255
285	The origin of membrane bioenergetics. <i>Cell</i> , <b>2012</b> , 151, 1406-16	56.2	241
284	Endosymbiotic theory for organelle origins. <i>Current Opinion in Microbiology</i> , <b>2014</b> , 22, 38-48	7.9	227
283	The evolution of the Calvin cycle from prokaryotic to eukaryotic chromosomes: a case study of functional redundancy in ancient pathways through endosymbiosis. <i>Current Genetics</i> , <b>1997</b> , 32, 1-18	2.9	224
282	Floral homeotic genes were recruited from homologous MADS-box genes preexisting in the common ancestor of ferns and seed plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1997</b> , 94, 2415-20	11.5	215
281	How did LUCA make a living? Chemiosmosis in the origin of life. <i>BioEssays</i> , <b>2010</b> , 32, 271-80	4.1	203
280	Why have organelles retained genomes?. <i>Trends in Genetics</i> , <b>1999</b> , 15, 364-70	8.5	202
279	Endosymbiotic origin and differential loss of eukaryotic genes. <i>Nature</i> , <b>2015</b> , 524, 427-32	50.4	190
278	Mosaic bacterial chromosomes: a challenge en route to a tree of genomes. <i>BioEssays</i> , <b>1999</b> , 21, 99-104	4.1	186

277	Genomes of Stigonematalean cyanobacteria (subsection V) and the evolution of oxygenic photosynthesis from prokaryotes to plastids. <i>Genome Biology and Evolution</i> , <b>2013</b> , 5, 31-44	3.9	182
276	Acquisition of 1,000 eubacterial genes physiologically transformed a methanogen at the origin of Haloarchaea. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 20537-42	11.5	180
275	Gene transfer from organelles to the nucleus: frequent and in big chunks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 8612-4	11.5	177
274	Genes of cyanobacterial origin in plant nuclear genomes point to a heterocyst-forming plastid ancestor. <i>Molecular Biology and Evolution</i> , <b>2008</b> , 25, 748-61	8.3	176
273	Molecular evidence for pre-Cretaceous angiosperm origins. <i>Nature</i> , <b>1989</b> , 339, 46-48	50.4	174
272	Origins of major archaeal clades correspond to gene acquisitions from bacteria. <i>Nature</i> , <b>2015</b> , 517, 77-80	50.4	169
271	Directed networks reveal genomic barriers and DNA repair bypasses to lateral gene transfer among prokaryotes. <i>Genome Research</i> , <b>2011</b> , 21, 599-609	9.7	168
270	Brain energy rescue: an emerging therapeutic concept for neurodegenerative disorders of ageing. <i>Nature Reviews Drug Discovery</i> , <b>2020</b> , 19, 609-633	64.1	166
269	Ancestral genome sizes specify the minimum rate of lateral gene transfer during prokaryote evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 870-5	11.5	165
268	Specific and differential inhibition of very-long-chain fatty acid elongases from <i>Arabidopsis thaliana</i> by different herbicides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 11903-8	11.5	164
267	Early bioenergetic evolution. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2013</b> , 368, 20130088	5.8	162
266	Prokaryotic evolution and the tree of life are two different things. <i>Biology Direct</i> , <b>2009</b> , 4, 34	7.2	161
265	Evidence for a chimeric nature of nuclear genomes: eubacterial origin of eukaryotic glyceraldehyde-3-phosphate dehydrogenase genes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1993</b> , 90, 8692-6	11.5	161
264	A nuclear gene of eubacterial origin in <i>Euglena gracilis</i> reflects cryptic endosymbioses during protist evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1995</b> , 92, 9122-6	11.5	159
263	Plastid genome phylogeny and a model of amino acid substitution for proteins encoded by chloroplast DNA. <i>Journal of Molecular Evolution</i> , <b>2000</b> , 50, 348-58	3.1	157
262	Single eubacterial origin of eukaryotic sulfide:quinone oxidoreductase, a mitochondrial enzyme conserved from the early evolution of eukaryotes during anoxic and sulfidic times. <i>Molecular Biology and Evolution</i> , <b>2003</b> , 20, 1564-74	8.3	155
261	An overview of endosymbiotic models for the origins of eukaryotes, their ATP-producing organelles (mitochondria and hydrogenosomes), and their heterotrophic lifestyle. <i>Biological Chemistry</i> , <b>2001</b> , 382, 1521-39	4.5	152
260	A proteomic survey of <i>Chlamydomonas reinhardtii</i> mitochondria sheds new light on the metabolic plasticity of the organelle and on the nature of the alpha-proteobacterial mitochondrial ancestor. <i>Molecular Biology and Evolution</i> , <b>2009</b> , 26, 1533-48	8.3	151

259	Independent wheat B and G genome origins in outcrossing <i>Aegilops</i> progenitor haplotypes. <i>Molecular Biology and Evolution</i> , <b>2007</b> , 24, 217-27	8.3	149
258	Evolutionary origins of metabolic compartmentalization in eukaryotes. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2010</b> , 365, 847-55	5.8	142
257	Noncoding sequences from the slowly evolving chloroplast inverted repeat in addition to <i>rbcl</i> data do not support gnetalean affinities of angiosperms. <i>Molecular Biology and Evolution</i> , <b>1996</b> , 13, 383-96	8.3	134
256	Acceleration of genomic evolution caused by enhanced mutation rate in endocellular symbionts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 12944-8	11.5	130
255	Molecular diversity at 18 loci in 321 wild and 92 domesticate lines reveal no reduction of nucleotide diversity during <i>Triticum monococcum</i> (Einkorn) domestication: implications for the origin of agriculture. <i>Molecular Biology and Evolution</i> , <b>2007</b> , 24, 2657-68	8.3	128
254	Enzymatic Evidence for a Complete Oxidative Pentose Phosphate Pathway in Chloroplasts and an Incomplete Pathway in the Cytosol of Spinach Leaves. <i>Plant Physiology</i> , <b>1995</b> , 108, 609-614	6.6	121
253	Prokaryotic features of a nucleus-encoded enzyme. cDNA sequences for chloroplast and cytosolic glyceraldehyde-3-phosphate dehydrogenases from mustard ( <i>Sinapis alba</i> ). <i>FEBS Journal</i> , <b>1986</b> , 159, 323-31		119
252	Annotated English translation of Mereschkowsky's 1905 paper <i>Ber Natur und Ursprung der Chromatophoren im Pflanzenreiche</i> <i>European Journal of Phycology</i> , <b>1999</b> , 34, 287-295	2.2	117
251	Pyruvate formate-lyase and a novel route of eukaryotic ATP synthesis in <i>Chlamydomonas</i> mitochondria. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 9909-18	5.4	113
250	Pyruvate : NADP <sup>+</sup> oxidoreductase from the mitochondrion of <i>Euglena gracilis</i> and from the apicomplexan <i>Cryptosporidium parvum</i> : a biochemical relic linking pyruvate metabolism in mitochondriate and amitochondriate protists. <i>Molecular Biology and Evolution</i> , <b>2001</b> , 18, 710-20	8.3	113
249	Endosymbiotic origin and codon bias of the nuclear gene for chloroplast glyceraldehyde-3-phosphate dehydrogenase from maize. <i>Journal of Molecular Evolution</i> , <b>1987</b> , 26, 320-8 <sup>3.1</sup>		113
248	Networks of gene sharing among 329 proteobacterial genomes reveal differences in lateral gene transfer frequency at different phylogenetic depths. <i>Molecular Biology and Evolution</i> , <b>2011</b> , 28, 1057-74	8.3	112
247	Mutational decay and age of chloroplast and mitochondrial genomes transferred recently to angiosperm nuclear chromosomes. <i>Plant Physiology</i> , <b>2005</b> , 138, 1723-33	6.6	112
246	Evolution of the enzymes of the citric acid cycle and the glyoxylate cycle of higher plants. A case study of endosymbiotic gene transfer. <i>FEBS Journal</i> , <b>2002</b> , 269, 868-83		110
245	Compartment-specific isoforms of TPI and GAPDH are imported into diatom mitochondria as a fusion protein: evidence in favor of a mitochondrial origin of the eukaryotic glycolytic pathway. <i>Molecular Biology and Evolution</i> , <b>2000</b> , 17, 213-23	8.3	110
244	How many genes in <i>Arabidopsis</i> come from cyanobacteria? An estimate from 386 protein phylogenies. <i>Trends in Genetics</i> , <b>2001</b> , 17, 113-20	8.5	108
243	Five identical intron positions in ancient duplicated genes of eubacterial origin. <i>Nature</i> , <b>1994</b> , 367, 387-9 <sup>50.4</sup>		107
242	Transcriptomic evidence that longevity of acquired plastids in the photosynthetic slugs <i>Elysia timida</i> and <i>Plakobranhus ocellatus</i> does not entail lateral transfer of algal nuclear genes. <i>Molecular Biology and Evolution</i> , <b>2011</b> , 28, 699-706	8.3	106

241	Bacterial Vesicle Secretion and the Evolutionary Origin of the Eukaryotic Endomembrane System. <i>Trends in Microbiology</i> , <b>2016</b> , 24, 525-534	12.4	106
240	An evolutionary network of genes present in the eukaryote common ancestor polls genomes on eukaryotic and mitochondrial origin. <i>Genome Biology and Evolution</i> , <b>2012</b> , 4, 466-85	3.9	104
239	The Entner-Doudoroff pathway is an overlooked glycolytic route in cyanobacteria and plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 5441-6	11.5	102
238	Haplotype structure at seven barley genes: relevance to gene pool bottlenecks, phylogeny of ear type and site of barley domestication. <i>Molecular Genetics and Genomics</i> , <b>2006</b> , 276, 230-41	3.1	98
237	Evolution. Energy at life's origin. <i>Science</i> , <b>2014</b> , 344, 1092-3	33.3	93
236	How do mitochondrial genes get into the nucleus?. <i>Trends in Genetics</i> , <b>2001</b> , 17, 383-7	8.5	88
235	Acetate formation in the energy metabolism of parasitic helminths and protists. <i>International Journal for Parasitology</i> , <b>2010</b> , 40, 387-97	4.3	85
234	Molecular phylogenies of plastid origins and algal evolution. <i>Journal of Molecular Evolution</i> , <b>1992</b> , 35, 385-404	3.1	85
233	On the Origin of Heterotrophy. <i>Trends in Microbiology</i> , <b>2016</b> , 24, 12-25	12.4	84
232	Early cell evolution, eukaryotes, anoxia, sulfide, oxygen, fungi first (?), and a tree of genomes revisited. <i>IUBMB Life</i> , <b>2003</b> , 55, 193-204	4.7	81
231	Structure, evolution and anaerobic regulation of a nuclear gene encoding cytosolic glyceraldehyde-3-phosphate dehydrogenase from maize. <i>Journal of Molecular Biology</i> , <b>1989</b> , 208, 551-65	6.5	81
230	Hydrogen, metals, bifurcating electrons, and proton gradients: the early evolution of biological energy conservation. <i>FEBS Letters</i> , <b>2012</b> , 586, 485-93	3.8	80
229	Endosymbiotic gene transfer from prokaryotic pangenomes: Inherited chimerism in eukaryotes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 10139-46	11.5	78
228	Evolutionary analysis of 58 proteins encoded in six completely sequenced chloroplast genomes: Revised molecular estimates of two seed plant divergence times. <i>Plant Systematics and Evolution</i> , <b>1997</b> , 206, 337-351	1.3	77
227	The difference between organelles and endosymbionts. <i>Current Biology</i> , <b>2006</b> , 16, R1016-7; author reply R1017-8	6.3	77
226	Intron conservation across the prokaryote-eukaryote boundary: structure of the nuclear gene for chloroplast glyceraldehyde-3-phosphate dehydrogenase from maize. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1988</b> , 85, 2672-6	11.5	76
225	Lokiarchaeon is hydrogen dependent. <i>Nature Microbiology</i> , <b>2016</b> , 1, 16034	26.6	75
224	Anaerobic energy metabolism in unicellular photosynthetic eukaryotes. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2013</b> , 1827, 210-23	4.6	75



223	AstRoMap European Astrobiology Roadmap. <i>Astrobiology</i> , <b>2016</b> , 16, 201-43	3.7	75
222	Too Much Eukaryote LGT. <i>BioEssays</i> , <b>2017</b> , 39, 1700115	4.1	74
221	The origin of mitochondria in light of a fluid prokaryotic chromosome model. <i>Biology Letters</i> , <b>2007</b> , 3, 180-4	3.6	74
220	Planctomycetes and eukaryotes: a case of analogy not homology. <i>BioEssays</i> , <b>2011</b> , 33, 810-7	4.1	73
219	Chloroplast genome phylogenetics: why we need independent approaches to plant molecular evolution. <i>Trends in Plant Science</i> , <b>2005</b> , 10, 203-9	13.1	73
218	Purification and cDNA cloning of anthranilate synthase from <i>Ruta graveolens</i> : modes of expression and properties of native and recombinant enzymes. <i>Plant Journal</i> , <b>1995</b> , 7, 491-501	6.9	73
217	Red and problematic green phylogenetic signals among thousands of nuclear genes from the photosynthetic and apicomplexa-related <i>Chromera velia</i> . <i>Genome Biology and Evolution</i> , <b>2011</b> , 3, 1220-30	3.9	71
216	Mitochondrial trans-2-enoyl-CoA reductase of wax ester fermentation from <i>Euglena gracilis</i> defines a new family of enzymes involved in lipid synthesis. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 4329-38	5.4	71
215	Protein import and the origin of red complex plastids. <i>Current Biology</i> , <b>2015</b> , 25, R515-21	6.3	70
214	Genome networks root the tree of life between prokaryotic domains. <i>Genome Biology and Evolution</i> , <b>2010</b> , 2, 379-92	3.9	70
213	Massively convergent evolution for ribosomal protein gene content in plastid and mitochondrial genomes. <i>Genome Biology and Evolution</i> , <b>2013</b> , 5, 2318-29	3.9	69
212	Energy metabolism among eukaryotic anaerobes in light of Proterozoic ocean chemistry. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2008</b> , 363, 2717-29	5.8	69
211	Archaeobacteria (Archaea) and the origin of the eukaryotic nucleus. <i>Current Opinion in Microbiology</i> , <b>2005</b> , 8, 630-7	7.9	69
210	Higher-plant chloroplast and cytosolic fructose-1,6-bisphosphatase isoenzymes: origins via duplication rather than prokaryote-eukaryote divergence. <i>Plant Molecular Biology</i> , <b>1996</b> , 32, 485-91	4.6	69
209	<i>Euglena gracilis</i> rholoquinone:ubiquinone ratio and mitochondrial proteome differ under aerobic and anaerobic conditions. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 22422-9	5.4	68
208	Automated glycopeptide analysis--review of current state and future directions. <i>Briefings in Bioinformatics</i> , <b>2013</b> , 14, 361-74	13.4	67
207	Functional studies of chloroplast glyceraldehyde-3-phosphate dehydrogenase subunits A and B expressed in <i>Escherichia coli</i> : formation of highly active A4 and B4 homotetramers and evidence that aggregation of the B4 complex is mediated by the B subunit carboxy terminus. <i>Plant Molecular Biology</i> , <b>1996</b> , 32, 505-13	4.6	66
206	A natural barrier to lateral gene transfer from prokaryotes to eukaryotes revealed from genomes: the 70% rule. <i>BMC Biology</i> , <b>2016</b> , 14, 89	7.3	66

205	A physiological perspective on the origin and evolution of photosynthesis. <i>FEMS Microbiology Reviews</i> , <b>2018</b> , 42, 205-231	15.1	65
204	Sulfide : quinone oxidoreductase (SOR) from the lugworm <i>Arenicola marina</i> shows cyanide- and thioredoxin-dependent activity. <i>FEBS Journal</i> , <b>2008</b> , 275, 1131-9	5.7	64
203	Enolase from <i>Trypanosoma brucei</i> , from the amitochondriate protist <i>Mastigamoeba balamuthi</i> , and from the chloroplast and cytosol of <i>Euglena gracilis</i> : pieces in the evolutionary puzzle of the eukaryotic glycolytic pathway. <i>Molecular Biology and Evolution</i> , <b>2000</b> , 17, 989-1000	8.3	63
202	Deep sequencing of <i>Trichomonas vaginalis</i> during the early infection of vaginal epithelial cells and amoeboid transition. <i>International Journal for Parasitology</i> , <b>2013</b> , 43, 707-19	4.3	62
201	Getting a better picture of microbial evolution en route to a network of genomes. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2009</b> , 364, 2187-96	5.8	62
200	The Physiology of Phagocytosis in the Context of Mitochondrial Origin. <i>Microbiology and Molecular Biology Reviews</i> , <b>2017</b> , 81,	13.2	61
199	The last universal common ancestor between ancient Earth chemistry and the onset of genetics. <i>PLoS Genetics</i> , <b>2018</b> , 14, e1007518	6	61
198	Anthranilate synthase from <i>Ruta graveolens</i> . Duplicated AS alpha genes encode tryptophan-sensitive and tryptophan-insensitive isoenzymes specific to amino acid and alkaloid biosynthesis. <i>Plant Physiology</i> , <b>1996</b> , 111, 507-14	6.6	61
197	The evolutionary root of flowering plants. <i>Systematic Biology</i> , <b>2013</b> , 62, 50-61	8.4	60
196	Biochemical fossils of the ancient transition from geoenergetics to bioenergetics in prokaryotic one carbon compound metabolism. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2014</b> , 1837, 964-81	4.6	60
195	Secondary loss of chloroplasts in trypanosomes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 765-7	11.5	60
194	Evidence for nucleomorph to host nucleus gene transfer: light-harvesting complex proteins from cryptomonads and chlorarachniophytes. <i>Protist</i> , <b>2000</b> , 151, 239-52	2.5	60
193	Origins of hydrogenosomes and mitochondria. <i>Current Opinion in Microbiology</i> , <b>2000</b> , 3, 481-6	7.9	60
192	The genome of <i>Rickettsia prowazekii</i> and some thoughts on the origin of mitochondria and hydrogenosomes. <i>BioEssays</i> , <b>1999</b> , 21, 377-81	4.1	60
191	Higher-plant chloroplast and cytosolic 3-phosphoglycerate kinases: a case of endosymbiotic gene replacement. <i>Plant Molecular Biology</i> , <b>1996</b> , 30, 65-75	4.6	60
190	A hydrogen-dependent geochemical analogue of primordial carbon and energy metabolism. <i>Nature Ecology and Evolution</i> , <b>2020</b> , 4, 534-542	12.3	57
189	Early Microbial Evolution: The Age of Anaerobes. <i>Cold Spring Harbor Perspectives in Biology</i> , <b>2015</b> , 8, a0181127	11.2	57
188	Chlorophyll biosynthesis gene evolution indicates photosystem gene duplication, not photosystem merger, at the origin of oxygenic photosynthesis. <i>Genome Biology and Evolution</i> , <b>2013</b> , 5, 200-16	3.9	57



187	Base J originally found in kinetoplastida is also a minor constituent of nuclear DNA of <i>Euglena gracilis</i> . <i>Nucleic Acids Research</i> , <b>2000</b> , 28, 3017-21	20.1	56
186	Variability of wax ester fermentation in natural and bleached <i>Euglena gracilis</i> Strains in response to oxygen and the elongase inhibitor flufenacet. <i>Journal of Eukaryotic Microbiology</i> , <b>2010</b> , 57, 63-9	3.6	55
185	A briefly argued case that mitochondria and plastids are descendants of endosymbionts, but that the nuclear compartment is not. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>1999</b> , 266, 1387-1395	4.4	55
184	Chloroplast class I and class II aldolases are bifunctional for fructose-1,6-biphosphate and sedoheptulose-1,7-biphosphate cleavage in the Calvin cycle. <i>FEBS Letters</i> , <b>1999</b> , 447, 200-2	3.8	55
183	ERAD components in organisms with complex red plastids suggest recruitment of a preexisting protein transport pathway for the periplastid membrane. <i>Genome Biology and Evolution</i> , <b>2011</b> , 3, 140-50	3.9	53
182	Multiple recruitment of class-I aldolase to chloroplasts and eubacterial origin of eukaryotic class-II aldolases revealed by cDNAs from <i>Euglena gracilis</i> . <i>Current Genetics</i> , <b>1997</b> , 31, 430-8	2.9	53
181	Interspecific evolution: microbial symbiosis, endosymbiosis and gene transfer. <i>Environmental Microbiology</i> , <b>2003</b> , 5, 641-9	5.2	53
180	Purification and cloning of chloroplast 6-phosphogluconate dehydrogenase from spinach. Cyanobacterial genes for chloroplast and cytosolic isoenzymes encoded in eukaryotic chromosomes. <i>FEBS Journal</i> , <b>2001</b> , 268, 2678-86		53
179	Mitochondria, the Cell Cycle, and the Origin of Sex via a Syncytial Eukaryote Common Ancestor. <i>Genome Biology and Evolution</i> , <b>2016</b> , 8, 1950-70	3.9	51
178	Is ftsH the key to plastid longevity in sacoglossan slugs?. <i>Genome Biology and Evolution</i> , <b>2013</b> , 5, 2540-8	3.9	51
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