

JÃ©rÃ©me Hamelin

List of Publications by Year in descending order

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Version: 2024-02-01

66
papers

4,736
citations

109137

35
h-index

106150

65
g-index

67
all docs

67
docs citations

67
times ranked

7353
citing authors

#	ARTICLE	IF	CITATIONS
1	World Scientistsâ€™ Warning to Humanity: A Second Notice. <i>BioScience</i> , 2017, 67, 1026-1028.	2.2	817
2	Challenges in microbial ecology: building predictive understanding of community function and dynamics. <i>ISME Journal</i> , 2016, 10, 2557-2568.	4.4	570
3	Statistical analysis of denaturing gel electrophoresis (DGE) fingerprinting patterns. <i>Environmental Microbiology</i> , 2002, 4, 634-643.	1.8	469
4	Robust estimation of microbial diversity in theory and in practice. <i>ISME Journal</i> , 2013, 7, 1092-1101.	4.4	321
5	Inhibition of fermentative hydrogen production by lignocellulose-derived compounds in mixed cultures. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 3150-3159.	3.8	167
6	Nutritional stress induces exchange of cell material and energetic coupling between bacterial species. <i>Nature Communications</i> , 2015, 6, 6283.	5.8	136
7	Total solids content: a key parameter of metabolic pathways in dry anaerobic digestion. <i>Biotechnology for Biofuels</i> , 2013, 6, 164.	6.2	128
8	The Oxygenic Photogranule Process for Aeration-Free Wastewater Treatment. <i>Environmental Science & Technology</i> , 2018, 52, 3503-3511.	4.6	109
9	Sub-dominant bacteria as keystone species in microbial communities producing bio-hydrogen. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 4975-4985.	3.8	79
10	The importance of filamentous cyanobacteria in the development of oxygenic photogranules. <i>Scientific Reports</i> , 2017, 7, 17944.	1.6	78
11	Differences between Bacterial Communities in the Gut of a Soil-Feeding Termite (<i>Cubitermes</i>) Tj ETQq1 1 0.784314 1.4 74 /Overlock 107	1.4	74
12	nifH gene diversity in the bacterial community associated with the rhizosphere of <i>Molinia coerulea</i> , an oligonitrophilic perennial grass. <i>Environmental Microbiology</i> , 2002, 4, 477-481.	1.8	72
13	Co-evolution between <i>Frankia</i> populations and host plants in the family Casuarinaceae and consequent patterns of global dispersal. <i>Environmental Microbiology</i> , 1999, 1, 525-533.	1.8	71
14	Specific inhibition of biohydrogen-producing <i>Clostridium</i> sp. after dilute-acid pretreatment of sunflower stalks. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 12273-12282.	3.8	68
15	A Single Community Dominates Structure and Function of a Mixture of Multiple Methanogenic Communities. <i>Current Biology</i> , 2017, 27, 3390-3395.e4.	1.8	65
16	Soil Microbial Community Changes in Wooded Mountain Pastures due to Simulated Effects of Cattle Grazing. <i>Plant and Soil</i> , 2005, 278, 327-340.	1.8	64
17	Spatial distribution of microbial communities in the shallow submarine alkaline hydrothermal field of the Pory Bay, New Caledonia. <i>Environmental Microbiology Reports</i> , 2014, 6, 665-674.	1.0	64
18	How to use molecular biology tools for the study of the anaerobic digestion process?. <i>Reviews in Environmental Science and Biotechnology</i> , 2015, 14, 555-593.	3.9	60

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19	Substrate milling pretreatment as a key parameter for Solid-State Anaerobic Digestion optimization. <i>Bioresource Technology</i> , 2014, 173, 185-192.	4.8	59
20	Growth Progression of Oxygenic Photogranules and Its Impact on Bioactivity for Aeration-Free Wastewater Treatment. <i>Environmental Science & Technology</i> , 2020, 54, 486-496.	4.6	58
21	How elevated pCO ₂ modifies total and metabolically active bacterial communities in the rhizosphere of two perennial grasses grown under field conditions. <i>FEMS Microbiology Ecology</i> , 2006, 55, 339-350.	1.3	55
22	Anaerobic digester bioaugmentation influences quasi steady state performance and microbial community. <i>Water Research</i> , 2016, 104, 128-136.	5.3	54
23	Influence of support material properties on the potential selection of Archaea during initial adhesion of a methanogenic consortium. <i>Bioresource Technology</i> , 2011, 102, 4054-4060.	4.8	53
24	Correlating methane production to microbiota in anaerobic digesters fed synthetic wastewater. <i>Water Research</i> , 2017, 110, 161-169.	5.3	49
25	Biofilm development during the start-up period of anaerobic biofilm reactors: the biofilm <i>Archaea</i> community is highly dependent on the support material. <i>Microbial Biotechnology</i> , 2014, 7, 257-264.	2.0	47
26	Carbon conversion efficiency and population dynamics of a marine algae-bacteria consortium growing on simplified synthetic digestate: First step in a bioprocess coupling algal production and anaerobic digestion. <i>Bioresource Technology</i> , 2012, 119, 79-87.	4.8	46
27	Vertebrate bacterial gut diversity: size also matters. <i>BMC Ecology</i> , 2016, 16, 12.	3.0	46
28	Absolute quantitation of microbes using 16S rRNA gene metabarcoding: A rapid normalization of relative abundances by quantitative PCR targeting a 16S rRNA gene spike-in standard. <i>MicrobiologyOpen</i> , 2020, 9, e977.	1.2	43
29	Specific PCR Amplification for the Genus <i>Pseudomonas</i> Targeting the 3/4 Half of 16S rDNA and the Whole 16S-23S rDNA Spacer. <i>Systematic and Applied Microbiology</i> , 2002, 25, 220-227.	1.2	42
30	Microbial community signature of high-solid content methanogenic ecosystems. <i>Bioresource Technology</i> , 2013, 133, 256-262.	4.8	42
31	Changes in hydrogenase genetic diversity and proteomic patterns in mixed-culture dark fermentation of mono-, di- and tri-saccharides. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 11654-11665.	3.8	41
32	Two-Stage Alkaline-Enzymatic Pretreatments To Enhance Biohydrogen Production from Sunflower Stalks. <i>Environmental Science & Technology</i> , 2013, 47, 12591-12599.	4.6	40
33	Frequency and Diversity of Nitrate Reductase Genes among Nitrate-Dissimilating <i>Pseudomonas</i> in the Rhizosphere of Perennial Grasses Grown in Field Conditions. <i>Microbial Ecology</i> , 2005, 49, 63-72.	1.4	39
34	CO ₂ addition to increase biomass production and control microalgae species in high rate algal ponds treating wastewater. <i>Journal of CO₂ Utilization</i> , 2018, 28, 292-298.	3.3	39
35	Total solid content drives hydrogen production through microbial selection during thermophilic fermentation. <i>Bioresource Technology</i> , 2014, 166, 610-615.	4.8	38
36	Biogranules applied in environmental engineering. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27801-27811.	3.8	38

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37	<i>In situ</i> proteo-metabolomics reveals metabolite secretion by the acid mine drainage bio-indicator, <i>Euglena mutabilis</i> . ISME Journal, 2012, 6, 1391-1402.	4.4	37
38	Spatial and temporal variations of the bacterial community in the bovine digestive tract. Journal of Applied Microbiology, 2009, 107, 1642-1650.	1.4	34
39	Functional versus phylogenetic fingerprint analyses for monitoring hydrogen-producing bacterial populations in dark fermentation cultures. International Journal of Hydrogen Energy, 2011, 36, 3870-3879.	3.8	32
40	Phenotypic structure of <i>Pseudomonas</i> populations is altered under elevated pCO ₂ in the rhizosphere of perennial grasses. Soil Biology and Biochemistry, 2006, 38, 1193-1201.	4.2	30
41	Development and application of a functional CE-SSCP fingerprinting method based on [Fe ²⁺]-hydrogenase genes for monitoring hydrogen-producing <i>Clostridium</i> in mixed cultures. International Journal of Hydrogen Energy, 2010, 35, 13158-13167.	3.8	30
42	Wastewater treatment using oxygenic photogranule-based process has lower environmental impact than conventional activated sludge process. Bioresource Technology, 2021, 319, 124204.	4.8	30
43	Improvement of RNA-SIP by pyrosequencing to identify putative 4-n-nonylphenol degraders in activated sludge. Water Research, 2012, 46, 601-610.	5.3	26
44	Structural divergence of bacterial communities from functionally similar laboratory-scale vermicomposts assessed by PCR-CE-SSCP. Journal of Applied Microbiology, 2008, 105, 2123-2132.	1.4	23
45	Distribution and hydrophobic properties of Extracellular Polymeric Substances in biofilms in relation towards cohesion. Journal of Biotechnology, 2013, 165, 85-92.	1.9	23
46	Only Simpson Diversity can be Estimated Accurately from Microbial Community Fingerprints. Microbial Ecology, 2014, 68, 169-172.	1.4	23
47	Adaptation of acidogenic sludge to increasing glycerol concentrations for biohydrogen production. Applied Microbiology and Biotechnology, 2015, 99, 8295-8308.	1.7	23
48	Development and Application of an Enzymatic and Cell Flotation Treatment for the Recovery of Viable Microbial Cells from Environmental Matrices Such as Anaerobic Sludge. Applied and Environmental Microbiology, 2011, 77, 8487-8493.	1.4	22
49	Selective microbial aerosolization in biogas demonstrated by quantitative PCR. Bioresource Technology, 2010, 101, 7252-7257.	4.8	21
50	Engineered methanotrophic syntrophy in photogranule communities removes dissolved methane. Water Research X, 2021, 12, 100106.	2.8	19
51	Examination of Gould's modified S1 (mS1) selective medium and Angle's non-selective medium for describing the diversity of <i>Pseudomonas</i> spp. in soil and root environments. FEMS Microbiology Ecology, 2003, 45, 97-104.	1.3	18
52	Similar PAH Fate in Anaerobic Digesters Inoculated with Three Microbial Communities Accumulating Either Volatile Fatty Acids or Methane. PLoS ONE, 2015, 10, e0125552.	1.1	18
53	Novel Outlook in Microbial Ecology: Nonmutualistic Interspecies Electron Transfer. Trends in Microbiology, 2020, 28, 245-253.	3.5	14
54	Bioaerosol emissions from open microalgal processes and their potential environmental impacts: what can be learned from natural and anthropogenic aquatic environments?. Current Opinion in Biotechnology, 2015, 33, 279-286.	3.3	11

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55	Nitrogen fertiliser rate affects the frequency of nitrate-dissimilating <i>Pseudomonas</i> spp. in the rhizosphere of <i>Lolium perenne</i> grown under elevated pCO ₂ (Swiss FACE). <i>Soil Biology and Biochemistry</i> , 2005, 37, 1962-1965.	4.2	9
56	Spatial variability of the functional stability of microbial respiration process: a microcosm study using tropical forest soil. <i>Journal of Soils and Sediments</i> , 2012, 12, 1030-1039.	1.5	8
57	Distribution of <i>Pseudomonas</i> populations harboring <i>phlD</i> or <i>hcnAB</i> biocontrol genes is related to depth in vineyard soils. <i>Soil Biology and Biochemistry</i> , 2010, 42, 466-472.	4.2	7
58	New urban wastewater treatment with autotrophic membrane bioreactor at low chemical oxygen demand/N substrate ratio. <i>Water Science and Technology</i> , 2014, 69, 960-965.	1.2	7
59	Mapping the biological activities of filamentous oxygenic photogranules. <i>Biotechnology and Bioengineering</i> , 2021, 118, 601-611.	1.7	7
60	DNA reassociation kinetics and diversity indices: richness is not rich enough. <i>Oikos</i> , 2008, 117, 177-181.	1.2	6
61	Homogeneity and Synchronous Dynamics of Microbial Communities in Particulate Biofilms: from Major Populations to Minor Groups. <i>Microbes and Environments</i> , 2012, 27, 142-148.	0.7	5
62	The use of green macroalgae (<i>Ulva lactuca</i> and <i>Codium tomentosum</i>) that have a high methane potential, as a source of biogas in Senegal. <i>Journal of Applied Bioscience</i> , 2019, 132, 13404.	0.7	5
63	Simple Time-lapse Imaging for Quantifying the Hydrostatic Production of Oxygenic Photogranules. <i>Bio-protocol</i> , 2020, 10, e3784.	0.2	3
64	Multiplexed chemostat system for quantification of biodiversity and ecosystem functioning in anaerobic digestion. <i>PLoS ONE</i> , 2018, 13, e0193748.	1.1	2
65	Screening and Application of Ligninolytic Microbial Consortia to Enhance Aerobic Degradation of Solid Digestate. <i>Microorganisms</i> , 2022, 10, 277.	1.6	2
66	16. Biomasse et déchets pour la production de bioénergies. , 0, , 162.		0