

Anna SchnÄ¼rer

List of Publications by Year in descending order

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103
papers

6,098
citations

66234

42
h-index

74018

75
g-index

111
all docs

111
docs citations

111
times ranked

4928
citing authors

#	ARTICLE	IF	CITATIONS
1	Ammonia, a selective agent for methane production by syntrophic acetate oxidation at mesophilic temperature. <i>Water Science and Technology</i> , 2008, 57, 735-740.	1.2	305
2	Effect of process temperature on bacterial and archaeal communities in two methanogenic bioreactors treating organic household waste. <i>FEMS Microbiology Ecology</i> , 2007, 59, 683-693.	1.3	292
3	Biogas production through syntrophic acetate oxidation and deliberate operating strategies for improved digester performance. <i>Applied Energy</i> , 2016, 179, 124-135.	5.1	251
4	<i>Syntrophaceticus schinkii</i> gen. nov., sp. nov., an anaerobic, syntrophic acetate-oxidizing bacterium isolated from a mesophilic anaerobic filter. <i>FEMS Microbiology Letters</i> , 2010, 309, no-no.	0.7	220
5	Methane Production in Dairy Cows Correlates with Rumen Methanogenic and Bacterial Community Structure. <i>Frontiers in Microbiology</i> , 2017, 8, 226.	1.5	218
6	Characterization of microbial community structure during continuous anaerobic digestion of straw and cow manure. <i>Microbial Biotechnology</i> , 2015, 8, 815-827.	2.0	197
7	Bioaugmentation of Syntrophic Acetate-Oxidizing Culture in Biogas Reactors Exposed to Increasing Levels of Ammonia. <i>Applied and Environmental Microbiology</i> , 2012, 78, 7619-7625.	1.4	191
8	Bacterial community composition and fhs profiles of low- and high-ammonia biogas digesters reveal novel syntrophic acetate-oxidising bacteria. <i>Biotechnology for Biofuels</i> , 2016, 9, 48.	6.2	190
9	Comparative characterization of digestate versus pig slurry and cow manure – Chemical composition and effects on soil microbial activity. <i>Waste Management</i> , 2017, 61, 529-538.	3.7	171
10	<i>Tepidanaerobacter acetatoxydans</i> sp. nov., an anaerobic, syntrophic acetate-oxidizing bacterium isolated from two ammonium-enriched mesophilic methanogenic processes. <i>Systematic and Applied Microbiology</i> , 2011, 34, 260-266.	1.2	170
11	Expression of barley SUSIBA2 transcription factor yields high-starch low-methane rice. <i>Nature</i> , 2015, 523, 602-606.	13.7	155
12	Volatile fatty acids production via mixed culture fermentation: Revealing the link between pH, inoculum type and bacterial composition. <i>Bioresource Technology</i> , 2019, 292, 121889.	4.8	140
13	Impact of trace element addition on degradation efficiency of volatile fatty acids, oleic acid and phenyl acetate and on microbial populations in a biogas digester. <i>Journal of Bioscience and Bioengineering</i> , 2012, 114, 446-452.	1.1	133
14	Quantification of syntrophic acetate-oxidizing microbial communities in biogas processes. <i>Environmental Microbiology Reports</i> , 2011, 3, 500-505.	1.0	132
15	Ammonia threshold for inhibition of anaerobic digestion of thin stillage and the importance of organic loading rate. <i>Microbial Biotechnology</i> , 2016, 9, 180-194.	2.0	128
16	First insights into the syntrophic acetate-oxidizing bacteria – a genetic study. <i>MicrobiologyOpen</i> , 2013, 2, 35-53.	1.2	126
17	The microbial community structure in industrial biogas plants influences the degradation rate of straw and cellulose in batch tests. <i>Biotechnology for Biofuels</i> , 2016, 9, 128.	6.2	125
18	Improved bio-energy yields via sequential ethanol fermentation and biogas digestion of steam exploded oat straw. <i>Bioresource Technology</i> , 2011, 102, 4449-4455.	4.8	112

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19	Mesophilic syntrophic acetate oxidation during methane formation by a triculture at high ammonium concentration. <i>Archives of Microbiology</i> , 1994, 162, 70-74.	1.0	107
20	Biogas production from wheat straw and manure – Impact of pretreatment and process operating parameters. <i>Bioresource Technology</i> , 2013, 149, 232-237.	4.8	100
21	Microbial community adaptability to altered temperature conditions determines the potential for process optimisation in biogas production. <i>Applied Energy</i> , 2018, 226, 838-848.	5.1	96
22	Methanogenic Population and CH ₄ Production in Swedish Dairy Cows Fed Different Levels of Forage. <i>Applied and Environmental Microbiology</i> , 2012, 78, 6172-6179.	1.4	94
23	Conversion of phenols during anaerobic digestion of organic solid waste – A review of important microorganisms and impact of temperature. <i>Journal of Environmental Management</i> , 2012, 95, S99-S103.	3.8	94
24	Trace element and temperature effects on microbial communities and links to biogas digester performance at high ammonia levels. <i>Biotechnology for Biofuels</i> , 2015, 8, 154.	6.2	94
25	Syntrophic acetate oxidation in industrial CSTR biogas digesters. <i>Journal of Biotechnology</i> , 2014, 171, 39-44.	1.9	92
26	Importance of inoculum source and initial community structure for biogas production from agricultural substrates. <i>Bioresource Technology</i> , 2017, 245, 768-777.	4.8	92
27	Improved biogas production from whole stillage by co-digestion with cattle manure. <i>Bioresource Technology</i> , 2012, 114, 314-319.	4.8	85
28	Effects of temperature on biological degradation of phenols, benzoates and phthalates under methanogenic conditions. <i>International Biodeterioration and Biodegradation</i> , 2005, 55, 153-160.	1.9	75
29	Changes in the Acetogenic Population in a Mesophilic Anaerobic Digester in Response to Increasing Ammonia Concentration. <i>Microbes and Environments</i> , 2011, 26, 347-353.	0.7	72
30	Detection of novel syntrophic acetate-oxidizing bacteria from biogas processes by continuous acetate enrichment approaches. <i>Microbial Biotechnology</i> , 2018, 11, 680-693.	2.0	63
31	Enzyme activities in and energetics of acetate metabolism by the mesophilic syntrophically acetate-oxidizing anaerobe <i>Clostridium ultunense</i> . <i>FEMS Microbiology Letters</i> , 1997, 154, 331-336.	0.7	60
32	The effect of substrate and operational parameters on the abundance of sulphate-reducing bacteria in industrial anaerobic biogas digesters. <i>Bioresource Technology</i> , 2013, 132, 327-332.	4.8	59
33	Phenols in anaerobic digestion processes and inhibition of ammonia oxidising bacteria (AOB) in soil. <i>Science of the Total Environment</i> , 2006, 364, 229-238.	3.9	56
34	Growth Characteristics and Thermodynamics of Syntrophic Acetate Oxidizers. <i>Environmental Science & Technology</i> , 2019, 53, 5512-5520.	4.6	56
35	Genome-Guided Analysis and Whole Transcriptome Profiling of the Mesophilic Syntrophic Acetate Oxidising Bacterium <i>Syntrophaceticus schinkii</i> . <i>PLoS ONE</i> , 2016, 11, e0166520.	1.1	53
36	Effects of mechanical pre-treatment on the biogas yield from ley crop silage. <i>Applied Energy</i> , 2012, 97, 498-502.	5.1	52

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37	Anaerobic Fungi: A Potential Source of Biological H ₂ in the Oceanic Crust. <i>Frontiers in Microbiology</i> , 2016, 7, 674.	1.5	52
38	Production efficiency of Swedish farm-scale biogas plants. <i>Biomass and Bioenergy</i> , 2017, 97, 27-37.	2.9	49
39	Effect of Start-Up Strategies and Electrode Materials on Carbon Dioxide Reduction on Biocathodes. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	1.4	48
40	Biogas Production from Thin Stillage on an Industrial Scale—Experience and Optimisation. <i>Energies</i> , 2013, 6, 5642-5655.	1.6	47
41	Semi-continuous anaerobic co-digestion of cow manure and steam-exploded <i>Salix</i> with recirculation of liquid digestate. <i>Journal of Environmental Management</i> , 2014, 136, 9-15.	3.8	45
42	Biogas Production: Microbiology and Technology. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2016, 156, 195-234.	0.6	45
43	Complete genome sequence of <i>Methanoculleus bourgensis</i> strain MAB1, the syntrophic partner of mesophilic acetate-oxidising bacteria (SAOB). <i>Standards in Genomic Sciences</i> , 2016, 11, 80.	1.5	44
44	Biogas production from wheat straw: community structure of cellulose-degrading bacteria. <i>Energy, Sustainability and Society</i> , 2013, 3, .	1.7	43
45	Serial anaerobic digestion improves protein degradation and biogas production from mixed food waste. <i>Biomass and Bioenergy</i> , 2022, 161, 106478.	2.9	42
46	Fungal survival during anaerobic digestion of organic household waste. <i>Waste Management</i> , 2006, 26, 1205-1211.	3.7	41
47	Microbial Responses to Different Operating Practices for Biogas Production Systems. , 0, , .		40
48	In situ ammonia production as a sanitation agent during anaerobic digestion at mesophilic temperature. <i>Letters in Applied Microbiology</i> , 2008, 46, 325-330.	1.0	38
49	Microbial Community Structure in a Serpentine-Hosted Abiotic Gas Seepage at the Chimaera Ophiolite, Turkey. <i>Applied and Environmental Microbiology</i> , 2017, 83, .	1.4	37
50	Comparison of operating strategies for increased biogas production from thin stillage. <i>Journal of Biotechnology</i> , 2014, 175, 22-30.	1.9	34
51	Effects of thermal hydrolytic pre-treatment on biogas process efficiency and microbial community structure in industrial- and laboratory-scale digesters. <i>Waste Management</i> , 2019, 95, 150-160.	3.7	33
52	Ammonia-oxidizing communities in agricultural soil incubated with organic waste residues. <i>Biology and Fertility of Soils</i> , 2006, 42, 315-323.	2.3	31
53	Sulfide level in municipal sludge digesters affects microbial community response to long-chain fatty acid loads. <i>Biotechnology for Biofuels</i> , 2019, 12, 259.	6.2	30
54	AcetoBase: a functional gene repository and database for formyltetrahydrofolate synthetase sequences. <i>Database: the Journal of Biological Databases and Curation</i> , 2019, 2019, .	1.4	29

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55	Genome-Guided Analysis of Physiological Capacities of <i>Tepidanaerobacter acetatoxydans</i> Provides Insights into Environmental Adaptations and Syntrophic Acetate Oxidation. <i>PLoS ONE</i> , 2015, 10, e0121237.	1.1	28
56	Two-stage anaerobic digestion for reduced hydrogen sulphide production. <i>Journal of Chemical Technology and Biotechnology</i> , 2016, 91, 1055-1062.	1.6	28
57	Inoculum Source Determines Acetate and Lactate Production during Anaerobic Digestion of Sewage Sludge and Food Waste. <i>Bioengineering</i> , 2020, 7, 3.	1.6	28
58	Molecular characterisation of two anaerobic phenol-degrading enrichment cultures. <i>International Biodeterioration and Biodegradation</i> , 2010, 64, 427-433.	1.9	27
59	Genome-Guided Analysis of <i>Clostridium ultunense</i> and Comparative Genomics Reveal Different Strategies for Acetate Oxidation and Energy Conservation in Syntrophic Acetate-Oxidising Bacteria. <i>Genes</i> , 2018, 9, 225.	1.0	27
60	Perspectives on Potential Applications of Nanometal Derivatives in Gaseous Bioenergy Pathways: Mechanisms, Life Cycle, and Toxicity. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9563-9589.	3.2	26
61	Effects on enteric methane production and bacterial and archaeal communities by the addition of cashew nut shell extract or glycerol – An in vitro evaluation. <i>Journal of Dairy Science</i> , 2014, 97, 5729-5741.	1.4	25
62	Acetate and Lactate Production During Two-Stage Anaerobic Digestion of Food Waste Driven by <i>Lactobacillus</i> and <i>Aeriscardovia</i> . <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	23
63	Comparison of pasteurization and integrated thermophilic sanitation at a full-scale biogas plant – Heat demand and biogas production. <i>Energy</i> , 2015, 79, 419-427.	4.5	21
64	Biogas digestates based on lignin-rich feedstock – potential as fertilizer and soil amendment. <i>Archives of Agronomy and Soil Science</i> , 2018, 64, 347-359.	1.3	21
65	Substrate-Induced Response in Biogas Process Performance and Microbial Community Relates Back to Inoculum Source. <i>Microorganisms</i> , 2018, 6, 80.	1.6	21
66	The potential for polyphosphate metabolism in Archaea and anaerobic polyphosphate formation in <i>Methanosarcina mazei</i> . <i>Scientific Reports</i> , 2019, 9, 17101.	1.6	21
67	Effect of Cobalt, Nickel, and Selenium/Tungsten Deficiency on Mesophilic Anaerobic Digestion of Chemically Defined Soluble Organic Compounds. <i>Microorganisms</i> , 2020, 8, 598.	1.6	21
68	Enrichment and description of novel bacteria performing syntrophic propionate oxidation at high ammonia level. <i>Environmental Microbiology</i> , 2021, 23, 1620-1637.	1.8	21
69	Effect of Nickel Levels on Hydrogen Partial Pressure and Methane Production in Methanogens. <i>PLoS ONE</i> , 2016, 11, e0168357.	1.1	21
70	Presence of potential ammonia oxidation (PAO) inhibiting substances in anaerobic digestion residues. <i>Applied Soil Ecology</i> , 2004, 26, 107-112.	2.1	19
71	Working draft genome sequence of the mesophilic acetate oxidizing bacterium <i>Syntrophaceticus schinkii</i> strain Sp3. <i>Standards in Genomic Sciences</i> , 2015, 10, 99.	1.5	19
72	First Genome Sequence of a Syntrophic Acetate-Oxidizing Bacterium, <i>Tepidanaerobacter acetatoxydans</i> Strain Re1. <i>Genome Announcements</i> , 2013, 1, .	0.8	18

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73	Fate of Ah-receptor agonists in organic household waste during anaerobic degradation—estimation of levels using EROD induction in organ cultures of chick embryo livers. <i>Science of the Total Environment</i> , 2002, 297, 105-108.	3.9	17
74	Process performance and population dynamics of ammonium tolerant microorganisms during co-digestion of fish waste and manure. <i>Renewable Energy</i> , 2018, 125, 529-536.	4.3	17
75	Anaerobic Digestion of Animal Manure and Influence of Organic Loading Rate and Temperature on Process Performance, Microbiology, and Methane Emission From Digestates. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	17
76	Draft Genome Sequence of <i>Clostridium ultunense</i> Strain Esp, a Syntrophic Acetate-Oxidizing Bacterium. <i>Genome Announcements</i> , 2013, 1, e0010713.	0.8	16
77	Enzyme activities in and energetics of acetate metabolism by the mesophilic syntrophically acetate-oxidizing anaerobe <i>Clostridium ultunense</i> . <i>FEMS Microbiology Letters</i> , 2006, 154, 331-336.	0.7	15
78	Forage types and origin of manure in codigestion affect methane yield and microbial community structure. <i>Grass and Forage Science</i> , 2018, 73, 740-757.	1.2	15
79	QTL Mapping of Wood FT-IR Chemotypes Shows Promise for Improving Biofuel Potential in Short Rotation Coppice Willow (<i>Salix</i> spp.). <i>Bioenergy Research</i> , 2018, 11, 351-363.	2.2	15
80	Isolation of antibiotic-resistant bacteria in biogas digestate and their susceptibility to antibiotics. <i>Environmental Pollution</i> , 2020, 266, 115265.	3.7	14
81	Diversity and Abundance of Microbial Communities in UASB Reactors during Methane Production from Hydrolyzed Wheat Straw and Lucerne. <i>Microorganisms</i> , 2020, 8, 1394.	1.6	14
82	Microbial Community Ability to Adapt to Altered Temperature Conditions Influences Operating Stability in Anaerobic Digestion. <i>Energy Procedia</i> , 2017, 105, 895-900.	1.8	13
83	Profiling temporal dynamics of acetogenic communities in anaerobic digesters using next-generation sequencing and T-RFLP. <i>Scientific Reports</i> , 2021, 11, 13298.	1.6	12
84	Fractionation and Determination of Ah Receptor (AhR) Agonists in Organic Waste After Anaerobic Biodegradation and in Batch Experiments with PCB and decaBDE (8 pp). <i>Environmental Science and Pollution Research</i> , 2007, 14, 36-43.	2.7	11
85	Complete Genome Sequence of the Methanogen <i>Methanoculleus bourgensis</i> BA1 Isolated from a Biogas Reactor. <i>Genome Announcements</i> , 2016, 4, .	0.8	11
86	Dynamics of a Perturbed Microbial Community during Thermophilic Anaerobic Digestion of Chemically Defined Soluble Organic Compounds. <i>Microorganisms</i> , 2018, 6, 105.	1.6	11
87	Biomass Recalcitrance in Willow Under Two Biological Conversion Paradigms: Enzymatic Hydrolysis and Anaerobic Digestion. <i>Bioenergy Research</i> , 2020, 13, 260-270.	2.2	10
88	High-Throughput Sequencing and Unsupervised Analysis of Formyltetrahydrofolate Synthetase (FTHFS) Gene Amplicons to Estimate Acetogenic Community Structure. <i>Frontiers in Microbiology</i> , 2020, 11, 2066.	1.5	10
89	Effluent solids recirculation to municipal sludge digesters enhances long-chain fatty acids degradation capacity. <i>Biotechnology for Biofuels</i> , 2021, 14, 56.	6.2	10
90	Identifying targets for increased biogas production through chemical and organic matter characterization of digestate from full-scale biogas plants: what remains and why?. , 2022, 15, 16.		10

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91	Microbiological Surveillance of Biogas Plants: Targeting Acetogenic Community. <i>Frontiers in Microbiology</i> , 2021, 12, 700256.	1.5	8
92	Microbial community development during syngas methanation in a trickle bed reactor with various nutrient sources. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 5317-5333.	1.7	7
93	Crystal ball “ 2013. <i>Microbial Biotechnology</i> , 2013, 6, 3-16.	2.0	6
94	Mesophilic syntrophic acetate oxidation during methane formation by a triculture at high ammonium concentration. <i>Archives of Microbiology</i> , 1994, 162, 70-74.	1.0	6
95	<i>Miniphocaeibacter halophilus</i> sp. nov., an ammonium-tolerant acetate-producing bacterium isolated from a biogas system. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2022, 72, .	0.8	6
96	Monitoring growth of the methanogenic archaea <i>Methanobacterium formicicum</i> using an electronic nose. <i>Biotechnology Letters</i> , 2001, 23, 241-248.	1.1	5
97	Response of Induced Perturbation on Replicating $\hat{1}^2$ -Proteobacterial Ammonia-Oxidizing Populations in Soil. <i>Microbial Ecology</i> , 2012, 63, 701-709.	1.4	4
98	Uncovering antimicrobial resistance in three agricultural biogas plants using plant-based substrates. <i>Science of the Total Environment</i> , 2022, 829, 154556.	3.9	4
99	AcetoBase Version 2: a database update and re-analysis of formyltetrahydrofolate synthetase amplicon sequencing data from anaerobic digesters. <i>Database: the Journal of Biological Databases and Curation</i> , 2022, 2022, .	1.4	3
100	Draft Genome Sequence of the Cellulolytic Strain <i>Clostridium</i> sp. Bc-iso-3 Isolated from an Industrial-Scale Anaerobic Digester. <i>Genome Announcements</i> , 2016, 4, .	0.8	2
101	A Study in Blue: Secondary Copper-Rich Minerals and Their Associated Bacterial Diversity in Icelandic Lava Tubes. <i>Earth and Space Science</i> , 2022, 9, .	1.1	2
102	Co-Digestion of Salix and Manure for Biogas: Importance of Clone Choice, Coppicing Frequency and Reactor Setup. <i>Energies</i> , 2020, 13, 3804.	1.6	1
103	Ion Torrent sequencing and pipeline assembly of the first genome sequence of a mesophilic syntrophic acetate oxidizing bacterium (SAOB). <i>EMBnet Journal</i> , 2013, 19, 60.	0.2	1