

Barth F Smets

List of Publications by Year in descending order

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247
papers

12,767
citations

23500

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all docs

257
docs citations

257
times ranked

10894
citing authors

#	ARTICLE	IF	CITATIONS
1	Survival strategy of comammox bacteria in a wastewater nutrient removal system with sludge fermentation liquid as additional carbon source. <i>Science of the Total Environment</i> , 2022, 802, 149862.	3.9	13
2	Intermittent aeration to regulate microbial activities in membrane-aerated biofilm reactors: Energy-efficient nitrogen removal and low nitrous oxide emission. <i>Chemical Engineering Journal</i> , 2022, 433, 133630.	6.6	18
3	Evolutionary Ecology of Natural Comammox <i>Nitrospira</i> Populations. <i>MSystems</i> , 2022, 7, e0113921.	1.7	14
4	IncHIIA plasmids potentially facilitate horizontal flow of antibiotic resistance genes to pathogens in microbial communities of urban residential sewage. <i>Molecular Ecology</i> , 2022, 31, 1595-1608.	2.0	14
5	Aggregation of purple bacteria in an upflow photobioreactor to facilitate solid/liquid separation: Impact of organic loading rate, hydraulic retention time and water composition. <i>Bioresource Technology</i> , 2022, 348, 126806.	4.8	6
6	Modelling N ₂ O production and emissions. , 2022, , 167-196.		0
7	Chronic effects of cerium dioxide nanoparticles on biological nitrogen removal and nitrous oxide emission: Insight into impact mechanism and performance recovery potential. <i>Bioresource Technology</i> , 2022, 351, 126966.	4.8	1
8	Time to act—assessing variations in qPCR analyses in biological nitrogen removal with examples from partial nitrification/anammox systems. <i>Water Research</i> , 2021, 190, 116604.	5.3	8
9	Stable nitrogen removal by anammox process after rapid temperature drops: Insights from metagenomics and metaproteomics. <i>Bioresource Technology</i> , 2021, 320, 124231.	4.8	20
10	Temperature modulates stress response in mainstream anammox reactors. <i>Communications Biology</i> , 2021, 4, 23.	2.0	15
11	Role of Ammonia Oxidation in Organic Micropollutant Transformation during Wastewater Treatment: Insights from Molecular, Cellular, and Community Level Observations. <i>Environmental Science & Technology</i> , 2021, 55, 2173-2188.	4.6	49
12	Extended-Spectrum β -Lactamase and Carbapenemase Genes are Substantially and Sequentially Reduced during Conveyance and Treatment of Urban Sewage. <i>Environmental Science & Technology</i> , 2021, 55, 5939-5949.	4.6	24
13	Insights into chronic zinc oxide nanoparticle stress responses of biological nitrogen removal system with nitrous oxide emission and its recovery potential. <i>Bioresource Technology</i> , 2021, 327, 124797.	4.8	19
14	Combination of ¹⁵ N Tracer and Microbial Analyses Discloses N ₂ O Sink Potential of the Anammox Community. <i>Environmental Science & Technology</i> , 2021, 55, 9231-9242.	4.6	23
15	Pathogenic and Indigenous Denitrifying Bacteria are Transcriptionally Active and Key Multi-Antibiotic-Resistant Players in Wastewater Treatment Plants. <i>Environmental Science & Technology</i> , 2021, 55, 10862-10874.	4.6	60
16	EMBRACE-WATERS statement: Recommendations for reporting of studies on antimicrobial resistance in wastewater and related aquatic environments. <i>One Health</i> , 2021, 13, 100339.	1.5	11
17	Response to “Comment on “Role of Ammonia Oxidation in Organic Micropollutant Transformation during Wastewater Treatment”: Overlooked Evidence to the Contrary”: <i>Environmental Science & Technology</i> , 2021, 55, 16783-16784.	4.6	1
18	Dewatering methanotrophic enrichments intended for single cell protein production using biomimetic aquaporin forward osmosis membranes. <i>Separation and Purification Technology</i> , 2020, 235, 116133.	3.9	21

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19	Modelling N ₂ O dynamics of activated sludge biomass: Uncertainty analysis and pathway contributions. <i>Chemical Engineering Journal</i> , 2020, 379, 122311.	6.6	22
20	A converging subset of soil bacterial taxa is permissive to the IncP-1 plasmid pJK5 across a range of soil copper contamination. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	9
21	Cultivation of methanotrophic bacteria in a novel bubble-free membrane bioreactor for microbial protein production. <i>Bioresource Technology</i> , 2020, 310, 123388.	4.8	34
22	Modeling Denitrification as an Electric Circuit Accurately Captures Electron Competition between Individual Reductive Steps: The Activated Sludge Modelâ€™Electron Competition Model. <i>Environmental Science & Technology</i> , 2020, 54, 7330-7338.	4.6	14
23	Comparison of antibiotic-resistant bacteria and antibiotic resistance genes abundance in hospital and community wastewater: A systematic review. <i>Science of the Total Environment</i> , 2020, 743, 140804.	3.9	126
24	Minimum influent concentrations of oxytetracycline, streptomycin and spiramycin in selecting antibiotic resistance in biofilm type wastewater treatment systems. <i>Science of the Total Environment</i> , 2020, 720, 137531.	3.9	40
25	Coupling electrochemical ammonia extraction and cultivation of methane oxidizing bacteria for production of microbial protein. <i>Journal of Environmental Management</i> , 2020, 265, 110560.	3.8	21
26	Plasmids persist in a microbial community by providing fitness benefit to multiple phylotypes. <i>ISME Journal</i> , 2020, 14, 1170-1181.	4.4	62
27	Spatial ecology of a wastewater network defines the antibiotic resistance genes in downstream receiving waters. <i>Water Research</i> , 2019, 162, 347-357.	5.3	108
28	Fate of Labile Organic Carbon in Paddy Soil Is Regulated by Microbial Ferric Iron Reduction. <i>Environmental Science & Technology</i> , 2019, 53, 8533-8542.	4.6	42
29	Copper-Induced Stimulation of Nitrification in Biological Rapid Sand Filters for Drinking Water Production by Proliferation of <i>Nitrosomonas</i> spp.. <i>Environmental Science & Technology</i> , 2019, 53, 12433-12441.	4.6	13
30	Enrichment, Isolation, and Characterization of High-Affinity N ₂ -Reducing Bacteria in a Gas-Permeable Membrane Reactor. <i>Environmental Science & Technology</i> , 2019, 53, 12101-12112.	4.6	38
31	Guild Composition of Root-Associated Bacteria Changes with Increased Soil Contamination. <i>Microbial Ecology</i> , 2019, 78, 416-427.	1.4	3
32	Modelling carbofuran biotransformation by <i>Novosphingobium</i> sp. KN65.2 in the presence of coincidental carbon and indigenous microbes. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 798-807.	1.2	7
33	The effect of pH on N ₂ O production in intermittently-fed nitrification reactors. <i>Water Research</i> , 2019, 156, 223-231.	5.3	36
34	Regulation of key N ₂ O production mechanisms during biological water treatment. <i>Current Opinion in Biotechnology</i> , 2019, 57, 119-126.	3.3	32
35	Abiotic Nitrous Oxide (N ₂ O) Production Is Strongly pH Dependent, but Contributes Little to Overall N ₂ O Emissions in Biological Nitrogen Removal Systems. <i>Environmental Science & Technology</i> , 2019, 53, 3508-3516.	4.6	53
36	DNA- and RNA-SIP Reveal <i>Nitrospira</i> spp. as Key Drivers of Nitrification in Groundwater-Fed Biofilters. <i>MBio</i> , 2019, 10, .	1.8	33

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37	National innovative capacity in the water sector: A comparison between China and Europe. <i>Journal of Cleaner Production</i> , 2019, 210, 325-342.	4.6	6
38	Methanotrophic contribution to biodegradation of phenoxy acids in cultures enriched from a groundwater-fed rapid sand filter. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 1007-1019.	1.7	13
39	Removal of micropollutants during biological phosphorus removal: Impact of redox conditions in MBBR. <i>Science of the Total Environment</i> , 2019, 663, 496-506.	3.9	50
40	Comparative genomics sheds light on niche differentiation and the evolutionary history of comammox <i>Nitrospira</i> . <i>ISME Journal</i> , 2018, 12, 1779-1793.	4.4	249
41	Reactor staging influences microbial community composition and diversity of denitrifying MBBRs- Implications on pharmaceutical removal. <i>Water Research</i> , 2018, 138, 333-345.	5.3	41
42	Estimating the Transfer Range of Plasmids Encoding Antimicrobial Resistance in a Wastewater Treatment Plant Microbial Community. <i>Environmental Science and Technology Letters</i> , 2018, 5, 260-265.	3.9	98
43	The pH dependency of N ₂ O producing enzymatic processes, pathways and microbes: effect on net N ₂ O production. <i>Environmental Microbiology</i> , 2018, 20, 1623-1640.	1.8	80
44	Comammox <i>Nitrospira</i> are abundant ammonia oxidizers in diverse groundwater-fed rapid sand filter communities. <i>Environmental Microbiology</i> , 2018, 20, 1002-1015.	1.8	211
45	Evidence of co-metabolic bentazone transformation by methanotrophic enrichment from a groundwater-fed rapid sand filter. <i>Water Research</i> , 2018, 129, 105-114.	5.3	36
46	Nitrous oxide production in intermittently aerated Partial Nitritation-Anammox reactor: oxic N ₂ O production dominates and relates with ammonia removal rate. <i>Chemical Engineering Journal</i> , 2018, 335, 458-466.	6.6	43
47	Diversity of Iron Oxidizers in Groundwater-Fed Rapid Sand Filters: Evidence of Fe(II)-Dependent Growth by <i>Curvibacter</i> and <i>Undibacterium</i> spp.. <i>Frontiers in Microbiology</i> , 2018, 9, 2808.	1.5	33
48	Corrigendum to "Decay Experiments of Effective N-Removing Microbial Communities in Sequencing Batch Reactors". <i>Journal of Chemistry</i> , 2018, 2018, 1-1.	0.9	0
49	Nitrous oxide emissions from biofilm processes for wastewater treatment. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 9815-9829.	1.7	71
50	Stochastic processes govern invasion success in microbial communities when the invader is phylogenetically close to resident bacteria. <i>ISME Journal</i> , 2018, 12, 2748-2756.	4.4	41
51	The industrial dynamics of water innovation: A comparison between China and Europe. <i>International Journal of Innovation Studies</i> , 2018, 2, 14-32.	1.4	17
52	Does universal 16S rRNA gene amplicon sequencing of environmental communities provide an accurate description of nitrifying guilds?. <i>Journal of Microbiological Methods</i> , 2018, 151, 28-34.	0.7	11
53	Water and sanitation: an essential battlefield in the war on antimicrobial resistance. <i>FEMS Microbiology Ecology</i> , 2018, 94, .	1.3	104
54	From biofilm ecology to reactors: a focused review. <i>Water Science and Technology</i> , 2017, 75, 1753-1760.	1.2	79

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55	Intermittent Aeration Suppresses Nitrite-Oxidizing Bacteria in Membrane-Aerated Biofilms: A Model-Based Explanation. <i>Environmental Science & Technology</i> , 2017, 51, 6146-6155.	4.6	68
56	Diffusion and sorption of organic micropollutants in biofilms with varying thicknesses. <i>Water Research</i> , 2017, 123, 388-400.	5.3	87
57	<i>Nitrotoga</i> is selected over <i>Nitrospira</i> in newly assembled biofilm communities from a tap water source community at increased nitrite loading. <i>Environmental Microbiology</i> , 2017, 19, 2785-2793.	1.8	32
58	Bacteria from wheat and cucurbit plant roots metabolize PAHs and aromatic root exudates: Implications for rhizodegradation. <i>International Journal of Phytoremediation</i> , 2017, 19, 877-883.	1.7	32
59	Microbial biotechnologies for potable water production. <i>Microbial Biotechnology</i> , 2017, 10, 1094-1097.	2.0	12
60	Density and distribution of nitrifying guilds in rapid sand filters for drinking water production: Dominance of <i>Nitrospira</i> spp.. <i>Water Research</i> , 2017, 127, 239-248.	5.3	74
61	Calibration of the comprehensive NDHA-N ₂ O dynamics model for nitrifier-enriched biomass using targeted respirometric assays. <i>Water Research</i> , 2017, 126, 29-39.	5.3	12
62	Counter-diffusion biofilms have lower N ₂ O emissions than co-diffusion biofilms during simultaneous nitrification and denitrification: Insights from depth-profile analysis. <i>Water Research</i> , 2017, 124, 363-371.	5.3	87
63	Challenges in using allylthiourea and chlorate as specific nitrification inhibitors. <i>Chemosphere</i> , 2017, 182, 301-305.	4.2	30
64	Low nitrous oxide production through nitrifier-denitrification in intermittent-feed high-rate nitrification reactors. <i>Water Research</i> , 2017, 123, 429-438.	5.3	36
65	Pathways and Controls of N ₂ O Production in Nitritation-Anammox Biomass. <i>Environmental Science & Technology</i> , 2017, 51, 8981-8991.	4.6	59
66	Heterotrophs are key contributors to nitrous oxide production in activated sludge under low C-to-N ratios during nitrification—Batch experiments and modeling. <i>Biotechnology and Bioengineering</i> , 2017, 114, 132-140.	1.7	24
67	Metal stressors consistently modulate bacterial conjugal plasmid uptake potential in a phylogenetically conserved manner. <i>ISME Journal</i> , 2017, 11, 152-165.	4.4	114
68	Underestimation of ammonia-oxidizing bacteria abundance by amplification bias in <i>amoA</i> -targeted qPCR. <i>Microbial Biotechnology</i> , 2016, 9, 519-524.	2.0	27
69	Challenges in microbial ecology: building predictive understanding of community function and dynamics. <i>ISME Journal</i> , 2016, 10, 2557-2568.	4.4	570
70	A conceptual framework for invasion in microbial communities. <i>ISME Journal</i> , 2016, 10, 2773-2779.	4.4	100
71	Metagenomic analysis of rapid gravity sand filter microbial communities suggests novel physiology of <i>Nitrospira</i> spp.. <i>ISME Journal</i> , 2016, 10, 2569-2581.	4.4	213
72	Structural and functional robustness of an environmental bacterial community degrading diesel fuel. <i>New Biotechnology</i> , 2016, 33, S128.	2.4	0

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73	A consilience model to describe N_2O production during biological N removal. Environmental Science: Water Research and Technology, 2016, 2, 923-930.	1.2	27
74	Towards a consensus-based biokinetic model for green microalgae. The ASM-A. Water Research, 2016, 103, 485-499.	5.3	57
75	Biofilm Thickness Influences Biodiversity in Nitrifying MBBRs. Implications on Micropollutant Removal. Environmental Science & Technology, 2016, 50, 9279-9288.	4.6	135
76	Evaluating robustness of a diesel-degrading bacterial consortium isolated from contaminated soil. New Biotechnology, 2016, 33, 852-859.	2.4	30
77	Short-sludge age EBPR process. Microbial and biochemical process characterisation during reactor start-up and operation. Water Research, 2016, 104, 320-329.	5.3	57
78	Harvesting microalgae using activated sludge can decrease polymer dosing and enhance methane production via co-digestion in a bacterial-microalgal process. Algal Research, 2016, 20, 197-204.	2.4	19
79	Depth investigation of rapid sand filters for drinking water production reveals strong stratification in nitrification biokinetic behavior. Water Research, 2016, 101, 402-410.	5.3	29
80	Microbes in biological processes for municipal landfill leachate treatment: Community, function and interaction. International Biodeterioration and Biodegradation, 2016, 113, 88-96.	1.9	74
81	Ecological patterns, diversity and core taxa of microbial communities in groundwater-fed rapid gravity filters. ISME Journal, 2016, 10, 2209-2222.	4.4	125
82	Evaluating Alternate Biokinetic Models for Trace Pollutant Cometabolism. Environmental Science & Technology, 2015, 49, 2230-2236.	4.6	30
83	A nitrate sensitive planar optode; performance and interferences. Talanta, 2015, 144, 933-937.	2.9	8
84	Measuring biogeochemical heterogeneity at the micro scale in soils and sediments. Soil Biology and Biochemistry, 2015, 90, 122-138.	4.2	37
85	An improved method to set significance thresholds for β diversity testing in microbial community comparisons. Environmental Microbiology, 2015, 17, 3154-3167.	1.8	6
86	EBP2R. An innovative enhanced biological nutrient recovery activated sludge system to produce growth medium for green microalgae cultivation. Water Research, 2015, 68, 821-830.	5.3	35
87	Broad host range plasmids can invade an unexpectedly diverse fraction of a soil bacterial community. ISME Journal, 2015, 9, 934-945.	4.4	330
88	A novel control strategy for single-stage autotrophic nitrogen removal in SBR. Chemical Engineering Journal, 2015, 260, 64-73.	6.6	11
89	Spectrometric characterization of the effluent dissolved organic matter from an anammox reactor shows correlation between the EEM signature and anammox growth. Chemosphere, 2014, 117, 271-277.	4.2	29
90	Novel assay to measure the plasmid mobilizing potential of mixed microbial communities. Frontiers in Microbiology, 2014, 5, 730.	1.5	27

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91	Fine scale spatial variability of microbial pesticide degradation in soil: scales, controlling factors, and implications. <i>Frontiers in Microbiology</i> , 2014, 5, 667.	1.5	41
92	Protocol for Evaluating the Permissiveness of Bacterial Communities Toward Conjugal Plasmids by Quantification and Isolation of Transconjugants. <i>Springer Protocols</i> , 2014, , 275-288.	0.1	19
93	A Model Framework to Describe Growth-Linked Biodegradation of Trace-Level Pollutants in the Presence of Coincidental Carbon Substrates and Microbes. <i>Environmental Science & Technology</i> , 2014, 48, 13358-13366.	4.6	19
94	Colony morphology and transcriptome profiling of <i>Pseudomonas putida</i> KT 2440 and its mutants deficient in alginate or all EPS synthesis under controlled matrix potentials. <i>MicrobiologyOpen</i> , 2014, 3, 457-469.	1.2	18
95	Structure, composition, and strength of nitrifying membrane-aerated biofilms. <i>Water Research</i> , 2014, 57, 151-161.	5.3	64
96	Internal Porosity of Mineral Coating Supports Microbial Activity in Rapid Sand Filters for Groundwater Treatment. <i>Applied and Environmental Microbiology</i> , 2014, 80, 7010-7020.	1.4	40
97	Sequentially aerated membrane biofilm reactors for autotrophic nitrogen removal: microbial community composition and dynamics. <i>Microbial Biotechnology</i> , 2014, 7, 32-43.	2.0	50
98	Seasonal Arsenic Accumulation in Stream Sediments at a Groundwater Discharge Zone. <i>Environmental Science & Technology</i> , 2014, 48, 920-929.	4.6	21
99	Aeration Strategies To Mitigate Nitrous Oxide Emissions from Single-Stage Nitrification/Anammox Reactors. <i>Environmental Science & Technology</i> , 2014, 48, 8679-8687.	4.6	69
100	Long-term manure exposure increases soil bacterial community potential for plasmid uptake. <i>Environmental Microbiology Reports</i> , 2014, 6, 125-130.	1.0	59
101	Effects of dynamic operating conditions on nitrification in biological rapid sand filters for drinking water treatment. <i>Water Research</i> , 2014, 64, 226-236.	5.3	71
102	Does microbial centimeter-scale heterogeneity impact MCPA degradation in and leaching from a loamy agricultural soil?. <i>Science of the Total Environment</i> , 2014, 472, 90-98.	3.9	26
103	Seasonal and spatial variations in microbial activity at various phylogenetic resolutions at a groundwater " surface water interface. <i>Canadian Journal of Microbiology</i> , 2014, 60, 277-286.	0.8	1
104	Reply to Comment on "Modeling Nitrous Oxide Production during Biological Nitrogen Removal via Nitrification and Denitrification: Extensions to the General ASM Models". <i>Environmental Science & Technology</i> , 2013, 47, 11910-11911.	4.6	0
105	A novel bench-scale column assay to investigate site-specific nitrification biokinetics in biological rapid sand filters. <i>Water Research</i> , 2013, 47, 6380-6387.	5.3	19
106	Model-based evaluation of the role of Anammox on nitric oxide and nitrous oxide productions in membrane aerated biofilm reactor. <i>Journal of Membrane Science</i> , 2013, 446, 332-340.	4.1	51
107	Critical assessment of extracellular polymeric substances extraction methods from mixed culture biomass. <i>Water Research</i> , 2013, 47, 5564-5574.	5.3	116
108	Microbial activity catalyzes oxygen transfer in membrane-aerated nitrifying biofilm reactors. <i>Journal of Membrane Science</i> , 2013, 446, 465-471.	4.1	45

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109	Crystal ball " 2013. <i>Microbial Biotechnology</i> , 2013, 6, 3-16.	2.0	6
110	Autotrophic Nitrogen Removal in a Membrane-Aerated Biofilm Reactor Under Continuous Aeration: A Demonstration. <i>Environmental Engineering Science</i> , 2013, 30, 38-45.	0.8	48
111	An operational protocol for facilitating start-up of single-stage autotrophic nitrogen-removing reactors based on process stoichiometry. <i>Water Science and Technology</i> , 2013, 68, 514-521.	1.2	17
112	Calibration and validation of a model describing complete autotrophic nitrogen removal in a granular SBR system. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 2007-2015.	1.6	12
113	Neutrophilic iron-oxidizing bacteria: occurrence and relevance in biological drinking water treatment. <i>Water Science and Technology: Water Supply</i> , 2013, 13, 1295-1301.	1.0	14
114	Nitrous Oxide and Nitric Oxide Emissions From Single-Stage Nitrification/Anammox Reactors Under Varying Aeration Regimes. <i>Proceedings of the Water Environment Federation</i> , 2013, 2013, 6513-6518.	0.0	0
115	Control of a Biological Nitrogen Removal Process in an Intensified Single Reactor Configuration. <i>Computer Aided Chemical Engineering</i> , 2013, 32, 769-774.	0.3	1
116	Pseudomonad Swarming Motility Is Restricted to a Narrow Range of High Matric Water Potentials. <i>Applied and Environmental Microbiology</i> , 2012, 78, 2936-2940.	1.4	13
117	Transcriptome Dynamics of <i>Pseudomonas putida</i> KT2440 under Water Stress. <i>Applied and Environmental Microbiology</i> , 2012, 78, 676-683.	1.4	40
118	Evaluation on the microbial interactions of anaerobic ammonium oxidizers and heterotrophs in Anammox biofilm. <i>Water Research</i> , 2012, 46, 4645-4652.	5.3	122
119	Efficient Total Nitrogen Removal in an Ammonia Gas Biofilter through High-Rate OLAND. <i>Environmental Science & Technology</i> , 2012, 46, 8826-8833.	4.6	20
120	Effect of the kinetics of ammonium and nitrite oxidation on nitrification success or failure for different biofilm reactor geometries. <i>Biochemical Engineering Journal</i> , 2012, 69, 123-129.	1.8	20
121	Sensitivity analysis of autotrophic N removal by a granule based bioreactor: Influence of mass transfer versus microbial kinetics. <i>Bioresource Technology</i> , 2012, 123, 230-241.	4.8	51
122	Modeling Nitrous Oxide Production during Biological Nitrogen Removal via Nitrification and Denitrification: Extensions to the General ASM Models. <i>Environmental Science & Technology</i> , 2011, 45, 7768-7776.	4.6	161
123	Biological Nitrogen Removal from Domestic Wastewater. , 2011, , 329-340.		9
124	iDynoMiCS: next-generation individual-based modelling of biofilms. <i>Environmental Microbiology</i> , 2011, 13, 2416-2434.	1.8	217
125	Growth dependence of conjugation explains limited plasmid invasion in biofilms: an individual-based modelling study. <i>Environmental Microbiology</i> , 2011, 13, 2435-2452.	1.8	57
126	An individual-based approach to explain plasmid invasion in bacterial populations. <i>FEMS Microbiology Ecology</i> , 2011, 75, 17-27.	1.3	64

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127	Structure and activity of lacustrine sediment bacteria involved in nutrient and iron cycles. FEMS Microbiology Ecology, 2011, 77, 666-679.	1.3	51
128	Effects of PAH-Contaminated Soil on Rhizosphere Microbial Communities. Water, Air, and Soil Pollution, 2011, 222, 17-25.	1.1	11
129	Biological Nitrogen Removal From Domestic Wastewater. , 2011, , 285-296.		2
130	A new extant respirometric assay to estimate intrinsic growth parameters applied to study plasmid metabolic burden. Biotechnology and Bioengineering, 2010, 105, 141-149.	1.7	9
131	Presence, distribution, and diversity of iron-oxidizing bacteria at a landfill leachate-impacted groundwater surface water interface. FEMS Microbiology Ecology, 2010, 71, 260-271.	1.3	36
132	TOL plasmid carriage enhances biofilm formation and increases extracellular DNA content in Pseudomonas putida KT2440. FEMS Microbiology Letters, 2010, 312, 84-92.	0.7	36
133	Shifts between <i>Nitrospira</i> and <i>Nitrobacter</i> -like nitrite oxidizers underlie the response of soil potential nitrite oxidation to changes in tillage practices. Environmental Microbiology, 2010, 12, 315-326.	1.8	214
134	Inoculum effects on community composition and nitrification performance of autotrophic nitrifying biofilm reactors with counter-diffusion geometry. Environmental Microbiology, 2010, 12, 2858-2872.	1.8	59
135	Hydration-controlled bacterial motility and dispersal on surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14369-14372.	3.3	182
136	Novel Assay To Assess Permissiveness of a Soil Microbial Community toward Receipt of Mobile Genetic Elements. Applied and Environmental Microbiology, 2010, 76, 4813-4818.	1.4	67
137	Sequential Aeration of Membrane-Aerated Biofilm Reactors for High-Rate Autotrophic Nitrogen Removal: Experimental Demonstration. Environmental Science & Technology, 2010, 44, 7628-7634.	4.6	109
138	Evaluation of Bioaugmentation with Entrapped Degrading Cells as a Soil Remediation Technology. Environmental Science & Technology, 2010, 44, 7622-7627.	4.6	21
139	Biodegradation in a Partially Saturated Sand Matrix: Compounding Effects of Water Content, Bacterial Spatial Distribution, and Motility. Environmental Science & Technology, 2010, 44, 2386-2392.	4.6	48
140	The Pressurized Porous Surface Model: An improved tool to study bacterial behavior under a wide range of environmentally relevant matric potentials. Journal of Microbiological Methods, 2010, 82, 324-326.	0.7	8
141	Nitrification performance in membrane-aerated biofilm reactors differs from conventional biofilm systems. Water Research, 2010, 44, 6073-6084.	5.3	70
142	Effective Biological Nitrogen Removal Treatment Processes for Domestic Wastewaters with Low C/N Ratios: A Review. Environmental Engineering Science, 2010, 27, 111-126.	0.8	184
143	Aggregate Size and Architecture Determine Microbial Activity Balance for One-Stage Partial Nitrification and Anammox. Applied and Environmental Microbiology, 2010, 76, 900-909.	1.4	318
144	Oxygen Transfer Model for a Flow-Through Hollow-Fiber Membrane Biofilm Reactor. Journal of Environmental Engineering, ASCE, 2009, 135, 806-814.	0.7	23

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145	The effect of hydroxylamine on the activity and aggregate structure of autotrophic nitrifying bioreactor cultures. <i>Biotechnology and Bioengineering</i> , 2009, 102, 714-724.	1.7	37
146	Nitrogen Removal from Digested Black Water by One-Stage Partial Nitritation and Anammox. <i>Environmental Science & Technology</i> , 2009, 43, 5035-5041.	4.6	160
147	Nitritation performance and biofilm development of co- and counter-diffusion biofilm reactors: Modeling and experimental comparison. <i>Water Research</i> , 2009, 43, 2699-2709.	5.3	51
148	Enhancing the formation and shear resistance of nitrifying biofilms on membranes by surface modification. <i>Water Research</i> , 2009, 43, 3469-3478.	5.3	60
149	Mass Action Models Describing Extant Horizontal Transfer of Plasmids: Inferences and Parameter Sensitivities. <i>Methods in Molecular Biology</i> , 2009, 532, 289-305.	0.4	2
150	A critical comparison of extant batch respirometric and substrate depletion assays for estimation of nitrification biokinetics. <i>Biotechnology and Bioengineering</i> , 2008, 101, 62-72.	1.7	19
151	Limited diffusive fluxes of substrate facilitate coexistence of two competing bacterial strains. <i>FEMS Microbiology Ecology</i> , 2008, 64, 1-8.	1.3	44
152	An improved cell recovery method for iron oxidizing bacterial (IOB) enrichments. <i>Journal of Microbiological Methods</i> , 2008, 72, 235-240.	0.7	5
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154	Effects of heat-activated persulfate oxidation on soil microorganisms. <i>Water Research</i> , 2008, 42, 1013-1022.	5.3	129
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