

# Kengo Kubota

## List of Publications by Year in descending order

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78  
papers

2,788  
citations

126708

33  
h-index

182168

51  
g-index

79  
all docs

79  
docs citations

79  
times ranked

2846  
citing authors

#	ARTICLE	IF	CITATIONS
1	Successful operation performance and syntrophic micro-granule in partial nitritation and anammox reactor treating low-strength ammonia wastewater. <i>Water Research</i> , 2019, 155, 288-299.	5.3	174
2	Operation performance and granule characterization of upflow anaerobic sludge blanket (UASB) reactor treating wastewater with starch as the sole carbon source. <i>Bioresource Technology</i> , 2015, 180, 264-273.	4.8	116
3	Metaproteomic Identification of Diazotrophic Methanotrophs and Their Localization in Root Tissues of Field-Grown Rice Plants. <i>Applied and Environmental Microbiology</i> , 2014, 80, 5043-5052.	1.4	101
4	Improved In Situ Hybridization Efficiency with Locked-Nucleic-Acid-Incorporated DNA Probes. <i>Applied and Environmental Microbiology</i> , 2006, 72, 5311-5317.	1.4	91
5	Effect of influent COD/SO <sub>4</sub> <sup>2-</sup> ratios on biodegradation behaviors of starch wastewater in an upflow anaerobic sludge blanket (UASB) reactor. <i>Bioresource Technology</i> , 2016, 214, 175-183.	4.8	89
6	CARD-FISH for Environmental Microorganisms: Technical Advancement and Future Applications. <i>Microbes and Environments</i> , 2013, 28, 3-12.	0.7	75
7	Comparing mesophilic and thermophilic anaerobic digestion of chicken manure: Microbial community dynamics and process resilience. <i>Waste Management</i> , 2015, 43, 114-122.	3.7	73
8	Anaerobic treatment of N, N-dimethylformamide-containing wastewater by co-culturing two sources of inoculum. <i>Water Research</i> , 2018, 139, 228-239.	5.3	73
9	A successful start-up of an anaerobic membrane bioreactor (AnMBR) coupled mainstream partial nitritation-anammox (PN/A) system: A pilot-scale study on in-situ NOB elimination, AnAOB growth kinetics, and mainstream treatment performance. <i>Water Research</i> , 2021, 207, 117783.	5.3	69
10	Characterization of start-up performance and archaeal community shifts during anaerobic self-degradation of waste-activated sludge. <i>Bioresource Technology</i> , 2009, 100, 4981-4988.	4.8	67
11	In situ DNA hybridization chain reaction (HCR): a facilitated in situ HCR system for the detection of environmental microorganisms. <i>Environmental Microbiology</i> , 2015, 17, 2532-2541.	1.8	65
12	Characterization of sulfide-oxidizing microbial mats developed inside a full-scale anaerobic digester employing biological desulfurization. <i>Applied Microbiology and Biotechnology</i> , 2012, 93, 847-857.	1.7	61
13	Effects of seed sludge on fermentative characteristics and microbial community structures in thermophilic hydrogen fermentation of starch. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 6541-6548.	3.8	60
14	Co-production of biohydrogen and biomethane from food waste and paper waste via recirculated two-phase anaerobic digestion process: Bioenergy yields and metabolic distribution. <i>Bioresource Technology</i> , 2019, 276, 325-334.	4.8	60
15	Characterization of microbial community and main functional groups of prokaryotes in thermophilic anaerobic co-digestion of food waste and paper waste. <i>Science of the Total Environment</i> , 2019, 652, 709-717.	3.9	60
16	Simultaneous nitrogen removal and phosphorus recovery using an anammox expanded reactor operated at 25°C. <i>Water Research</i> , 2020, 172, 115510.	5.3	60
17	Comparison of hyper-thermophilic mesophilic two-stage with single-stage mesophilic anaerobic digestion of waste activated sludge: Process performance and microbial community analysis. <i>Chemical Engineering Journal</i> , 2016, 290, 290-301.	6.6	59
18	Long-term operation performance and variation of substrate tolerance ability in an anammox attached film expanded bed (AAFEB) reactor. <i>Bioresource Technology</i> , 2016, 211, 31-40.	4.8	57

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19	Characterization of the retained sludge in a down-flow hanging sponge (DHS) reactor with emphasis on its low excess sludge production. <i>Bioresource Technology</i> , 2013, 136, 169-175.	4.8	56
20	Microbial community composition of a down-flow hanging sponge (DHS) reactor combined with an up-flow anaerobic sludge blanket (UASB) reactor for the treatment of municipal sewage. <i>Bioresource Technology</i> , 2014, 151, 144-150.	4.8	56
21	Molecular Diversity of Eukaryotes in Municipal Wastewater Treatment Processes as Revealed by 18S rRNA Gene Analysis. <i>Microbes and Environments</i> , 2014, 29, 401-407.	0.7	53
22	Sulfidogenesis process to strengthen re-granulation for biodegradation of methanolic wastewater and microorganisms evolution in an UASB reactor. <i>Water Research</i> , 2017, 108, 137-150.	5.3	53
23	Achieving superior nitrogen removal performance in low-strength ammonium wastewater treatment by cultivating concentrated, highly dispersive, and easily settleable granule sludge in a one-stage partial nitrification/anammox-HAP reactor. <i>Water Research</i> , 2021, 200, 117217.	5.3	53
24	Biocatalysis conversion of methanol to methane in an upflow anaerobic sludge blanket (UASB) reactor: Long-term performance and inherent deficiencies. <i>Bioresource Technology</i> , 2015, 198, 691-700.	4.8	52
25	Effect of ammonia inhibition on microbial community dynamic and process functional resilience in mesophilic methane fermentation of chicken manure. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 2161-2169.	1.6	50
26	Response of morphology and microbial community structure of granules to influent COD/SO <sub>4</sub> <sup>2-</sup> ratios in an upflow anaerobic sludge blanket (UASB) reactor treating starch wastewater. <i>Bioresource Technology</i> , 2018, 256, 456-465.	4.8	48
27	Hythane (H <sub>2</sub> +CH <sub>4</sub> ) production from petrochemical wastewater containing mono-ethylene glycol via stepped anaerobic baffled reactor. <i>International Biodeterioration and Biodegradation</i> , 2015, 105, 252-261.	1.9	43
28	Development of a new non-aeration-based sewage treatment technology: Performance evaluation of a full-scale down-flow hanging sponge reactor employing third-generation sponge carriers. <i>Water Research</i> , 2016, 102, 138-146.	5.3	43
29	Phase separation and microbial distribution in the hyperthermophilic-mesophilic-type temperature-phased anaerobic digestion (TPAD) of waste activated sludge (WAS). <i>Bioresource Technology</i> , 2017, 245, 401-410.	4.8	43
30	Evaluation of enzymatic cell treatments for application of CARD-FISH to methanogens. <i>Journal of Microbiological Methods</i> , 2008, 72, 54-59.	0.7	41
31	Visualization of mcr mRNA in a methanogen by fluorescence in situ hybridization with an oligonucleotide probe and two-pass tyramide signal amplification (two-pass TSA-FISH). <i>Journal of Microbiological Methods</i> , 2006, 66, 521-528.	0.7	39
32	Important effects of temperature on treating real municipal wastewater by a submerged anaerobic membrane bioreactor: Removal efficiency, biogas, and microbial community. <i>Bioresource Technology</i> , 2021, 336, 125306.	4.8	38
33	Using Partial Nitrification and Anammox To Remove Nitrogen from Low-Strength Wastewater by Co-immobilizing Biofilm inside a Moving Bed Bioreactor. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 1353-1361.	3.2	35
34	Metagenomic characterization of <i>Candidatus</i> <i>Fluviicoccus tetraformis</i> strain TFO71 <sup>TM</sup> , a tetrad-forming organism, predominant in an anaerobic-aerobic membrane bioreactor with deteriorated biological phosphorus removal. <i>Environmental Microbiology</i> , 2014, 16, 2739-2751.	1.8	34
35	Removal of human pathogenic viruses in a down-flow hanging sponge (DHS) reactor treating municipal wastewater and health risks associated with utilization of the effluent for agricultural irrigation. <i>Water Research</i> , 2017, 110, 389-398.	5.3	34
36	Characterization of downflow hanging sponge reactors with regard to structure, process function, and microbial community compositions. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 10345-10352.	1.7	34

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37	Application of two anaerobic membrane bioreactors with different pore size membranes for municipal wastewater treatment. <i>Science of the Total Environment</i> , 2020, 745, 140903.	3.9	33
38	Phylogenetic diversity and in situ detection of eukaryotes in anaerobic sludge digesters. <i>PLoS ONE</i> , 2017, 12, e0172888.	1.1	33
39	Novel Online Monitoring and Alert System for Anaerobic Digestion Reactors. <i>Environmental Science &amp; Technology</i> , 2011, 45, 9093-9100.	4.6	31
40	Temperature-phased anaerobic co-digestion of food waste and paper waste with and without recirculation: Biogas production and microbial structure. <i>Science of the Total Environment</i> , 2020, 724, 138168.	3.9	31
41	Microfluidic PCR Amplification and MiSeq Amplicon Sequencing Techniques for High-Throughput Detection and Genotyping of Human Pathogenic RNA Viruses in Human Feces, Sewage, and Oysters. <i>Frontiers in Microbiology</i> , 2018, 9, 830.	1.5	29
42	Aquatic insect community structure revealed by eDNA metabarcoding derives indices for environmental assessment. <i>PeerJ</i> , 2020, 8, e9176.	0.9	29
43	Fast formation of anammox granules using a nitrification-denitrification sludge and transformation of microbial community. <i>Water Research</i> , 2022, 221, 118751.	5.3	29
44	Evaluation of functional microbial community's difference in full-scale and lab-scale anaerobic digesters feeding with different organic solid waste: Effects of substrate and operation factors. <i>Bioresource Technology</i> , 2015, 193, 110-118.	4.8	28
45	Upgrading of mesophilic anaerobic digestion of waste activated sludge by thermophilic pre-fermentation and recycle: Process performance and microbial community analysis. <i>Fuel</i> , 2016, 169, 7-14.	3.4	28
46	Microbial characteristics in anaerobic membrane bioreactor treating domestic sewage: Effects of HRT and process performance. <i>Journal of Environmental Sciences</i> , 2022, 111, 392-399.	3.2	28
47	Detection of Single Copy Genes by Two-Pass Tyramide Signal Amplification Fluorescence in situ Hybridization (Two-Pass TSA-FISH) with Single Oligonucleotide Probes. <i>Microbes and Environments</i> , 2010, 25, 15-21.	0.7	26
48	Uncovering Viable Microbiome in Anaerobic Sludge Digesters by Propidium Monoazide (PMA)-PCR. <i>Microbial Ecology</i> , 2020, 79, 925-932.	1.4	25
49	Efficient phosphorus recovery by enhanced hydroxyapatite formation in a high loading anammox expanded bed reactor at 15°C. <i>Chemical Engineering Journal</i> , 2021, 425, 130636.	6.6	24
50	Identification and Detection of Prokaryotic Symbionts in the Ciliate <i>Metopus</i> from Anaerobic Granular Sludge. <i>Microbes and Environments</i> , 2015, 30, 335-338.	0.7	23
51	Rapid and sensitive identification of marine bacteria by an improved in situ DNA hybridization chain reaction (quickHCR-FISH). <i>Systematic and Applied Microbiology</i> , 2015, 38, 400-405.	1.2	23
52	Effects of Predation by Protists on Prokaryotic Community Function, Structure, and Diversity in Anaerobic Granular Sludge. <i>Microbes and Environments</i> , 2016, 31, 279-287.	0.7	22
53	Gold-ISH: A nano-size gold particle-based phylogenetic identification compatible with NanoSIMS. <i>Systematic and Applied Microbiology</i> , 2014, 37, 261-266.	1.2	17
54	Detection of single-copy functional genes in prokaryotic cells by two-pass TSA-FISH with polynucleotide probes. <i>Journal of Microbiological Methods</i> , 2012, 88, 218-223.	0.7	16

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55	Anaerobic degradation of palm oil mill effluent (POME). <i>Water Science and Technology</i> , 2011, 64, 2001-2008.	1.2	12
56	Defining microbial community composition and seasonal variation in a sewage treatment plant in India using a down-flow hanging sponge reactor. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 4381-4392.	1.7	9
57	The impact of calcium supplementation on methane fermentation and ammonia inhibition of fish processing wastewater. <i>Bioresource Technology</i> , 2021, 337, 125471.	4.8	9
58	Health Impact of Agricultural Drainage Water for Farmers in the West Nile Delta. <i>International Journal of Environmental Research</i> , 2019, 13, 319-325.	1.1	8
59	Niche Differentiation of Phenol-Degrading Microorganisms in UASB Granular Sludge as Revealed by Fluorescence in situ Hybridization. <i>Engineering</i> , 2022, 9, 61-66.	3.2	7
60	Kinetic analysis on gaseous and aqueous product formation by mixed anaerobic hydrogen-producing cultures. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 15590-15597.	3.8	6
61	Characteristics of DO, organic matter, and ammonium profile for practical-scale DHS reactor under various organic load and temperature conditions. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 907-916.	1.2	6
62	EDTA-FISH: A Simple and Effective Approach to Reduce Non-specific Adsorption of Probes in Fluorescence in situ Hybridization (FISH) for Environmental Samples. <i>Microbes and Environments</i> , 2020, 35, n/a.	0.7	5
63	Sodium hypochlorite induced inhibition in anaerobic digestion and possible approach to maintain methane fermentation performance. <i>Bioresource Technology</i> , 2022, 352, 127096.	4.8	5
64	Application of DHS Reactor to Sewage Treatment in a Developing Country: Performance during Start-Up Period and under High Organic Load Condition. <i>Journal of Japan Society on Water Environment</i> , 2017, 40, 11-19.	0.1	4
65	Effect of treated sewage characteristics on duckweed biomass production and microbial communities. <i>Water Science and Technology</i> , 2020, 82, 292-302.	1.2	4
66	Experimental Adaptation of Murine Norovirus to Calcium Hydroxide. <i>Frontiers in Microbiology</i> , 2022, 13, 848439.	1.5	4
67	Characterization of sludge properties for sewage treatment in a practical-scale down-flow hanging sponge reactor: oxygen consumption and removal of organic matter, ammonium, and sulfur. <i>Water Science and Technology</i> , 2018, 77, 608-616.	1.2	3
68	Evaluation of microbial community succession and trophic transfer using microscopic, molecular and stable isotope ratio analysis in a sponge-based sewage treatment system. <i>Biochemical Engineering Journal</i> , 2021, 171, 108002.	1.8	3
69	Treatment performance of practical-scale down-flow hanging sponge reactor using sixth-generation hard sponge media. , 0, 91, 48-54.		3
70	Diversity of <i>Candidatus</i> Patescibacteria in Activated Sludge Revealed by a Size-Fractionation Approach. <i>Microbes and Environments</i> , 2022, 37, n/a.	0.7	3
71	Construction of a Cell Surface Engineered Yeast Aims to Selectively Recover Molybdenum, a Rare Metal. <i>Solid State Phenomena</i> , 0, 262, 421-424.	0.3	2
72	Full-scale application of a down-flow hanging sponge reactor combined with a primary sedimentation basin for domestic sewage treatment. <i>Bioprocess and Biosystems Engineering</i> , 2022, 45, 701-709.	1.7	2

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73	Visualization of Microorganisms in Bioprocesses. , 2017, , 13-26.		1
74	Protocol for In Situ Detection of Functional Genes of Microorganisms by Two-Pass TSA-FISH. Springer Protocols, 2015, , 131-144.	0.1	0
75	Sequence-Specific Capture of Oligonucleotide Probes (SCOPE): a Simple and Rapid Microbial rRNA Quantification Method Using a Molecular Weight Cutoff Membrane. Applied and Environmental Microbiology, 2021, 87, e0116721.	1.4	0
76	Time-series transition of the community structure of aquatic insects at middle domain of Natori river basin in Miyagi Prefecture as revealed by eDNA metabarcoding analysis.. Ecology and Civil Engineering, 2020, 23, 21-36.	0.1	0
77	MICROBIAL COMMUNITY STRUCTURE OF THERMOPHILIC ANAEROBIC DIGESTER SLUDGE AS REVEALED BY PMA-PCR. Journal of Japan Society of Civil Engineers Ser G (Environmental Research), 2021, 77, III_103-III_109.	0.1	0
78	Recent Progress in Cutting-edge Monitoring Tools for Microbiomes in Engineered Systems. Journal of Japan Society on Water Environment, 2022, 45, 91-105.	0.1	0