

Robbert Kleerebezem

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1250857/publications.pdf>

Version: 2024-02-01

109
papers

8,229
citations

46918

47
h-index

48187

88
g-index

112
all docs

112
docs citations

112
times ranked

6190
citing authors

#	ARTICLE	IF	CITATIONS
1	Production of a newly discovered PHA family member with an isobutyrate-fed enrichment culture. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 605-618.	1.7	8
2	Quantification of polyhydroxyalkanoate accumulated in waste activated sludge. <i>Water Research</i> , 2022, 221, 118795.	5.3	14
3	Resource allocation explains lactic acid production in mixed-culture anaerobic fermentations. <i>Biotechnology and Bioengineering</i> , 2021, 118, 745-758.	1.7	13
4	From waste to self-healing concrete: A proof-of-concept of a new application for polyhydroxyalkanoate. <i>Resources, Conservation and Recycling</i> , 2021, 164, 105206.	5.3	35
5	Seemingly trivial secondary factors may determine microbial competition: a cautionary tale on the impact of iron supplementation through corrosion. <i>FEMS Microbiology Ecology</i> , 2021, 97, .	1.3	1
6	Experimental infrastructure requirements for quantitative research on microbial communities. <i>Current Opinion in Biotechnology</i> , 2021, 67, 158-165.	3.3	6
7	Directing carbohydrates toward ethanol using mesophilic microbial communities. <i>Current Opinion in Biotechnology</i> , 2021, 67, 175-183.	3.3	13
8	Editorial overview: Microbial community engineering. <i>Current Opinion in Biotechnology</i> , 2021, 67, vi-ix.	3.3	0
9	High-rate ethanol production at low pH using the anaerobic granular sludge process. <i>Biotechnology and Bioengineering</i> , 2021, 118, 1943-1950.	1.7	8
10	Cyclic Conversions in the Nitrogen Cycle. <i>Frontiers in Microbiology</i> , 2021, 12, 622504.	1.5	6
11	Scaling-up microbial community-based polyhydroxyalkanoate production: status and challenges. <i>Bioresource Technology</i> , 2021, 327, 124790.	4.8	60
12	Product Inhibition and pH Affect Stoichiometry and Kinetics of Chain Elongating Microbial Communities in Sequencing Batch Bioreactors. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 693030.	2.0	9
13	Simultaneous nitrification and denitrification in microbial community-based polyhydroxyalkanoate production. <i>Bioresource Technology</i> , 2021, 337, 125420.	4.8	8
14	Direct and Indirect Effects of Increased CO ₂ Partial Pressure on the Bioenergetics of Syntrophic Propionate and Butyrate Conversion. <i>Environmental Science & Technology</i> , 2020, 54, 12583-12592.	4.6	33
15	Simultaneous growth and poly(3-hydroxybutyrate) (PHB) accumulation in a <i>Plasticumulans acidivorans</i> dominated enrichment culture. <i>Journal of Biotechnology</i> , 2020, 324, 100027.	1.9	5
16	Purple phototrophic bacteria for resource recovery: Challenges and opportunities. <i>Biotechnology Advances</i> , 2020, 43, 107567.	6.0	103
17	Volatile Fatty Acid Product Spectrum as a Function of the Solids Retention Time in an Anaerobic Granular Sludge Process. <i>Journal of Environmental Engineering, ASCE</i> , 2020, 146, 04020091.	0.7	4
18	Open microbiome dominated by <i>Clostridium</i> and <i>Eubacterium</i> converts methanol into i-butyrate and n-butyrate. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 5119-5131.	1.7	17

#	ARTICLE	IF	CITATIONS
19	Selecting for lactic acid producing and utilising bacteria in anaerobic enrichment cultures. <i>Biotechnology and Bioengineering</i> , 2020, 117, 1281-1293.	1.7	45
20	Pilot-Scale Polyhydroxyalkanoate Production from Organic Waste: Process Characteristics at High pH and High Ammonium Concentration. <i>Journal of Environmental Engineering, ASCE</i> , 2020, 146, .	0.7	20
21	The impact of mixtures of xylose and glucose on the microbial diversity and fermentative metabolism of sequencing-batch or continuous enrichment cultures. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	5
22	Temperature as competitive strategy determining factor in pulse-fed aerobic bioreactors. <i>ISME Journal</i> , 2019, 13, 3112-3125.	4.4	17
23	Denitrification as an N ₂ O sink. <i>Water Research</i> , 2019, 151, 381-387.	5.3	101
24	Stratification of nitrifier guilds in granular sludge in relation to nitrification. <i>Water Research</i> , 2019, 148, 479-491.	5.3	28
25	Diversity and metabolism of xylose and glucose fermenting microbial communities in sequencing batch or continuous culturing. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	23
26	Towards mainstream anammox: lessons learned from pilot-scale research at WWTP Dokhaven. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 1721-1733.	1.2	64
27	Growth yield and selection of <i>NosZ</i> clade II types in a continuous enrichment culture of N ₂ O respiring bacteria. <i>Environmental Microbiology Reports</i> , 2018, 10, 239-244.	1.0	27
28	Effective role of medium supplementation in microalgal lipid accumulation. <i>Biotechnology and Bioengineering</i> , 2018, 115, 1152-1160.	1.7	19
29	Life on N ₂ O: deciphering the ecophysiology of N ₂ O respiring bacterial communities in a continuous culture. <i>ISME Journal</i> , 2018, 12, 1142-1153.	4.4	72
30	Exploring microbial N ₂ O reduction: a continuous enrichment in nitrogen free medium. <i>Environmental Microbiology Reports</i> , 2018, 10, 102-107.	1.0	11
31	Deterioration of the anammox process at decreasing temperatures and long SRTs. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 658-668.	1.2	46
32	Theoretical analysis of municipal solid waste treatment by leachate recirculation under anaerobic and aerobic conditions. <i>Waste Management</i> , 2018, 71, 246-254.	3.7	17
33	Enrichment of PHA-producing bacteria under continuous substrate supply. <i>New Biotechnology</i> , 2018, 41, 55-61.	2.4	34
34	Metabolism and Occurrence of Methanogenic and Sulfate-Reducing Syntrophic Acetate Oxidizing Communities in Haloalkaline Environments. <i>Frontiers in Microbiology</i> , 2018, 9, 3039.	1.5	48
35	O ₂ versus N ₂ O respiration in a continuous microbial enrichment. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 8943-8950.	1.7	21
36	Pilot-Scale Polyhydroxyalkanoate Production from Paper Mill Wastewater: Process Characteristics and Identification of Bottlenecks for Full-Scale Implementation. <i>Journal of Environmental Engineering, ASCE</i> , 2018, 144, .	0.7	41

#	ARTICLE	IF	CITATIONS
37	Role of nitrite in the competition between denitrification and DNRA in a chemostat enrichment culture. <i>AMB Express</i> , 2017, 7, 91.	1.4	43
38	Impact of phosphate limitation on PHA production in a feast-famine process. <i>Water Research</i> , 2017, 126, 472-480.	5.3	40
39	Fermentative Bacteria Influence the Competition between Denitrifiers and DNRA Bacteria. <i>Frontiers in Microbiology</i> , 2017, 8, 1684.	1.5	63
40	DNRA and Denitrification Coexist over a Broad Range of Acetate/N-NO ₃ ⁻ Ratios, in a Chemostat Enrichment Culture. <i>Frontiers in Microbiology</i> , 2016, 7, 1842.	1.5	97
41	A toolbox to find the best mechanistic model to predict the behavior of environmental systems. <i>Environmental Modelling and Software</i> , 2016, 83, 344-355.	1.9	7
42	Bowel movement frequency and cardiovascular mortality, a matter of fibers and oxidative stress?. <i>Atherosclerosis</i> , 2016, 253, 278-280.	0.4	2
43	Syntrophic associations from hypersaline soda lakes converting organic acids and alcohols to methane at extremely haloalkaline conditions. <i>Environmental Microbiology</i> , 2016, 18, 3189-3202.	1.8	61
44	Limitation of syntrophic coculture growth by the acetogen. <i>Biotechnology and Bioengineering</i> , 2016, 113, 560-567.	1.7	16
45	Combining the enrichment and accumulation step in non-axenic PHA production: Cultivation of <i>Plasticumulans acidivorans</i> at high volume exchange ratios. <i>Journal of Biotechnology</i> , 2016, 231, 260-267.	1.9	20
46	Survival of the fastest: Selective removal of the side population for enhanced PHA production in a mixed substrate enrichment. <i>Bioresource Technology</i> , 2016, 216, 1022-1029.	4.8	33
47	Respirometric characterization of aerobic sulfide, thiosulfate and elemental sulfur oxidation by S-oxidizing biomass. <i>Water Research</i> , 2016, 89, 282-292.	5.3	52
48	PHA production from the organic fraction of municipal solid waste (OFMSW): Overcoming the inhibitory matrix. <i>Water Research</i> , 2016, 96, 74-83.	5.3	82
49	Influence of silicate on enrichment of highly productive microalgae from a mixed culture. <i>Journal of Applied Phycology</i> , 2016, 28, 1453-1457.	1.5	9
50	Modeling the competition between PHA-producing and non-PHA-producing bacteria in feast-famine SBR and staged CSTR systems. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2475-2484.	1.7	25
51	Ecology-based selective environments as solution to contamination in microalgal cultivation. <i>Current Opinion in Biotechnology</i> , 2015, 33, 46-51.	3.3	51
52	Microbial community-based polyhydroxyalkanoates (PHAs) production from wastewater: Techno-economic analysis and ex-ante environmental assessment. <i>Bioresource Technology</i> , 2015, 185, 368-377.	4.8	138
53	Starch productivity in cyclically operated photobioreactors with marine microalgae: effect of ammonium addition regime and volume exchange ratio. <i>Journal of Applied Phycology</i> , 2015, 27, 1121-1126.	1.5	11
54	Feasibility study of an alkaline-based chemical treatment for the purification of polyhydroxybutyrate produced by a mixed enriched culture. <i>AMB Express</i> , 2015, 5, 5.	1.4	46

#	ARTICLE	IF	CITATIONS
55	Lipid recovery from a vegetable oil emulsion using microbial enrichment cultures. <i>Biotechnology for Biofuels</i> , 2015, 8, 39.	6.2	14
56	Anaerobic digestion without biogas?. <i>Reviews in Environmental Science and Biotechnology</i> , 2015, 14, 787-801.	3.9	265
57	<i>Plasticicumulans lactativorans</i> sp. nov., a polyhydroxybutyrate-accumulating gammaproteobacterium from a sequencing-batch bioreactor fed with lactate. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2014, 64, 33-38.	0.8	19
58	Outcompeting nitrite-oxidizing bacteria in single-stage nitrogen removal in sewage treatment plants: A model-based study. <i>Water Research</i> , 2014, 66, 208-218.	5.3	167
59	Enrichment of <i>Plasticicumulans acidivorans</i> at pilot-scale for PHA production on industrial wastewater. <i>Journal of Biotechnology</i> , 2014, 192, 161-169.	1.9	119
60	Substrate versatility of polyhydroxyalkanoate producing glycerol grown bacterial enrichment culture. <i>Water Research</i> , 2014, 66, 190-198.	5.3	30
61	Absolute Quantification of Individual Biomass Concentrations in a Methanogenic Coculture. <i>AMB Express</i> , 2014, 4, 35.	1.4	17
62	Modeling PHA-producing microbial enrichment cultures towards a generalized model with predictive power. <i>New Biotechnology</i> , 2014, 31, 324-334.	2.4	44
63	Impact of non-storing biomass on PHA production: An enrichment culture on acetate and methanol. <i>International Journal of Biological Macromolecules</i> , 2014, 71, 74-80.	3.6	36
64	Flux analysis of the human proximal colon using anaerobic digestion model 1. <i>Anaerobe</i> , 2014, 28, 137-148.	1.0	10
65	Impact of dissolved hydrogen partial pressure on mixed culture fermentations. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 2617-2625.	1.7	46
66	Survival of the fittest. <i>Energy and Environmental Science</i> , 2013, 6, 3404.	15.6	50
67	Butyrate as preferred substrate for polyhydroxybutyrate production. <i>Bioresource Technology</i> , 2013, 142, 232-239.	4.8	87
68	Impact of oxygen limitation on glycerol-based biopolymer production by bacterial enrichments. <i>Water Research</i> , 2013, 47, 1209-1217.	5.3	48
69	Linking thermodynamics and kinetics to assess pathway reversibility in anaerobic bioprocesses. <i>Energy and Environmental Science</i> , 2013, 6, 3780.	15.6	104
70	Influence of the cycle length on the production of PHA and polyglucose from glycerol by bacterial enrichments in sequencing batch reactors. <i>Biotechnology and Bioengineering</i> , 2013, 110, 3148-3155.	1.7	26
71	Nitrogen Removal by a Nitritation-Anammox Bioreactor at Low Temperature. <i>Applied and Environmental Microbiology</i> , 2013, 79, 2807-2812.	1.4	258
72	Waste to resource: Converting paper mill wastewater to bioplastic. <i>Water Research</i> , 2012, 46, 5517-5530.	5.3	176

#	ARTICLE	IF	CITATIONS
73	Unravelling the reasons for disproportion in the ratio of AOB and NOB in aerobic granular sludge. Applied Microbiology and Biotechnology, 2012, 94, 1657-1666.	1.7	142
74	Plasticicumulans acidivorans gen. nov., sp. nov., a polyhydroxyalkanoate-accumulating gammaproteobacterium from a sequencing-batch bioreactor. International Journal of Systematic and Evolutionary Microbiology, 2011, 61, 2314-2319.	0.8	42
75	Segregation of Biomass in Cyclic Anaerobic/Aerobic Granular Sludge Allows the Enrichment of Anaerobic Ammonium Oxidizing Bacteria at Low Temperatures. Environmental Science & Technology, 2011, 45, 7330-7337.	4.6	159
76	Metabolic modeling of mixed substrate uptake for polyhydroxyalkanoate (PHA) production. Water Research, 2011, 45, 1309-1321.	5.3	105
77	Reduced iron induced nitric oxide and nitrous oxide emission. Water Research, 2011, 45, 5945-5952.	5.3	137
78	Effect of temperature and cycle length on microbial competition in PHB-producing sequencing batch reactor. ISME Journal, 2011, 5, 896-907.	4.4	82
79	Microbial community engineering for biopolymer production from glycerol. Applied Microbiology and Biotechnology, 2011, 92, 631-639.	1.7	72
80	Polyhydroxybutyrate production from lactate using a mixed microbial culture. Biotechnology and Bioengineering, 2011, 108, 2022-2035.	1.7	132
81	Influence of ammonium on the accumulation of polyhydroxybutyrate (PHB) in aerobic open mixed cultures. Journal of Biotechnology, 2010, 147, 73-79.	1.9	77
82	Short- and long-term temperature effects on aerobic polyhydroxybutyrate producing mixed cultures. Water Research, 2010, 44, 1689-1700.	5.3	45
83	Influence of the C/N ratio on the performance of polyhydroxybutyrate (PHB) producing sequencing batch reactors at short SRTs. Water Research, 2010, 44, 2141-2152.	5.3	157
84	A Generalized Method for Thermodynamic State Analysis of Environmental Systems. Critical Reviews in Environmental Science and Technology, 2010, 40, 1-54.	6.6	164
85	Model-based data evaluation of polyhydroxybutyrate producing mixed microbial cultures in aerobic sequencing batch and fed-batch reactors. Biotechnology and Bioengineering, 2009, 104, 50-67.	1.7	57
86	Xylose anaerobic conversion by open-mixed cultures. Applied Microbiology and Biotechnology, 2009, 82, 231-239.	1.7	68
87	Nitrous oxide emission during wastewater treatment. Water Research, 2009, 43, 4093-4103.	5.3	1,032
88	Enrichment of a Mixed Bacterial Culture with a High Polyhydroxyalkanoate Storage Capacity. Biomacromolecules, 2009, 10, 670-676.	2.6	342
89	Diversity of microbial communities in open mixed culture fermentations: impact of the pH and carbon source. Applied Microbiology and Biotechnology, 2008, 80, 1121-1130.	1.7	104
90	Thermodynamic and kinetic characterization using process dynamics: Acidophilic ferrous iron oxidation by <i>Leptospirillum ferrooxidans</i> . Biotechnology and Bioengineering, 2008, 100, 49-60.	1.7	11

#	ARTICLE	IF	CITATIONS
91	Glycerol fermentation by (open) mixed cultures: A chemostat study. <i>Biotechnology and Bioengineering</i> , 2008, 100, 1088-1098.	1.7	107
92	Energy-based models for environmental biotechnology. <i>Trends in Biotechnology</i> , 2008, 26, 366-374.	4.9	58
93	Effect of Dynamic Process Conditions on Nitrogen Oxides Emission from a Nitrifying Culture. <i>Environmental Science & Technology</i> , 2008, 42, 429-435.	4.6	250
94	Nitrous and Nitric Oxides and the Effect of Oxygen Level and Nitrite Concentration on its Emission from Nitrification and Nitrification-Denitrification Reactors. , 2008, , .		1
95	Unraveling the Source of Nitric Oxide Emission During Nitrification. <i>Water Environment Research</i> , 2007, 79, 2499-2509.	1.3	65
96	Influence of the pH on (open) mixed culture fermentation of glucose: A chemostat study. <i>Biotechnology and Bioengineering</i> , 2007, 98, 69-79.	1.7	193
97	Mixed culture biotechnology for bioenergy production. <i>Current Opinion in Biotechnology</i> , 2007, 18, 207-212.	3.3	517
98	Modeling product formation in anaerobic mixed culture fermentations. <i>Biotechnology and Bioengineering</i> , 2006, 93, 592-606.	1.7	196
99	High rate treatment of terephthalic acid production wastewater in a two-stage anaerobic bioreactor. <i>Biotechnology and Bioengineering</i> , 2005, 91, 169-179.	1.7	65
100	Cultivation of high-rate sulfate reducing sludge by pH-based electron donor dosage. <i>Journal of Biotechnology</i> , 2005, 118, 107-116.	1.9	21
101	Combining Mixing Regimes for Optimized Anaerobic Wastewater Treatment. <i>Applied Biochemistry and Biotechnology</i> , 2003, 109, 3-14.	1.4	1
102	Kinetics of syntrophic cultures: A theoretical treatise on butyrate fermentation. , 2000, 67, 529-543.		60
103	Anaerobic Degradation of Phthalate Isomers by Methanogenic Consortia. <i>Applied and Environmental Microbiology</i> , 1999, 65, 1152-1160.	1.4	96
104	The Role of Benzoate in Anaerobic Degradation of Terephthalate. <i>Applied and Environmental Microbiology</i> , 1999, 65, 1161-1167.	1.4	62
105	Effects of Nickel and Cobalt on Kinetics of Methanol Conversion by Methanogenic Sludge as Assessed by On-Line CH ₄ Monitoring. <i>Applied and Environmental Microbiology</i> , 1999, 65, 1789-1793.	1.4	90
106	High-Rate Treatment of Terephthalate in Anaerobic Hybrid Reactors. <i>Biotechnology Progress</i> , 1999, 15, 347-357.	1.3	24
107	Energetics of product formation during anaerobic degradation of phthalate isomers and benzoate. <i>FEMS Microbiology Ecology</i> , 1999, 29, 273-282.	1.3	24
108	Anaerobic biodegradability of phthalic acid isomers and related compounds. <i>Biodegradation</i> , 1999, 10, 63-73.	1.5	79

#	ARTICLE	IF	CITATIONS
109	Anaerobic pre-treatment of petrochemical effluents: terephthalic acid wastewater. Water Science and Technology, 1997, 36, 237-248.	1.2	65