

CÃ©line Brochier-Armanet

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9416683/publications.pdf>

Version: 2024-02-01

109
papers

7,430
citations

66343

42
h-index

60623

81
g-index

114
all docs

114
docs citations

114
times ranked

8341
citing authors

#	ARTICLE	IF	CITATIONS
1	Mesophilic crenarchaeota: proposal for a third archaeal phylum, the Thaumarchaeota. <i>Nature Reviews Microbiology</i> , 2008, 6, 245-252.	28.6	1,043
2	Distinct gene set in two different lineages of ammonia-oxidizing archaea supports the phylum Thaumarchaeota. <i>Trends in Microbiology</i> , 2010, 18, 331-340.	7.7	431
3	<i>De novo</i> metagenomic assembly reveals abundant novel major lineage of Archaea in hypersaline microbial communities. <i>ISME Journal</i> , 2012, 6, 81-93.	9.8	347
4	The growing tree of Archaea: new perspectives on their diversity, evolution and ecology. <i>ISME Journal</i> , 2017, 11, 2407-2425.	9.8	320
5	A korarchaeal genome reveals insights into the evolution of the Archaea. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 8102-8107.	7.1	253
6	The two-domain tree of life is linked to a new root for the Archaea. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6670-6675.	7.1	234
7	Giant viruses, giant chimeras: The multiple evolutionary histories of Mimivirus genes. <i>BMC Evolutionary Biology</i> , 2008, 8, 12.	3.2	223
8	The origin and evolution of Archaea: a state of the art. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2006, 361, 1007-1022.	4.0	222
9	Phylogeny and evolution of the Archaea: one hundred genomes later. <i>Current Opinion in Microbiology</i> , 2011, 14, 274-281.	5.1	215
10	Iron-Sulfur (Fe/S) Protein Biogenesis: Phylogenomic and Genetic Studies of A-Type Carriers. <i>PLoS Genetics</i> , 2009, 5, e1000497.	3.5	166
11	Genome sequence of the stramenopile <i>Blastocystis</i> , a human anaerobic parasite. <i>Genome Biology</i> , 2011, 12, R29.	9.6	159
12	The origin of eukaryotes and their relationship with the Archaea: are we at a phylogenomic impasse?. <i>Nature Reviews Microbiology</i> , 2010, 8, 743-752.	28.6	140
13	Structure, Function, and Evolution of the <i>Thiomonas</i> spp. Genome. <i>PLoS Genetics</i> , 2010, 6, e1000859.	3.5	123
14	Silencing of natural transformation by an RNA chaperone and a multitarget small RNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 8813-8818.	7.1	104
15	Phylogenetic and genetic variation among Fe(II)-oxidizing acidithiobacilli supports the view that these comprise multiple species with different ferrous iron oxidation pathways. <i>Microbiology (United Kingdom)</i> 157, 1077-1087. doi:10.1099/mic/0/000000.0	14.7	100
16	Novel genomic island modifies DNA with 7-deazaguanine derivatives. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E1452-9.	7.1	99
17	The Multiple Evolutionary Histories of Dioxygen Reductases: Implications for the Origin and Evolution of Aerobic Respiration. <i>Molecular Biology and Evolution</i> , 2009, 26, 285-297.	8.9	93
18	Anaerobic oxidation of long-chain n-alkanes by the hyperthermophilic sulfate-reducing archaeon, <i>Archaeoglobus fulgidus</i> . <i>ISME Journal</i> , 2014, 8, 2153-2166.	9.8	88

#	ARTICLE	IF	CITATIONS
19	Widespread distribution of archaeal reverse gyrase in thermophilic bacteria suggests a complex history of vertical inheritance and lateral gene transfers. <i>Archaea</i> , 2006, 2, 83-93.	2.3	85
20	On the last common ancestor and early evolution of eukaryotes: reconstructing the history of mitochondrial ribosomes. <i>Research in Microbiology</i> , 2011, 162, 53-70.	2.1	85
21	The <i>Pseudomonas aeruginosa</i> patatin-like protein PlpD is the archetype of a novel Type V secretion system. <i>Environmental Microbiology</i> , 2010, 12, 1498-1512.	3.8	84
22	Unsuspected Diversity of Arsenite-Oxidizing Bacteria as Revealed by Widespread Distribution of the <i>aoxB</i> Gene in Prokaryotes. <i>Applied and Environmental Microbiology</i> , 2011, 77, 4685-4692.	3.1	84
23	Molecular organization, biochemical function, cellular role and evolution of NfuA, an atypical Fe carrier. <i>Molecular Microbiology</i> , 2012, 86, 155-171.	2.5	80
24	Emergence and Modular Evolution of a Novel Motility Machinery in Bacteria. <i>PLoS Genetics</i> , 2011, 7, e1002268.	3.5	77
25	The changing view of eukaryogenesis – fossils, cells, lineages and how they all come together. <i>Journal of Cell Science</i> , 2016, 129, 3695-3703.	2.0	77
26	Comparative RNomics and Modomics in Mollicutes: Prediction of Gene Function and Evolutionary Implications. <i>IUBMB Life</i> , 2007, 59, 634-658.	3.4	76
27	Biosynthesis of Wyosine Derivatives in tRNA: An Ancient and Highly Diverse Pathway in Archaea. <i>Molecular Biology and Evolution</i> , 2010, 27, 2062-2077.	8.9	71
28	Phylogenomic Test of the Hypotheses for the Evolutionary Origin of Eukaryotes. <i>Molecular Biology and Evolution</i> , 2014, 31, 832-845.	8.9	69
29	Phylogenomic analysis supports the ancestral presence of LPS-outer membranes in the Firmicutes. <i>ELife</i> , 2016, 5, .	6.0	69
30	Global Phylogenomic Analysis Disentangles the Complex Evolutionary History of DNA Replication in Archaea. <i>Genome Biology and Evolution</i> , 2014, 6, 192-212.	2.5	68
31	PASTA repeats of the protein kinase StkP interconnect cell constriction and separation of <i>Streptococcus pneumoniae</i> . <i>Nature Microbiology</i> , 2018, 3, 197-209.	13.3	63
32	The Environmental <i>Acinetobacter baumannii</i> Isolate DSM30011 Reveals Clues into the Preantibiotic Era Genome Diversity, Virulence Potential, and Niche Range of a Predominant Nosocomial Pathogen. <i>Genome Biology and Evolution</i> , 2017, 9, 2292-2307.	2.5	61
33	Life in an Arsenic-Containing Gold Mine: Genome and Physiology of the Autotrophic Arsenite-Oxidizing Bacterium <i>Rhizobium</i> sp. NT-26. <i>Genome Biology and Evolution</i> , 2013, 5, 934-953.	2.5	60
34	Extending the Conserved Phylogenetic Core of Archaea Disentangles the Evolution of the Third Domain of Life. <i>Molecular Biology and Evolution</i> , 2015, 32, 1242-1254.	8.9	59
35	A DNA topoisomerase IB in Thaumarchaeota testifies for the presence of this enzyme in the last common ancestor of Archaea and Eucarya. <i>Biology Direct</i> , 2008, 3, 54.	4.6	55
36	Qri7/OSGEPL, the mitochondrial version of the universal Kae1/YgjD protein, is essential for mitochondrial genome maintenance. <i>Nucleic Acids Research</i> , 2009, 37, 5343-5352.	14.5	55

#	ARTICLE	IF	CITATIONS
37	Complete-fosmid and fosmid-end sequences reveal frequent horizontal gene transfers in marine uncultured planktonic archaea. <i>ISME Journal</i> , 2011, 5, 1291-1302.	9.8	55
38	<i>Mesotoga infera</i> sp. nov., a mesophilic member of the order Thermotogales, isolated from an underground gas storage aquifer. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2013, 63, 3003-3008.	1.7	52
39	Extreme halophilic archaea derive from two distinct methanogen Class II lineages. <i>Molecular Phylogenetics and Evolution</i> , 2018, 127, 46-54.	2.7	52
40	Cultivation of the first mesophilic representative (â€œmesotogaâ€) within the order Thermotogales. <i>Systematic and Applied Microbiology</i> , 2011, 34, 581-585.	2.8	51
41	Plant, Animal, and Fungal Micronutrient Queuosine Is Salvaged by Members of the DUF2419 Protein Family. <i>ACS Chemical Biology</i> , 2014, 9, 1812-1825.	3.4	48
42	Phylogenomics of the archaeal flagellum: rare horizontal gene transfer in a unique motility structure. <i>BMC Evolutionary Biology</i> , 2007, 7, 106.	3.2	47
43	Evolution of the haem copper oxidases superfamily: a rooting tale. <i>Trends in Biochemical Sciences</i> , 2009, 34, 375-381.	7.5	47
44	Metagenomics of Kamchatkan hot spring filaments reveal two new major (hyper)thermophilic lineages related to Thaumarchaeota. <i>Research in Microbiology</i> , 2013, 164, 425-438.	2.1	46
45	Acquisition of a bacterial RumAâ€type tRNA(uracilâ€54, C5)â€methyltransferase by Archaea through an ancient horizontal gene transfer. <i>Molecular Microbiology</i> , 2008, 67, 323-335.	2.5	45
46	Characterization of heterotrophic prokaryote subgroups in the Sfax coastal solar salterns by combining flow cytometry cell sorting and phylogenetic analysis. <i>Extremophiles</i> , 2011, 15, 347-358.	2.3	40
47	Loss-of-Function Mutations in UNC45A Cause a Syndrome Associating Cholestasis, Diarrhea, Impaired Hearing, and Bone Fragility. <i>American Journal of Human Genetics</i> , 2018, 102, 364-374.	6.2	40
48	Evolution of <i>Helicobacter</i> : Acquisition by Gastric Species of Two Histidine-Rich Proteins Essential for Colonization. <i>PLoS Pathogens</i> , 2015, 11, e1005312.	4.7	40
49	Characteristics of a phylogenetically ambiguous, arsenic-oxidizing <i>Thiomonas</i> sp., <i>Thiomonas arsenitoxydans</i> strain 3AsT sp. nov. <i>Archives of Microbiology</i> , 2011, 193, 439-449.	2.2	38
50	Promiscuous Nickel Import in Human Pathogens: Structure, Thermodynamics, and Evolution of Extracytoplasmic Nickel-Binding Proteins. <i>Structure</i> , 2014, 22, 1421-1432.	3.3	38
51	<i>Francisella tularensis</i> : FupA mutation contributes to fluoroquinolone resistance by increasing vesicle secretion and biofilm formation. <i>Emerging Microbes and Infections</i> , 2019, 8, 808-822.	6.5	38
52	Gene Acquisitions from Bacteria at the Origins of Major Archaeal Clades Are Vastly Overestimated. <i>Molecular Biology and Evolution</i> , 2016, 33, 305-310.	8.9	37
53	Evolutionary history of the mammalian synaptonemal complex. <i>Chromosoma</i> , 2016, 125, 355-360.	2.2	36
54	Horizontal gene transfer of a chloroplast DnaJ-Fer protein to Thaumarchaeota and the evolutionary history of the DnaK chaperone system in Archaea. <i>BMC Evolutionary Biology</i> , 2012, 12, 226.	3.2	34

#	ARTICLE	IF	CITATIONS
55	The phylogenomic analysis of the anaphase promoting complex and its targets points to complex and modern-like control of the cell cycle in the last common ancestor of eukaryotes. BMC Evolutionary Biology, 2011, 11, 265.	3.2	33
56	Evolution and Design Governing Signal Precision and Amplification in a Bacterial Chemosensory Pathway. PLoS Genetics, 2015, 11, e1005460.	3.5	33
57	GeneSpy, a user-friendly and flexible genomic context visualizer. Bioinformatics, 2019, 35, 329-331.	4.1	33
58	The phytopathogenic nature of <i>Dickeya aquatica</i> 174/2 and the dynamic early evolution of <i>Dickeya</i> pathogenicity. Environmental Microbiology, 2019, 21, 2809-2835.	3.8	32
59	A divide-and-conquer phylogenomic approach based on character supermatrices resolves early steps in the evolution of the Archaea. BMC Ecology and Evolution, 2022, 22, 1.	1.6	32
60	Specificity shifts in the rRNA and tRNA nucleotide targets of archaeal and bacterial m ⁵ U methyltransferases. Rna, 2011, 17, 45-53.	3.5	31
61	Constitutive arsenite oxidase expression detected in arsenic-hypertolerant <i>Pseudomonas xanthomarina</i> S11. Research in Microbiology, 2015, 166, 205-214.	2.1	31
62	Ribosomal proteins: Toward a next generation standard for prokaryotic systematics?. Molecular Phylogenetics and Evolution, 2014, 75, 103-117.	2.7	30
63	<i>Dickeya poaceiphila</i> sp. nov., a plant-pathogenic bacterium isolated from sugar cane (<i>Saccharum</i>) Tj ETQq1 1 0.784314 rgBT /Overloc	1.7	30
64	A New Highly Conserved Antibiotic Sensing/Resistance Pathway in Firmicutes Involves an ABC Transporter Interplaying with a Signal Transduction System. PLoS ONE, 2011, 6, e15951.	2.5	28
65	Obligate sugar oxidation in <i>Mesotoga</i> spp., phylum <i>Thermotogae</i> , in the presence of either elemental sulfur or hydrogenotrophic sulfate reducers as electron acceptor. Environmental Microbiology, 2018, 20, 281-292.	3.8	28
66	Happy together: genomic insights into the unique Nanoarchaeum/Ignicoccus association. Journal of Biology, 2009, 8, 7.	2.7	27
67	Time for order in microbial systematics. Trends in Microbiology, 2012, 20, 209-210.	7.7	27
68	A eukaryotic-like sulfiredoxin involved in oxidative stress responses and in the reduction of the sulfinic form of 2-Cys peroxiredoxin in the cyanobacterium <i>Anabaena</i> PCC 7120. New Phytologist, 2011, 191, 1108-1118.	7.3	26
69	An oxygen reduction chain in the hyperthermophilic anaerobe <i>Thermotoga maritima</i> highlights horizontal gene transfer between <i>Thermococcales</i> and <i>Thermotogales</i> . Environmental Microbiology, 2011, 13, 2132-2145.	3.8	25
70	In Vitro Detection of the Enzymatic Activity of Folate-Dependent tRNA (Uracil ⁵⁴ , ⁵) Methyltransferase: Evolutionary Implications. Methods in Enzymology, 2007, 425, 103-119.	1.0	24
71	Evolutionary placement of Methanonatronarchaeia. Nature Microbiology, 2019, 4, 558-559.	13.3	24
72	Adaptation in Toxic Environments: Arsenic Genomic Islands in the Bacterial Genus <i>Thiomonas</i> . PLoS ONE, 2015, 10, e0139011.	2.5	24

#	ARTICLE	IF	CITATIONS
73	RiboDB Database: A Comprehensive Resource for Prokaryotic Systematics. <i>Molecular Biology and Evolution</i> , 2016, 33, 2170-2172.	8.9	23
74	Cell division of <i>Streptococcus pneumoniae</i> : think positive!. <i>Current Opinion in Microbiology</i> , 2016, 34, 18-23.	5.1	23
75	<i>Halomonas olivaria</i> sp. nov., a moderately halophilic bacterium isolated from olive-processing effluents. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2014, 64, 46-54.	1.7	22
76	Hepatitis B virus preS21”38â€“55 variants: A newly identified risk factor for hepatocellular carcinoma. <i>JHEP Reports</i> , 2020, 2, 100144.	4.9	21
77	A Complex Cell Division Machinery Was Present in the Last Common Ancestor of Eukaryotes. <i>PLoS ONE</i> , 2009, 4, e5021.	2.5	21
78	Phylogenies of Central Element Proteins Reveal the Dynamic Evolutionary History of the Mammalian Synaptonemal Complex: Ancient and Recent Components. <i>Genetics</i> , 2013, 195, 781-793.	2.9	20
79	The Assembly Mode of the Pseudopilus. <i>Journal of Biological Chemistry</i> , 2011, 286, 24407-24416.	3.4	19
80	Comparative genomic analysis of the DUF71/COG2102 family predicts roles in diphthamide biosynthesis and B12 salvage. <i>Biology Direct</i> , 2012, 7, 32.	4.6	19
81	Comparison of alignment free string distances for complete genome phylogeny. <i>Advances in Data Analysis and Classification</i> , 2009, 3, 95-108.	1.4	18
82	Plant genera <i>Cannabis</i> and <i>Humulus</i> share the same pair of wellâ€“differentiated sex chromosomes. <i>New Phytologist</i> , 2021, 231, 1599-1611.	7.3	17
83	Evolutionary history of phosphatidylinositol- 3-kinases: ancestral origin in eukaryotes and complex duplication patterns. <i>BMC Evolutionary Biology</i> , 2015, 15, 226.	3.2	16
84	An evolutionary link between capsular biogenesis and surface motility in bacteria. <i>Nature Reviews Microbiology</i> , 2015, 13, 318-326.	28.6	16
85	The TERB1-TERB2-MAJIN complex of mouse meiotic telomeres dates back to the common ancestor of metazoans. <i>BMC Evolutionary Biology</i> , 2020, 20, 55.	3.2	16
86	Transcriptional start site turnover in the evolution of bacterial paralogous genes â€“ the <i>pelE</i> virulence genes in <i>Dickeya</i> . <i>FEBS Journal</i> , 2016, 283, 4192-4207.	4.7	15
87	The Molecular Determinants of Thermoadaptation: <i>Methanococcales</i> as a Case Study. <i>Molecular Biology and Evolution</i> , 2021, 38, 1761-1776.	8.9	14
88	Survival of extremely and moderately halophilic isolates of Tunisian solar salterns after UV-B or oxidative stress. <i>Canadian Journal of Microbiology</i> , 2011, 57, 923-933.	1.7	13
89	Characterization of <i>Halorubrum sfaxense</i> sp. nov., a New Halophilic Archaeon Isolated from the Solar Saltern of Sfax in Tunisia. <i>International Journal of Microbiology</i> , 2011, 2011, 1-8.	2.3	13
90	Genome-wide survey of two-component signal transduction systems in the plant growth-promoting bacterium <i>Azospirillum</i> . <i>BMC Genomics</i> , 2015, 16, 833.	2.8	13

#	ARTICLE	IF	CITATIONS
91	Protein SYCP2 Is an Ancient Component of the Metazoan Synaptonemal Complex. <i>Cytogenetic and Genome Research</i> , 2015, 144, 299-305.	1.1	11
92	A novel subfamily of bacterial AAT-fold basic amino acid decarboxylases and functional characterization of its first representative: <i>Pseudomonas aeruginosa</i> LdcA. <i>Genome Biology and Evolution</i> , 2018, 10, 3058-3075.	2.5	11
93	Evolutionary relationships between Archaea and eukaryotes. <i>Nature Ecology and Evolution</i> , 2020, 4, 20-21.	7.8	11
94	The GTPase Function of YvcJ and Its Subcellular Relocalization Are Dependent on Growth Conditions in <i>Bacillus subtilis</i> . <i>Journal of Molecular Microbiology and Biotechnology</i> , 2011, 20, 156-167.	1.0	10
95	Structure, Function, and Evolution of the <i>Pseudomonas aeruginosa</i> Lysine Decarboxylase LdcA. <i>Structure</i> , 2019, 27, 1842-1854.e4.	3.3	9
96	Structural and functional analysis of the <i>Francisella</i> lysine decarboxylase as a key actor in oxidative stress resistance. <i>Scientific Reports</i> , 2021, 11, 972.	3.3	9
97	Editorial: Archaea and the Tree of Life. <i>Research in Microbiology</i> , 2011, 162, 1-4.	2.1	8
98	Draft genome sequence of <i>Mesotoga</i> strain PhosAC3, a mesophilic member of the bacterial order Thermotogales, isolated from a digester treating phosphogypsum in Tunisia. <i>Standards in Genomic Sciences</i> , 2015, 10, 12.	1.5	8
99	Draft genome sequences for three unisolated <i>Alnus</i> -infective <i>Frankia</i> Sp+ strains, AgTrS, AiOr and AvVan, the first sequenced <i>Frankia</i> strains able to sporulate <i>in-planta</i> . <i>Journal of Genomics</i> , 2019, 7, 50-55.	0.9	8
100	IsoSel: Protein Isoform Selector for phylogenetic reconstructions. <i>PLoS ONE</i> , 2017, 12, e0174250.	2.5	7
101	The bacterial MrpORP is a novel Mrp/NBP35 protein involved in iron-sulfur biogenesis. <i>Scientific Reports</i> , 2019, 9, 712.	3.3	7
102	Phylogenetics and biochemistry elucidate the evolutionary link between l-malate and l-lactate dehydrogenases and disclose an intermediate group of sequences with mix functional properties. <i>Biochimie</i> , 2021, 191, 140-153.	2.6	7
103	Taxonomy and Phylogeny of Prokaryotes. , 2015, , 145-190.		6
104	For Three Billion Years, Microorganisms Were the Only Inhabitants of the Earth. , 2015, , 75-106.		6
105	Comparative genomics and proteogenomics highlight key molecular players involved in <i>Frankia</i> sporulation. <i>Research in Microbiology</i> , 2019, 170, 202-213.	2.1	5
106	A Comprehensive Evolutionary Scenario of Cell Division and Associated Processes in the Firmicutes. <i>Molecular Biology and Evolution</i> , 2021, 38, 2396-2412.	8.9	4
107	Natural History of the Archaeal Domain. , 0, , 17-28.		3
108	Taxonomic assignment of uncultured prokaryotes with long range PCR targeting the spectinomycin operon. <i>Research in Microbiology</i> , 2019, 170, 280-287.	2.1	2

#	ARTICLE	IF	CITATIONS
109	Minimal cell: the biologist's point of view. , 2011, , 26-46.		0