Jo De Vrieze

List of Publications by Year
in descending order

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72 papers	4,158 citations	126708 33 h-index	118652 62 g-index

75 all docs	75 docs citations	75 times ranked	4860 citing authors

#	Article	IF	Citations
1	Methanosarcina: The rediscovered methanogen for heavy duty biomethanation. Bioresource Technology, 2012, 112, 1-9.	4.8	661
2	Ammonia and temperature determine potential clustering in the anaerobic digestion microbiome. Water Research, 2015, 75, 312-323.	5.3	276
3	Absolute quantification of microbial taxon abundances. ISME Journal, 2017, 11, 584-587.	4.4	273
4	The active microbial community more accurately reflects the anaerobic digestion process: 16S rRNA (gene) sequencing as a predictive tool. Microbiome, 2018, 6, 63.	4.9	138
5	Biomass retention on electrodes rather than electrical current enhances stability in anaerobic digestion. Water Research, 2014, 54, 211-221.	5.3	133
6	Inoculum selection is crucial to ensure operational stability in anaerobic digestion. Applied Microbiology and Biotechnology, 2015, 99, 189-199.	1.7	125
7	Microbial community redundancy in anaerobic digestion drives process recovery after salinity exposure. Water Research, 2017, 111, 109-117.	5.3	111
8	Greenhouse gas emissions from rice microcosms amended with a plant microbial fuel cell. Applied Microbiology and Biotechnology, 2014, 98, 3205-3217.	1.7	108
9	Interfacing anaerobic digestion with (bio)electrochemical systems: Potentials and challenges. Water Research, 2018, 146, 244-255.	5.3	108
10	Perspectives for microbial community composition in anaerobic digestion: from abundance and activity to connectivity. Environmental Microbiology, 2016, 18, 2797-2809.	1.8	99
11	Repeated pulse feeding induces functional stability in anaerobic digestion. Microbial Biotechnology, 2013, 6, 414-424.	2.0	98
12	Temperature regulates deterministic processes and the succession of microbial interactions in anaerobic digestion process. Water Research, 2017, 123, 134-143.	5.3	95
13	Electrochemical Ammonia Recovery from Source-Separated Urine for Microbial Protein Production. Environmental Science & Technology, 2017, 51, 13143-13150.	4.6	89
14	High-rate iron-rich activated sludge as stabilizing agent for the anaerobic digestion of kitchen waste. Water Research, 2013, 47, 3732-3741.	5.3	88
15	Thermophilic sludge digestion improves energy balance and nutrient recovery potential in full-scale municipal wastewater treatment plants. Bioresource Technology, 2016, 218, 1237-1245.	4.8	86
16	Temperature affects microbial abundance, activity and interactions in anaerobic digestion. Bioresource Technology, 2016, 209, 228-236.	4.8	84
17	Inoculum selection influences the biochemical methane potential of agroâ€industrial substrates. Microbial Biotechnology, 2015, 8, 776-786.	2.0	81
18	Presence does not imply activity: DNA and RNA patterns differ in response to salt perturbation in anaerobic digestion. Biotechnology for Biofuels, 2016, 9, 244.	6.2	81

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19	Proteotyping of biogas plant microbiomes separates biogas plants according to process temperature and reactor type. Biotechnology for Biofuels, 2016, 9, 155.	6.2	80
20	Electrochemical Nutrient Recovery Enables Ammonia Toxicity Control and Biogas Desulfurization in Anaerobic Digestion. Environmental Science & Technology, 2015, 49, 948-955.	4.6	72
21	Anaerobic treatment of raw domestic wastewater in a UASB-digester at 10â€Â°C and microbial community dynamics. Chemical Engineering Journal, 2018, 334, 2088-2097.	6.6	67
22	The full-scale anaerobic digestion microbiome is represented by specific marker populations. Water Research, 2016, 104, 101-110.	5.3	61
23	Temperature regulates methane production through the function centralization of microbial community in anaerobic digestion. Bioresource Technology, 2016, 216, 150-158.	4.8	60
24	Marker microbiome clusters are determined by operational parameters and specific key taxa combinations in anaerobic digestion. Bioresource Technology, 2018, 263, 128-135.	4.8	58
25	High salinity in molasses wastewaters shifts anaerobic digestion to carboxylate production. Water Research, 2016, 98, 293-301.	5.3	57
26	Anaerobic digestibility of marine microalgae Phaeodactylum tricornutum in a lab-scale anaerobic membrane bioreactor. Applied Microbiology and Biotechnology, 2012, 93, 859-869.	1.7	56
27	Resource recovery from pig manure via an integrated approach: A technical and economic assessment for full-scale applications. Bioresource Technology, 2019, 272, 582-593.	4.8	52
28	Terminal restriction fragment length polymorphism is an â€œold schoolâ€•reliable technique for swift microbial community screening in anaerobic digestion. Scientific Reports, 2018, 8, 16818.	1.6	48
29	The hydrogen gas bio-based economy and the production of renewable building block chemicals, food and energy. New Biotechnology, 2020, 55, 12-18.	2.4	46
30	Anaerobic digestion of molasses by means of a vibrating and non-vibrating submerged anaerobic membrane bioreactor. Biomass and Bioenergy, 2014, 68, 95-105.	2.9	40
31	Carbon emission avoidance and capture by producing in-reactor microbial biomass based food, feed and slow release fertilizer: Potentials and limitations. Science of the Total Environment, 2018, 644, 1525-1530.	3.9	39
32	High-rate activated sludge systems combined with dissolved air flotation enable effective organics removal and recovery. Bioresource Technology, 2019, 291, 121833.	4.8	35
33	Integrating anaerobic digestion and slow pyrolysis improves the product portfolio of a cocoa waste biorefinery. Sustainable Energy and Fuels, 2020, 4, 3712-3725.	2.5	35
34	Co-digestion of molasses or kitchen waste with high-rate activated sludge results in a diverse microbial community with stable methane production. Journal of Environmental Management, 2015, 152, 75-82.	3.8	31
35	Microbial protein production from methane via electrochemical biogas upgrading. Chemical Engineering Journal, 2020, 391, 123625.	6.6	31
36	Methanosaeta dominate acetoclastic methanogenesis during highâ€rate methane production in anaerobic reactors treating distillery wastewaters. Journal of Chemical Technology and Biotechnology, 2014, 89, 1751-1759.	1.6	30

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37	Enrichment of Methanosaetaceae on carbon felt and biochar during anaerobic digestion of a potassium-rich molasses stream. Applied Microbiology and Biotechnology, 2016, 100, 5177-5187.	1.7	30
38	Cocoa residues as viable biomass for renewable energy production through anaerobic digestion. Bioresource Technology, 2018, 265, 568-572.	4.8	28
39	Exploiting the unwanted: Sulphate reduction enables phosphate recovery from energy-rich sludge during anaerobic digestion. Water Research, 2019, 163, 114859.	5.3	28
40	The next frontier of the anaerobic digestion microbiome: From ecology to process control. Environmental Science and Ecotechnology, 2020, 3, 100032.	6.7	26
41	Stochasticity in microbiology: managing unpredictability to reach the Sustainable Development Goals. Microbial Biotechnology, 2020, 13, 829-843.	2.0	26
42	Combined Consumption of Beefâ€Based Cooked Mince and Sucrose Stimulates Oxidative Stress, Cardiac Hypertrophy, and Colonic Outgrowth of Desulfovibrionaceae in Rats. Molecular Nutrition and Food Research, 2019, 63, e1800962.	1.5	25
43	Gut Microbiota of Migrating Wild Rabbit Fish (Siganus guttatus) Larvae Have Low Spatial and Temporal Variability. Microbial Ecology, 2020, 79, 539-551.	1.4	25
44	Engineering microbial technologies for environmental sustainability: choices to make. Microbial Biotechnology, 2022, 15, 215-227.	2.0	24
45	Anaerobic ureolysis of source-separated urine for NH3 recovery enables direct removal of divalent ions at the toilet. Water Research, 2019, 148, 97-105.	5.3	21
46	Membrane electrolysis-assisted CO2 and H2S extraction as innovative pretreatment method for biological biogas upgrading. Chemical Engineering Journal, 2019, 361, 1479-1486.	6.6	21
47	Hygienization of sludge through anaerobic digestion at 35, 55 and 60 Â°C. Water Science and Technology, 2013, 68, 2234-2239.	1.2	20
48	Assessing the potential for upâ€cycling recovered resources from anaerobic digestion through microbial protein production. Microbial Biotechnology, 2021, 14, 897-910.	2.0	20
49	Methanol induces low temperature resilient methanogens and improves methane generation from domestic wastewater at low to moderate temperatures. Bioresource Technology, 2015, 189, 370-378.	4.8	19
50	Isotope Fractionation in Biogas Allows Direct Microbial Community Stability Monitoring in Anaerobic Digestion. Environmental Science & Technology, 2018, 52, 6704-6713.	4.6	19
51	The microbiome as engineering tool: Manufacturing and trading between microorganisms. New Biotechnology, 2017, 39, 206-214.	2.4	17
52	From Biogas and Hydrogen to Microbial Protein Through Co-Cultivation of Methane and Hydrogen Oxidizing Bacteria. Frontiers in Bioengineering and Biotechnology, 2021, 9, 733753.	2.0	17
53	Taking the technical microbiome into the next decade. Environmental Microbiology, 2018, 20, 1991-2000.	1.8	16
54	In vitro and in vivo digestion of red cured cooked meat: oxidation, intestinal microbiota and fecal metabolites. Food Research International, 2021, 142, 110203.	2.9	16

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55	Antibiotic affects the gut microbiota composition and expression of genes related to lipid metabolism and myofiber types in skeletal muscle of piglets. BMC Veterinary Research, 2020, 16, 392.	0.7	14
56	Cow manure stabilizes anaerobic digestion of cocoa waste. Waste Management, 2021, 126, 508-516.	3.7	14
57	Microbial technology with major potentials for the urgent environmental needs of the next decades. Microbial Biotechnology, 2017, 10, 988-994.	2.0	13
58	Microbial community dynamics reflect reactor stability during the anaerobic digestion of a very high strength and sulfateâ€rich vinasse. Journal of Chemical Technology and Biotechnology, 2018, 93, 975-984.	1.6	13
59	Urine nitrification with a synthetic microbial community. Systematic and Applied Microbiology, 2019, 42, 126021.	1.2	12
60	Triangulation of microbial fingerprinting in anaerobic digestion reveals consistent fingerprinting profiles. Water Research, 2021, 202, 117422.	5.3	12
61	Evaluation of solid polymeric organic materials for use in bioreactive sediment capping to stimulate the degradation of chlorinated aliphatic hydrocarbons. Applied Microbiology and Biotechnology, 2014, 98, 2255-2266.	1.7	11
62	Nitrate amendment to control sulphide accumulation in shrimp ponds. Aquaculture, 2020, 521, 735010.	1.7	9
63	Red and processed meat consumption within two different dietary patterns: Effect on the colon microbial community and volatile metabolites in pigs. Food Research International, 2020, 129, 108793.	2.9	7
64	Feedstock thermal pretreatment selectively steers process stability during the anaerobic digestion of waste activated sludge. Applied Microbiology and Biotechnology, 2020, 104, 3675-3686.	1.7	5
65	Labile carbon feedstocks trigger a priming effect in anaerobic digestion: An insight into microbial mechanisms. Bioresource Technology, 2022, 344, 126243.	4.8	5
66	Molybdate effectively controls sulphide production in a shrimp pond model. Environmental Research, 2022, 203, 111797.	3.7	4
67	Detection of acidification limit in anaerobic membrane bioreactors at ambient temperature. Water Research, 2016, 106, 429-438.	5.3	3
68	Anaerobic Digestion as Key Technology inÂthe Bio-Based Economy. , 2018, , 1-19.		2
69	Preâ€incubation conditions determine the fermentation pattern and microbial community structure in fermenters at mild hydrostatic pressure. Biotechnology and Bioengineering, 2022, 119, 1792-1807.	1.7	2
70	Anaerobic Digestion: About Beauty and Consolation. , 2015, , 3-12.		1
71	In situammonia removal by methanogenic granular biomass. Environmental Science: Water Research and Technology, 2018, 4, 559-568.	1.2	1
72	Anaerobic Digestion as Key Technology inÂthe Bio-based Economy. , 2019, , 361-378.		0