

Hisashi Satoh

List of Publications by Year in descending order

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Version: 2024-02-01

88
papers

5,575
citations

81900

39
h-index

79698

73
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88
all docs

88
docs citations

88
times ranked

4328
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of the simple analytical method for determination of arsenate(V) ion using fluorescence-labeled DNA and cerium oxide nanoparticles. <i>Water Science and Technology: Water Supply</i> , 2022, 22, 5524-5534.	2.1	2
2	Screening Antibiotic-Resistant <i>Escherichia coli</i> in Wastewater and River Water Using a Novel Simple Phenotypic Antibiotic-Susceptibility Testing Method. <i>ACS ES&T Water</i> , 2022, 2, 1301-1308.	4.6	2
3	Simple assay for colorimetric quantification of unamplified bacterial 16S rRNA in activated sludge using gold nanoprobe. <i>Chemosphere</i> , 2021, 263, 128331.	8.2	5
4	Bubble drag in electrolytically generated microbubble swarms with bubble-vortex interactions. <i>International Journal of Multiphase Flow</i> , 2021, 136, 103541.	3.4	4
5	Deep learning-based morphology classification of activated sludge flocs in wastewater treatment plants. <i>Environmental Science: Water Research and Technology</i> , 2021, 7, 298-305.	2.4	8
6	Simple enumeration of <i>Escherichia coli</i> concentrations in river water samples by measuring β -D-glucuronidase activities in a microplate reader. <i>Water Science and Technology</i> , 2021, 83, 1399-1406.	2.5	3
7	Redox stratification within cryoconite granules influences the nitrogen cycle on glaciers. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	2.7	19
8	Synthesis of a Fluorescent Solvatochromic Resin Using Suzuki-Miyaura Cross-Coupling and Its Optical Waveguide Spectra to Measure the Solvent Polarity on the Surface. <i>Materials</i> , 2020, 13, 4483.	2.9	3
9	Simple and reliable enumeration of <i>Escherichia coli</i> concentrations in wastewater samples by measuring β -D-glucuronidase (GUS) activities via a microplate reader. <i>Science of the Total Environment</i> , 2020, 715, 136928.	8.0	15
10	Cell Density-dependent Anammox Activity of <i>Candidatus Brocadia sinica</i> Regulated by N-acetyl Homoserine Lactone-mediated Quorum Sensing. <i>Microbes and Environments</i> , 2020, 35, n/a.	1.6	7
11	Development of a Paper-based Analytical Chip for the Detection of Bacterial 16S rRNA in Wastewater Samples. <i>Bunseki Kagaku</i> , 2020, 69, 715-722.	0.2	0
12	Development of a simple analytical method to determine arsenite using a DNA aptamer and gold nanoparticles. <i>Chemosphere</i> , 2019, 224, 538-543.	8.2	26
13	Digestion performance and contributions of organic and inorganic fouling in an anaerobic membrane bioreactor treating waste activated sludge. <i>Bioresource Technology</i> , 2019, 272, 63-69.	9.6	26
14	Experimental Evidence for in Situ Nitric Oxide Production in Anaerobic Ammonia-Oxidizing Bacterial Granules. <i>Environmental Science & Technology</i> , 2018, 52, 5744-5752.	10.0	19
15	3-[Bis(pyridin-2-ylmethyl)amino]-5-(4-carboxyphenyl)-BODIPY as Ratiometric Fluorescent Sensor for Cu ²⁺ . <i>Materials</i> , 2018, 11, 814.	2.9	4
16	High spatial resolution analysis of the distribution of sulfate reduction and sulfide oxidation in hypoxic sediment in a eutrophic estuary. <i>Water Science and Technology</i> , 2017, 75, 418-426.	2.5	2
17	Genetic diversity of marine anaerobic ammonium-oxidizing bacteria as revealed by genomic and proteomic analyses of <i>Candidatus Scalindua japonica</i> . <i>Environmental Microbiology Reports</i> , 2017, 9, 550-561.	2.4	29
18	Development of novel polysulfone membranes with embedded zirconium sulfate-surfactant micelle mesostructure for phosphate recovery from water through membrane filtration. <i>Water Research</i> , 2017, 124, 521-526.	11.3	33

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19	Enhancement of organic matter degradation and methane gas production of anaerobic granular sludge by degasification of dissolved hydrogen gas. <i>Bioresource Technology</i> , 2017, 244, 768-775.	9.6	10
20	Improvement of a Phosphate Ion-selective Microsensor Using Bis(dibromophenylstannyl)methane as a Carrier. <i>Analytical Sciences</i> , 2017, 33, 825-830.	1.6	16
21	Determination of Cadmium in Brown Rice Samples by Fluorescence Spectroscopy Using a Fluoroionophore after Purification of Cadmium by Anion Exchange Resin. <i>Sensors</i> , 2017, 17, 2291.	3.8	16
22	Ecology and physiology of anaerobic ammonium oxidizing bacteria. <i>Environmental Microbiology</i> , 2016, 18, 2784-2796.	3.8	316
23	Performance of anaerobic membrane bioreactor during digestion and thickening of aerobic membrane bioreactor excess sludge. <i>Bioresource Technology</i> , 2016, 218, 476-479.	9.6	17
24	Hydroxylamine-dependent anaerobic ammonium oxidation (anammox) by <i>Candidatus Brocadia sinica</i> . <i>Environmental Microbiology</i> , 2016, 18, 3133-3143.	3.8	112
25	Effects of organic matter in livestock manure digester liquid on microbial community structure and in situ activity of anammox granules. <i>Chemosphere</i> , 2016, 159, 300-307.	8.2	29
26	Source identification of nitrous oxide emission pathways from a single-stage nitritation-anammox granular reactor. <i>Water Research</i> , 2016, 102, 147-157.	11.3	106
27	Interactions of dissolved humic substances with oppositely charged fluorescent dyes for tracer techniques. <i>Water Research</i> , 2015, 85, 193-198.	11.3	7
28	Substituent Effects at the 5-Position of 3-[Bis(pyridine-2-ylmethyl)amino]-BODIPY Cation Sensor Used for Ratiometric Quantification of Cu ²⁺ . <i>Bulletin of the Chemical Society of Japan</i> , 2015, 88, 447-454.	3.2	11
29	Rapid and successful start-up of anammox process by immobilizing the minimal quantity of biomass in PVA-SA gel beads. <i>Water Research</i> , 2015, 79, 147-157.	11.3	152
30	Draft Genome Sequence of an Anaerobic Ammonium-Oxidizing Bacterium, <i>Candidatus Brocadia sinica</i> . <i>Genome Announcements</i> , 2015, 3, .	0.8	87
31	Effects of dissolved oxygen and pH on nitrous oxide production rates in autotrophic partial nitrification granules. <i>Bioresource Technology</i> , 2015, 197, 15-22.	9.6	72
32	Physiological characterization of anaerobic ammonium oxidizing bacterium <i>Candidatus Jettenia caeni</i> TM . <i>Environmental Microbiology</i> , 2015, 17, 2172-2189.	17.8	203
33	Control of algal production in a high rate algal pond: investigation through batch and continuous experiments. <i>Water Science and Technology</i> , 2014, 69, 2519-2525.	2.5	2
34	Identification of key nitrous oxide production pathways in aerobic partial nitrifying granules. <i>Environmental Microbiology</i> , 2014, 16, 3168-3180.	3.8	49
35	Application of fluorescence spectroscopy using a novel fluoroionophore for quantification of zinc in urban runoff. <i>Water Research</i> , 2014, 54, 12-20.	11.3	8
36	Explicit temperature-based model for anaerobic digestion: Application in domestic wastewater treatment in a UASB reactor. <i>Bioresource Technology</i> , 2013, 133, 437-442.	9.6	20

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37	Source identification of nitrous oxide on autotrophic partial nitrification in a granular sludge reactor. <i>Water Research</i> , 2013, 47, 7078-7086.	11.3	62
38	Development and characterization of the partial nitrification aerobic granules in a sequencing batch airlift reactor. <i>Bioresource Technology</i> , 2013, 139, 285-291.	9.6	39
39	High efficiency removal of phosphate from water by zirconium sulfate-surfactant micelle mesostructure immobilized on polymer matrix. <i>Water Research</i> , 2013, 47, 3583-3590.	11.3	49
40	Introduction of a Degassing Membrane Technology into Anaerobic Wastewater Treatment. <i>Water Environment Research</i> , 2013, 85, 387-390.	2.7	9
41	Nitrate-Dependent Ferrous Iron Oxidation by Anaerobic Ammonium Oxidation (Anammox) Bacteria. <i>Applied and Environmental Microbiology</i> , 2013, 79, 4087-4093.	3.1	160
42	BODIPY-Based Ratiometric Fluoroionophores with Bidirectional Spectral Shifts for the Selective Recognition of Heavy Metal Ions. <i>Bulletin of the Chemical Society of Japan</i> , 2013, 86, 37-44.	3.2	11
43	Determination of Zn ²⁺ in industrial wastewater by fluorescence spectroscopy with fluoroionophore. <i>Journal of Japan Society of Civil Engineers Ser G (Environmental Research)</i> , 2013, 69, III_275-III_280.	0.1	0
44	Spatial and Temporal Oxygen Dynamics in Macrofaunal Burrows in Sediments: A Review of Analytical Tools and Observational Evidence. <i>Microbes and Environments</i> , 2013, 28, 166-179.	1.6	19
45	Cultivation of Planktonic Anaerobic Ammonium Oxidation (Anammox) Bacteria Using Membrane Bioreactor. <i>Microbes and Environments</i> , 2013, 28, 436-443.	1.6	59
46	Characterization of microbial community structures and their activities in single anaerobic granules by beta imaging, microsensors and fluorescence in situ hybridization. <i>Water Science and Technology</i> , 2012, 65, 2125-2131.	2.5	7
47	Community Structure and In Situ Activity of Nitrifying Bacteria in <i>Phragmites</i> Root-Associated Biofilms. <i>Microbes and Environments</i> , 2012, 27, 242-249.	1.6	21
48	Anaerobic treatment of municipal wastewater at ambient temperature: Analysis of archaeal community structure and recovery of dissolved methane. <i>Water Research</i> , 2012, 46, 5756-5764.	11.3	121
49	N ₂ O emission from a partial nitrification "anammox process and identification of a key biological process of N ₂ O emission from anammox granules. <i>Water Research</i> , 2011, 45, 6461-6470.	11.3	179
50	A Polyphasic Approach to Study Ecophysiology of Complex Multispecies Nitrifying Biofilms. <i>Methods in Enzymology</i> , 2011, 496, 163-184.	1.0	8
51	Removal of residual dissolved methane gas in an upflow anaerobic sludge blanket reactor treating low-strength wastewater at low temperature with degassing membrane. <i>Water Research</i> , 2011, 45, 3533-3540.	11.3	148
52	Effect of feeding regimens on polyhydroxybutyrate production from food wastes by <i>Cupriavidus necator</i> . <i>Bioresource Technology</i> , 2011, 102, 3551-3553.	9.6	64
53	Development of long-term stable partial nitrification and subsequent anammox process. <i>Bioresource Technology</i> , 2011, 102, 6801-6807.	9.6	73
54	Physiological characteristics of the anaerobic ammonium-oxidizing bacterium "Candidatus <i>Brocadia sinica</i> " TM . <i>Microbiology (United Kingdom)</i> , 2011, 157, 1706-1713.	1.8	264

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55	Nitrogen removal performance and microbial community analysis of an anaerobic up-flow granular bed anammox reactor. <i>Chemosphere</i> , 2010, 78, 1129-1135.	8.2	153
56	Microbial community structures and in situ sulfate-reducing and sulfur-oxidizing activities in biofilms developed on mortar specimens in a corroded sewer system. <i>Water Research</i> , 2009, 43, 4729-4739.	11.3	124
57	Succession of Sulfur-Oxidizing Bacteria in the Microbial Community on Corroding Concrete in Sewer Systems. <i>Applied and Environmental Microbiology</i> , 2007, 73, 971-980.	3.1	277
58	In Situ Activity and Spatial Organization of Anaerobic Ammonium-Oxidizing (Anammox) Bacteria in Biofilms. <i>Applied and Environmental Microbiology</i> , 2007, 73, 4931-4939.	3.1	144
59	Layered Structure of Bacterial and Archaeal Communities and Their In Situ Activities in Anaerobic Granules. <i>Applied and Environmental Microbiology</i> , 2007, 73, 7300-7307.	3.1	105
60	Influences of Infaunal Burrows on the Community Structure and Activity of Ammonia-Oxidizing Bacteria in Intertidal Sediments. <i>Applied and Environmental Microbiology</i> , 2007, 73, 1341-1348.	3.1	56
61	Development of high-rate anaerobic ammonium-oxidizing (anammox) biofilm reactors. <i>Water Research</i> , 2007, 41, 1623-1634.	11.3	339
62	Response of NIPAAm-Ch gel to temperature changes and its effectiveness on nitrification as medium for immobilization. <i>Journal of Applied Polymer Science</i> , 2007, 103, 681-686.	2.6	3
63	Community Structure, Abundance, and in Situ Activity of Nitrifying Bacteria in River Sediments as Determined by the Combined Use of Molecular Techniques and Microelectrodes. <i>Environmental Science & Technology</i> , 2006, 40, 1532-1539.	10.0	33
64	Community structures and activities of nitrifying and denitrifying bacteria in industrial wastewater-treating biofilms. <i>Biotechnology and Bioengineering</i> , 2006, 94, 762-772.	3.3	49
65	Population dynamics and in situ kinetics of nitrifying bacteria in autotrophic nitrifying biofilms as determined by real-time quantitative PCR. <i>Biotechnology and Bioengineering</i> , 2006, 94, 1111-1121.	3.3	76
66	Use of microelectrodes to investigate the effects of 2-chlorophenol on microbial activities in biofilms. <i>Biotechnology and Bioengineering</i> , 2005, 91, 133-138.	3.3	24
67	Succession of Internal Sulfur Cycles and Sulfur-Oxidizing Bacterial Communities in Microaerophilic Wastewater Biofilms. <i>Applied and Environmental Microbiology</i> , 2005, 71, 2520-2529.	3.1	71
68	Effects of hydroxylamine on microbial community structure and function of autotrophic nitrifying biofilms determined by in situ hybridization and the use of microelectrodes. <i>Water Science and Technology</i> , 2004, 49, 61-68.	2.5	75
69	ANALYSIS OF MICROBIAL COMMUNITY STRUCTURE AND IN SITU ACTIVITY OF NITRIFYING BIOFILMS. <i>Journal of Water and Environment Technology</i> , 2004, 2, 65-74.	0.7	2
70	Analysis of size distribution and areal cell density of ammonia-oxidizing bacterial microcolonies in relation to substrate microprofiles in biofilms. <i>Biotechnology and Bioengineering</i> , 2004, 85, 86-95.	3.3	62
71	Macroscale and microscale analyses of nitrification and denitrification in biofilms attached on membrane aerated biofilm reactors. <i>Water Research</i> , 2004, 38, 1633-1641.	11.3	123
72	Photosynthesis in sediments determined at high spatial resolution by the use of microelectrodes. <i>Water Research</i> , 2004, 38, 2440-2448.	11.3	20

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73	Sulfate-reducing bacterial community structure and their contribution to carbon mineralization in a wastewater biofilm growing under microaerophilic conditions. <i>Applied Microbiology and Biotechnology</i> , 2003, 63, 322-334.	3.6	50
74	Effect of oxygen concentration on nitrification and denitrification in single activated sludge flocs. <i>Biotechnology and Bioengineering</i> , 2003, 83, 604-607.	3.3	92
75	Evaluation of the impact of bioaugmentation and biostimulation by in situ hybridization and microelectrode. <i>Water Research</i> , 2003, 37, 2206-2216.	11.3	58
76	Effect of nitrite and nitrate on biogenic sulfide production in sewer biofilms determined by the use of microelectrodes. <i>Water Science and Technology</i> , 2003, 47, 281-288.	2.5	32
77	Successional Development of Sulfate-Reducing Bacterial Populations and Their Activities in a Wastewater Biofilm Growing under Microaerophilic Conditions. <i>Applied and Environmental Microbiology</i> , 2002, 68, 1392-1402.	3.1	98
78	Structure and function of nitrifying biofilms as determined by molecular techniques and the use of microelectrodes. <i>Water Science and Technology</i> , 2002, 46, 233-241.	2.5	45
79	[14] Analysis of microbial structure and function of nitrifying biofilms. <i>Methods in Enzymology</i> , 2001, 337, 213-233.	1.0	6
80	Kinetic analysis of nitrifying biofilm growing on the rotating membrane disk. <i>Water Science and Technology: Water Supply</i> , 2001, 1, 111-118.	2.1	0
81	Significance of substrate C/N ratio on structure and activity of nitrifying biofilms determined by in situ hybridization and the use of microelectrodes. <i>Water Science and Technology</i> , 2000, 41, 317-321.	2.5	74
82	Microbial ecology of sulfatereducing bacteria in wastewater biofilms analyzed by microelectrodes and fish (fluorescent hybridization) technique. <i>Water Science and Technology</i> , 1999, 39, 41.	2.5	7
83	Significance of Substrate C/N Ratio on Structure and Activity of Nitrifying Biofilms Determined by <i>In situ</i> Hybridization and the Use of Microelectrodes. <i>Journal of Japan Society on Water Environment</i> , 1999, 22, 763-769.	0.4	1
84	Analyses of Spatial Distributions of Sulfate-Reducing Bacteria and Their Activity in Aerobic Wastewater Biofilms. <i>Applied and Environmental Microbiology</i> , 1999, 65, 5107-5116.	3.1	162
85	In Situ Analysis of Nitrifying Biofilms as Determined by In Situ Hybridization and the Use of Microelectrodes. <i>Applied and Environmental Microbiology</i> , 1999, 65, 3182-3191.	3.1	440
86	Sulfate reduction and sulfide oxidation in aerobic mixed population biofilms. <i>Water Science and Technology</i> , 1998, 37, 131.	2.5	11
87	Sulfate reduction and sulfide oxidation in aerobic mixed population biofilms. <i>Water Science and Technology</i> , 1998, 37, 131-138.	2.5	23
88	Nitrification in Wastewater Treatment. , 0, , 405-433.		7