

Theodore Bouchez

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

3,321
citations

136950

32
h-index

149698

56
g-index

73
all docs

73
docs citations

73
times ranked

4458
citing authors

#	ARTICLE	IF	CITATIONS
1	Ecological study of a bioaugmentation failure. <i>Environmental Microbiology</i> , 2000, 2, 179-190.	3.8	271
2	Simultaneous analysis of microbial identity and function using NanoSIMS. <i>Environmental Microbiology</i> , 2008, 10, 580-588.	3.8	187
3	Amoebae in domestic water systems: resistance to disinfection treatments and implication in <i>Legionella</i> persistence. <i>Journal of Applied Microbiology</i> , 2004, 97, 950-963.	3.1	176
4	Anaerobic digestion of biowaste under extreme ammonia concentration: Identification of key microbial phylotypes. <i>Bioresource Technology</i> , 2016, 207, 92-101.	9.6	140
5	Metaproteomics of cellulose methanisation under thermophilic conditions reveals a surprisingly high proteolytic activity. <i>ISME Journal</i> , 2014, 8, 88-102.	9.8	131
6	Members of the uncultured bacterial candidate division <i>WWE-1</i> are implicated in anaerobic digestion of cellulose. <i>MicrobiologyOpen</i> , 2014, 3, 157-167.	3.0	114
7	Occurrence of lignin degradation genotypes and phenotypes among prokaryotes. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 9527-9544.	3.6	114
8	Community shifts within anaerobic digestion microbiota facing phenol inhibition: Towards early warning microbial indicators?. <i>Water Research</i> , 2016, 100, 296-305.	11.3	108
9	Improving anaerobic digestion with support media: Mitigation of ammonia inhibition and effect on microbial communities. <i>Bioresource Technology</i> , 2017, 235, 229-239.	9.6	107
10	Insights into networks of functional microbes catalysing methanization of cellulose under mesophilic conditions. <i>Environmental Microbiology</i> , 2009, 11, 889-904.	3.8	105
11	Effect of inoculum to substrate ratio (I/S) on municipal solid waste anaerobic degradation kinetics and potential. <i>Waste Management</i> , 2012, 32, 2258-2265.	7.4	78
12	Stable isotope probing of acetate fed anaerobic batch incubations shows a partial resistance of acetoclastic methanogenesis catalyzed by <i>Methanosarcina</i> to sudden increase of ammonia level. <i>Water Research</i> , 2015, 69, 90-99.	11.3	76
13	<i>Microvirgula aerodenitrificans</i> gen. nov., sp. nov., a new Gram-negative bacterium exhibiting co-respiration of oxygen and nitrogen oxides up to oxygen-saturated conditions. <i>International Journal of Systematic Bacteriology</i> , 1998, 48, 775-782.	2.8	75
14	Molecular microbiology methods for environmental diagnosis. <i>Environmental Chemistry Letters</i> , 2016, 14, 423-441.	16.2	75
15	<i>Cloacibacillus evryensis</i> gen. nov., sp. nov., a novel asaccharolytic, mesophilic, amino-acid-degrading bacterium within the phylum 'Synergistetes', isolated from an anaerobic sludge digester. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2008, 58, 2003-2012.	1.7	75
16	Anaerobic biodegradation of cellulosic material: Batch experiments and modelling based on isotopic data and focusing on acetoclastic and non-acetoclastic methanogenesis. <i>Waste Management</i> , 2009, 29, 1828-1837.	7.4	74
17	New insights into the key microbial phylotypes of anaerobic sludge digesters under different operational conditions. <i>Water Research</i> , 2016, 102, 158-169.	11.3	73
18	Combined phosphate and nitrogen removal in a sequencing batch reactor using the aerobic denitrifier, <i>Microvirgula aerodenitrificans</i> . <i>Water Research</i> , 2001, 35, 189-197.	11.3	69

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19	Combined monitoring of changes in $\delta^{13}\text{C}_{\text{CH}_4}$ and archaeal community structure during mesophilic methanization of municipal solid waste. <i>FEMS Microbiology Ecology</i> , 2009, 68, 236-245.	2.7	69
20	A thermodynamic theory of microbial growth. <i>ISME Journal</i> , 2014, 8, 1747-1751.	9.8	58
21	Methanogenic diversity and activity in municipal solid waste landfill leachates. <i>Antonie Van Leeuwenhoek</i> , 2006, 89, 423-434.	1.7	51
22	Methanosarcina as the dominant acetoclastic methanogens during mesophilic anaerobic digestion of putrescible waste. <i>Antonie Van Leeuwenhoek</i> , 2008, 94, 593-605.	1.7	51
23	Comparison of synthetic medium and wastewater used as dilution medium to design scalable microbial anodes: Application to food waste treatment. <i>Bioresource Technology</i> , 2015, 185, 106-115.	9.6	51
24	Nitrate and nitrite injection during municipal solid waste anaerobic biodegradation. <i>Waste Management</i> , 2007, 27, 778-791.	7.4	50
25	Direct and correlated responses to selection in two lines of rabbits selected for feed efficiency under ad libitum and restricted feeding: I. Production traits and gut microbiota characteristics. <i>Journal of Animal Science</i> , 2016, 94, 38-48.	0.5	50
26	Successful and unsuccessful bioaugmentation experiments monitored by fluorescent in situ hybridization. <i>Water Science and Technology</i> , 2000, 41, 61-68.	2.5	49
27	Perspectives in mathematical modelling for microbial ecology. <i>Ecological Modelling</i> , 2016, 321, 64-74.	2.5	47
28	Increasing concentrations of phenol progressively affect anaerobic digestion of cellulose and associated microbial communities. <i>Biodegradation</i> , 2016, 27, 15-27.	3.0	43
29	Co-inoculating ruminal content neither provides active hydrolytic microbes nor improves methanization of ^{13}C -cellulose in batch digesters. <i>FEMS Microbiology Ecology</i> , 2014, 87, 616-629.	2.7	41
30	The current provided by oxygen-reducing microbial cathodes is related to the composition of their bacterial community. <i>Bioelectrochemistry</i> , 2015, 102, 42-49.	4.6	40
31	Successful bacterial incorporation into activated sludge flocs using alginate. <i>Bioresource Technology</i> , 2009, 100, 1031-1032.	9.6	36
32	Evaluation of biodegradability of phenol and bisphenol A during mesophilic and thermophilic municipal solid waste anaerobic digestion using ^{13}C -labeled contaminants. <i>Chemosphere</i> , 2013, 90, 512-520.	8.2	35
33	Comparative metatranscriptomic analysis of anaerobic digesters treating anionic surfactant contaminated wastewater. <i>Science of the Total Environment</i> , 2019, 649, 482-494.	8.0	33
34	Fluorescence-based tools for single-cell approaches in food microbiology. <i>International Journal of Food Microbiology</i> , 2015, 213, 2-16.	4.7	30
35	Shotgun metaproteomic profiling of biomimetic anaerobic digestion processes treating sewage sludge. <i>Proteomics</i> , 2015, 15, 3532-3543.	2.2	30
36	Discovery and characterization of a new bacterial candidate division by an anaerobic sludge digester metagenomic approach. <i>Environmental Microbiology</i> , 2008, 10, 2111-2123.	3.8	27

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37	Effect of ammonia on methane production pathways and reaction rates in acetate-fed biogas processes. <i>Water Science and Technology</i> , 2017, 75, 1839-1848.	2.5	27
38	Combined eukaryotic and bacterial community fingerprinting of natural freshwater biofilms using automated ribosomal intergenic spacer analysis. <i>FEMS Microbiology Ecology</i> , 2010, 74, 542-553.	2.7	26
39	Circular Economy Applied to Organic Residues and Wastewater: Research Challenges. <i>Waste and Biomass Valorization</i> , 2022, 13, 1267-1276.	3.4	26
40	Multi-system Nernst-Michaelis-Menten model applied to bioanodes formed from sewage sludge. <i>Bioresource Technology</i> , 2015, 195, 162-169.	9.6	25
41	A model-based approach to detect interspecific interactions during biofilm development. <i>Biofouling</i> , 2014, 30, 761-771.	2.2	23
42	Asymmetrical response of anaerobic digestion microbiota to temperature changes. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 1445-1457.	3.6	23
43	Denitrifying bio-cathodes developed from constructed wetland sediments exhibit electroactive nitrate reducing biofilms dominated by the genera <i>Azoarcus</i> and <i>Pontibacter</i> . <i>Bioelectrochemistry</i> , 2021, 140, 107819.	4.6	22
44	Successive bioanode regenerations to maintain efficient current production from biowaste. <i>Bioelectrochemistry</i> , 2015, 106, 133-140.	4.6	20
45	Gradual development of ammonia-induced syntrophic acetate-oxidizing activities under mesophilic and thermophilic conditions quantitatively tracked using multiple isotopic approaches. <i>Water Research</i> , 2021, 204, 117586.	11.3	20
46	Biocathodes reducing oxygen at high potential select biofilms dominated by <i>Ectothiorhodospiraceae</i> populations harboring a specific association of genes. <i>Bioresource Technology</i> , 2016, 214, 55-62.	9.6	19
47	Penta- and 2,4,6-tri-chlorophenol biodegradation during municipal solid waste anaerobic digestion. <i>Ecotoxicology and Environmental Safety</i> , 2016, 130, 270-278.	6.0	18
48	Whole Proteome Analyses on <i>Ruminiclostridium cellulolyticum</i> Show a Modulation of the Cellulolysis Machinery in Response to Cellulosic Materials with Subtle Differences in Chemical and Structural Properties. <i>PLoS ONE</i> , 2017, 12, e0170524.	2.5	16
49	Biorefinery for heterogeneous organic waste using microbial electrochemical technology. <i>Bioresource Technology</i> , 2019, 292, 121943.	9.6	15
50	Consistent microbial dynamics and functional community patterns derived from first principles. <i>ISME Journal</i> , 2019, 13, 263-276.	9.8	15
51	Leachate pre-treatment strategies before recirculation in landfill bioreactors. <i>Water Science and Technology</i> , 2005, 52, 289-297.	2.5	14
52	Life cycle assessment of a bioelectrochemical system as a new technological platform for biosuccinic acid production from waste. <i>Environmental Science and Pollution Research</i> , 2018, 25, 36485-36502.	5.3	14
53	Eco-design of microbial electrochemical technologies for the production of waste-based succinic acid thanks to a life cycle assessment. <i>Journal of Cleaner Production</i> , 2019, 225, 1155-1168.	9.3	14
54	Systematic and quantitative analysis of two decades of anodic wastewater treatment in bioelectrochemical reactors. <i>Water Research</i> , 2022, 214, 118142.	11.3	13

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55	Biological nitrogen removal in a single aerobic reactor by association of a nitrifying ecosystem to an aerobic denitrifier, <i>Microvirgula aerodenitrificans</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , 1998, 5, 435-439.	1.8	12
56	Elucidation of nitrate reduction pathways in anaerobic bioreactors using a stable isotope approach. <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 1746-1750.	1.5	12
57	Diversity of novel archaeal viruses infecting methanogens discovered through coupling of stable isotope probing and metagenomics. <i>Environmental Microbiology</i> , 2022, 24, 4853-4868.	3.8	12
58	Detection of <i>WWE2</i> -related <i>Lentisphaerae</i> by 16S rRNA gene sequencing and fluorescence in situ hybridization in landfill leachate. <i>Canadian Journal of Microbiology</i> , 2010, 56, 846-852.	1.7	11
59	Municipal Solid Waste Stabilization Efficiency Using Fluorescence Excitation-Emission Spectroscopy. <i>Environmental Engineering Science</i> , 2013, 30, 232-240.	1.6	11
60	Measurement of Biochemical Methane Potential of Heterogeneous Solid Substrates: Results of a Two-Phase French Inter-Laboratory Study. <i>Water (Switzerland)</i> , 2020, 12, 2814.	2.7	11
61	Insights from Microbial Transition State Theory on Monod's Affinity Constant. <i>Scientific Reports</i> , 2020, 10, 5323.	3.3	8
62	Impact of nitrate-enhanced leachate recirculation on gaseous releases from a landfill bioreactor cell. <i>Waste Management</i> , 2009, 29, 2078-2084.	7.4	7
63	SIMSISH Technique Does Not Alter the Apparent Isotopic Composition of Bacterial Cells. <i>PLoS ONE</i> , 2013, 8, e77522.	2.5	7
64	Acidophilic microbial communities catalyzing sludge bioleaching monitored by fluorescent in situ hybridization. <i>Antonie Van Leeuwenhoek</i> , 2006, 89, 435-442.	1.7	6
65	Genome Sequences of Two Nondomesticated <i>Bacillus subtilis</i> Strains Able To Form Thick Biofilms on Submerged Surfaces. <i>Genome Announcements</i> , 2014, 2, .	0.8	6
66	Emergence of a Synergistic Diversity as a Response to Competition in <i>Pseudomonas putida</i> Biofilms. <i>Microbial Ecology</i> , 2020, 80, 47-59.	2.8	6
67	Quantification of bacterial populations in complex ecosystems using fluorescent in situ hybridization, confocal laser scanning microscopy and image analysis. <i>Genetics Selection Evolution</i> , 2001, 33, S307.	3.0	5
68	Electrochemical analysis of a microbial electrochemical snorkel in laboratory and constructed wetlands. <i>Bioelectrochemistry</i> , 2021, 142, 107895.	4.6	5
69	Similar evolution in $\delta^{13}\text{C}_{\text{CH}_4}$ and model-predicted relative rate of acetoclastic methanogenesis during mesophilic methanization of municipal solid wastes. <i>Water Science and Technology</i> , 2009, 60, 3173-3179.	2.5	2
70	Influence de la pré-oxydation d'un PEHD sur l'extraction des carbonyles et la croissance d'un biofilm. <i>Materiaux Et Techniques</i> , 2012, 100, 211-220.	0.9	1
71	Leachate pre-treatment strategies before recirculation in landfill bioreactors. <i>Water Science and Technology</i> , 2005, 52, 289-97.	2.5	1
72	The role of oxidation compounds in biofilm growth on polyethylene geomembrane barriers used in landfill. <i>Journal of Applied Polymer Science</i> , 2012, 124, E251.	2.6	0