Kai-Qin Xu

List of Publications by Year
in descending order

120 papers	5,408 citations	66234 42 h-index	88477 70 g-index
123 all docs	123 docs citations	123 times ranked	5491 citing authors

#	Article	IF	Citations
1	Long-term variations in dissolved silicate, nitrogen, and phosphorus flux from the Yangtze River into the East China Sea and impacts on estuarine ecosystem. Estuarine, Coastal and Shelf Science, 2007, 71, 3-12.	0.9	360
2	A pH- and temperature-phased two-stage process for hydrogen and methane production from food waste. International Journal of Hydrogen Energy, 2008, 33, 4739-4746.	3.8	277
3	Continuous H2 and CH4 production from high-solid food waste in the two-stage thermophilic fermentation process with the recirculation of digester sludge. Bioresource Technology, 2010, 101, S42-S47.	4.8	221
4	Unraveling the catalyzing behaviors of different iron species (Fe2+ vs. Fe0) in activating persulfate-based oxidation process with implications to waste activated sludge dewaterability. Water Research, 2018, 134, 101-114.	5.3	202
5	Fermentative hydrogen production using lignocellulose biomass: An overview of pre-treatment methods, inhibitor effects and detoxification experiences. Renewable and Sustainable Energy Reviews, 2017, 77, 28-42.	8.2	176
6	Anaerobic co-digestion on improving methane production from mixed microalgae (Scenedesmus sp.,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Engineering Journal, 2016, 299, 332-341.	6.6	172
7	Nitrogen removal and N2O emission in a full-scale domestic wastewater treatment plant with intermittent aeration. Journal of Bioscience and Bioengineering, 1998, 86, 202-206.	0.9	154
8	Microbial electrolysis cell platform for simultaneous waste biorefinery and clean electrofuels generation: Current situation, challenges and future perspectives. Progress in Energy and Combustion Science, 2017, 63, 119-145.	15.8	137
9	Mesophilic anaerobic co-digestion of waste activated sludge and Egeria densa : Performance assessment and kinetic analysis. Applied Energy, 2015, 148, 78-86.	5.1	126
10	Promoted electromethanosynthesis in a two-chamber microbial electrolysis cells (MECs) containing a hybrid biocathode covered with graphite felt (GF). Chemical Engineering Journal, 2016, 284, 1146-1155.	6.6	119
11	Understanding methane bioelectrosynthesis from carbon dioxide in a two-chamber microbial electrolysis cells (MECs) containing a carbon biocathode. Bioresource Technology, 2015, 186, 141-148.	4.8	116
12	Enhancement of biofuel production via microbial augmentation: The case of dark fermentative hydrogen. Renewable and Sustainable Energy Reviews, 2016, 57, 879-891.	8.2	108
13	Comparison of single-stage and temperature-phased two-stage anaerobic digestion of oily food waste. Energy Conversion and Management, 2015, 106, 1174-1182.	4.4	107
14	Anaerobic membrane bioreactor towards biowaste biorefinery and chemical energy harvest: Recent progress, membrane fouling and future perspectives. Renewable and Sustainable Energy Reviews, 2019, 115, 109392.	8.2	103
15	Analysis of water demand and water pollutant discharge using a regional inputâ€“output table: An application to the City of Chongqing, upstream of the Three Gorges Dam in China. Ecological Economics, 2006, 58, 221-237.	2.9	98
16	The Climatic Signature of Incised River Meanders. Science, 2010, 327, 1497-1501.	6.0	98
17	Electro-conversion of carbon dioxide (CO2) to low-carbon methane by bioelectromethanogenesis process in microbial electrolysis cells: The current status and future perspective. Bioresource Technology, 2019, 279, 339-349.	4.8	88
18	Evaluation of different pretreatments on organic matter solubilization and hydrogen fermentation of mixed microalgae consortia. International Journal of Hydrogen Energy, 2016, 41, 21628-21640.	3.8	82

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19	Influence of plant species and wastewater strength on constructed wetland methane emissions and associated microbial populations. Ecological Engineering, 2008, 32, 22-29.	1.6	74
20	Hydrogen and methane potential based on the nature of food waste materials in a two-stage thermophilic fermentation process. International Journal of Hydrogen Energy, 2012, 37, 10611-10618.	3.8	72
21	Effect of sludge recirculation on characteristics of hydrogen production in a two-stage hydrogenâ€“methane fermentation process treating food wastes. International Journal of Hydrogen Energy, 2012, 37, 5602-5611.	3.8	71
22	Higher Temperatures Do Not Always Achieve Better Antibiotic Resistance Gene Removal in Anaerobic Digestion of Swine Manure. Applied and Environmental Microbiology, 2019, 85, .	1.4	69
23	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. Water Research, 2021, 207, 117783.	5.3	69
24	Measuring Water Storage Fluctuations in Lake Dongting, China, by Topex/Poseidon Satellite Altimetry. Environmental Monitoring and Assessment, 2006, 115, 23-37.	1.3	65
25	A comprehensive comparison of five different carbon-based cathode materials in CO2 electromethanogenesis: Long-term performance, cell-electrode contact behaviors and extracellular electron transfer pathways. Bioresource Technology, 2018, 266, 382-388.	4.8	64
26	Effects of ofloxacin on nitrogen removal and microbial community structure in constructed wetland. Science of the Total Environment, 2019, 656, 503-511.	3.9	64
27	Evaluation of hydrogen and methane production from municipal solid wastes with different compositions of fat, protein, cellulosic materials and the other carbohydrates. International Journal of Hydrogen Energy, 2012, 37, 15711-15718.	3.8	63
28	Improved biogas production from food waste by co-digestion with de-oiled grease trap waste. Bioresource Technology, 2016, 201, 237-244.	4.8	59
29	Flood disaster monitoring and evaluation in China. Environmental Hazards, 2002, 4, 33-43.	0.3	58
30	Effect of the Three Gorges Dam Project on flood control in the Dongting Lake area, China, in a 1998-type flood. Journal of Hydro-Environment Research, 2008, 2, 148-163.	1.0	58
31	High loading anaerobic co-digestion of food waste and grease trap waste: Determination of the limit and lipid/long chain fatty acid conversion. Chemical Engineering Journal, 2018, 338, 422-431.	6.6	57
32	Characterization of microbial community in the two-stage process for hydrogen and methane production from food waste. International Journal of Hydrogen Energy, 2010, 35, 8253-8261.	3.8	56
33	Estimating river discharge from very high-resolution satellite data: a case study in the Yangtze River, China. Hydrological Processes, 2004, 18, 1927-1939.	1.1	55
34	Effect of organic loading rate on continuous hydrogen production from food waste in submerged anaerobic membrane bioreactor. International Journal of Hydrogen Energy, 2014, 39, 16863-16871.	3.8	53
35	Cultivation of microalgal biomass using swine manure for biohydrogen production: Impact of dilution ratio and pretreatment. Bioresource Technology, 2018, 260, 16-22.	4.8	50
36	Distributions of dissolved and particulate elements in the Yangtze estuary in 1997â€“2002: Background data before the closure of the Three Gorges Dam. Estuarine, Coastal and Shelf Science, 2007, 71, 26-36.	0.9	49

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37	Effects of various dilute acid pretreatments on the biochemical hydrogen production potential of marine macroalgal biomass. International Journal of Hydrogen Energy, 2017, 42, 27600-27606.	3.8	49
38	Nitrous oxide emission from polyculture constructed wetlands: Effect of plant species. Environmental Pollution, 2008, 152, 351-360.	3.7	48
39	Extraction of raw sewage sludge containing iron phosphate for phosphorus recovery. Chemosphere, 2012, 89, 1243-1247.	4.2	47
40	Autotrophic denitrification in constructed wetlands: Achievements and challenges. Bioresource Technology, 2020, 318, 123778.	4.8	47
41	Biogeographic pattern of bacterioplanktonic community and potential function in the Yangtze River: Roles of abundant and rare taxa. Science of the Total Environment, 2020, 747, 141335.	3.9	46
42	Climate teleconnections to Yangtze river seasonal streamflow at the Three Gorges Dam, China. International Journal of Climatology, 2007, 27, 771-780.	1.5	44
43	Seasonal and annual maximum streamflow forecasting using climate information: application to the Three Gorges Dam in the Yangtze River basin, China / PrÃ©vision d'Ã©coulements saisonnier et maximum annuel Ã l'aide d'informations climatiques: application au Barrage des Trois Gorges dans le bassin du Fleuve Yangtze, Chine. Hydrological Sciences Journal, 2009, 54, 582-595.	1.2	43
44	Development of a treatment system for molasses wastewater: The effects of cation inhibition on the anaerobic degradation process. Bioresource Technology, 2013, 131, 295-302.	4.8	43
45	Combined pretreatment of electrolysis and ultra-sonication towards enhancing solubilization and methane production from mixed microalgae biomass. Bioresource Technology, 2017, 245, 196-200.	4.8	43
46	Simulated sediment flux during 1998 big-flood of the Yangtze (Changjiang) River, China. Journal of Hydrology, 2005, 313, 221-233.	2.3	42
47	Improved stability of up-flow anaerobic sludge blanket reactor treating starch wastewater by pre-acidification: Impact on microbial community and metabolic dynamics. Bioresource Technology, 2021, 326, 124781.	4.8	42
48	Recovery of biohydrogen in a single-chamber microbial electrohydrogenesis cell using liquid fraction of pressed municipal solid waste (LPW) asÂsubstrate. International Journal of Hydrogen Energy, 2016, 41, 17896-17906.	3.8	41
49	Seasonal effect on N2O formation in nitrification in constructed wetlands. Chemosphere, 2008, 73, 1071-1077.	4.2	40
50	Plume front and suspended sediment dispersal off the Yangtze (Changjiang) River mouth, China during non-flood season. Estuarine, Coastal and Shelf Science, 2007, 71, 60-67.	0.9	39
51	Biomethane recovery from Egeria densa in a microbial electrolysis cell-assisted anaerobic system: Performance and stability assessment. Chemosphere, 2016, 149, 121-129.	4.2	36
52	Structural changes of soil organic matter and the linkage to rhizosphere bacterial communities with biochar amendment in manure fertilized soils. Science of the Total Environment, 2019, 692, 333-343.	3.9	36
53	Dual-fuel production from restaurant grease trap waste: Bio-fuel oil extraction and anaerobic methane production from the post-extracted residue. Bioresource Technology, 2014, 169, 134-142.	4.8	34
54	Enzymatically-boosted ionic liquid gas separation membranes using carbonic anhydrase of biomass origin. Chemical Engineering Journal, 2016, 303, 621-626.	6.6	34

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55	Comparison of Cr(VI) removal by direct and pulse current electrocoagulation: Implications for energy consumption optimization, sludge reduction and floc magnetism. Journal of Water Process Engineering, 2020, 37, 101387.	2.6	34
56	Release of Extracellular Polymeric Substance and Disintegration of Anaerobic Granular Sludge under Reduced Sulfur Compounds-Rich Conditions. Energies, 2015, 8, 7968-7985.	1.6	33
57	Continuous micro-current stimulation to upgrade methanolic wastewater biodegradation and biomethane recovery in an upflow anaerobic sludge blanket (UASB) reactor. Chemosphere, 2017, 180, 229-238.	4.2	33
58	Characterization of Anaerobic Degradability and Kinetics of Harvested Submerged Aquatic Weeds Used for Nutrient Phytoremediation. Energies, 2015, 8, 304-318.	1.6	32
59	Acoustic Doppler current profiler surveys along the Yangtze River. Geomorphology, 2007, 85, 155-165.	1.1	31
60	Effect of temperature and organic loading rate on siphon-driven self-agitated anaerobic digestion performance for food waste treatment. Waste Management, 2018, 74, 150-157.	3.7	31
61	Flood disaster monitoring and evaluation in China. Environmental Hazards, 2002, 4, 33-43.	1.4	27
62	The role of rice husk biochar addition in anaerobic digestion for sweet sorghum under high loading condition. Biotechnology Reports (Amsterdam, Netherlands), 2020, 27, e00515.	2.1	27
63	Biogenic H2 production from mixed microalgae biomass: impact of pH control and methanogenic inhibitor (BESA) addition. Biofuel Research Journal, 2016, 3, 470-474.	7.2	27
64	Pilot-scale studies of domestic wastewater treatment by typical constructed wetlands and their greenhouse gas emissions. Frontiers of Environmental Science and Engineering in China, 2009, 3, 477-482.	0.8	25
65	Co-digestion of untreated macro and microalgal biomass for biohydrogen production: Impact of inoculum augmentation and microbial insights. International Journal of Hydrogen Energy, 2018, 43, 11484-11492.	3.8	25
66	Determination and abatement of methanogenic inhibition from oleic and palmitic acids. International Biodeterioration and Biodegradation, 2017, 123, 10-16.	1.9	25
67	Recovery strategies of inhibition for mesophilic anaerobic sludge treating the de-oiled grease trap waste. International Biodeterioration and Biodegradation, 2015, 104, 315-323.	1.9	24
68	Enhancement Strategies for Hydrogen Production from Wastewater: A Review. Current Organic Chemistry, 2016, 20, 2744-2752.	0.9	24
69	A simulation model of nitrogen transformation in reed constructed wetlands. Desalination, 2009, 235, 93-101.	4.0	23
70	Effects of Potassium, Magnesium, Zinc, and Manganese Addition on the Anaerobic Digestion of De-oiled Grease Trap Waste. Arabian Journal for Science and Engineering, 2016, 41, 2417-2427.	1.1	23
71	Estimation of river discharge from non-trapezoidal open channel using QuickBird-2 satellite imagery/Utilisation des images satellites de Quickbird-2 pour le calcul des dÃ©bits fluviaux en chenaux ouverts non-trapÃ©zoÃ¯daux. Hydrological Sciences Journal, 2004, 49, .	1.2	22
72	Simulation of the reduction of runoff and sediment load resulting from the Gain for Green Program in the Jialingjiang catchment, upper region of the Yangtze River, China. Journal of Environmental Management, 2015, 149, 126-137.	3.8	21

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73	Impact of cationic substances on biofilm formation from sieved fine particles of anaerobic granular sludge at high salinity. Bioresource Technology, 2018, 257, 69-75.	4.8	20
74	Removal of Nitrogen by Three Plant Species in Hydroponic Culture: Plant Uptake and Microbial Degradation. Water, Air, and Soil Pollution, 2016, 227, 1.	1.1	18
75	Characterization of the microbial community in the anaerobic/oxic/anoxic process combined with sludge ozonation and phosphorus adsorption. Journal of Water and Environment Technology, 2009, 7, 155-162.	0.3	17
76	Influence of hydraulic loading rate on antibiotics removal and antibiotic resistance expression in soil layer of constructed wetlands. Chemosphere, 2021, 265, 129100.	4.2	17
77	Biofilm formation enhancement in anaerobic treatment of high salinity wastewater: Effect of biochar/Fe addition. Journal of Environmental Chemical Engineering, 2021, 9, 105603.	3.3	17
78	Variable oil properties and biomethane production of grease trap waste derived from different resources. International Biodeterioration and Biodegradation, 2017, 119, 273-281.	1.9	16
79	High-rate treatment of molasses wastewater by combination of an acidification reactor and a USSB reactor. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2011, 46, 1721-1731.	0.9	15
80	Evaluation of regional bioenergy recovery by local methane fermentation thermal recycling systems. Waste Management, 2008, 28, 2259-2270.	3.7	14
81	Nitrogen cascade in the agriculture-food-environment system of the Yangtze Delta, 1998â€“2018. Science of the Total Environment, 2021, 787, 147442.	3.9	14
82	Effect of Mixing Driven by Siphon Flow: Parallel Experiments Using the Anaerobic Reactors with Different Mixing Modes. Energies, 2013, 6, 4207-4222.	1.6	13
83	Effects of lipid concentration on thermophilic anaerobic co-digestion of food waste and grease waste in a siphon-driven self-agitated anaerobic reactor. Biotechnology Reports (Amsterdam,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.1	13
84	Nutrient augmentation enhances biogas production from sorghum mono-digestion. Waste Management, 2021, 119, 63-71.	3.7	13
85	A Simple Method for the Detection of Long-Chain Fatty Acids in an Anaerobic Digestate Using a Quartz Crystal Sensor. Energies, 2017, 10, 19.	1.6	12
86	Anaerobic degradation of deca-brominated diphenyl ether contaminated in products: Effect of temperature on degradation characteristics. Bioresource Technology, 2019, 283, 28-35.	4.8	11
87	Combined process of bio-contact oxidation-constructed wetland for blackwater treatment. Bioresource Technology, 2020, 316, 123891.	4.8	11
88	Fitness reduction of antibiotic resistome by an extra carbon source during swine manure composting. Environmental Pollution, 2021, 277, 116819.	3.7	11
89	Application of constructed wetlands in treating rural sewage from source separation with high-influent nitrogen load: a review. World Journal of Microbiology and Biotechnology, 2021, 37, 138.	1.7	10
90	Enhanced anaerobic digestion of tar solution from rice husk thermal gasification with hybrid upflow anaerobic sludge-biochar bed reactor. Bioresource Technology, 2022, 347, 126688.	4.8	8

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91	Semi-continuous anolyte circulation to strengthen CO2 bioelectromethanosynthesis with complex organic matters as the e-/H+ donor for simultaneous biowaste refinery. Chemical Engineering Journal, 2022, 430, 133123.	6.6	7
92	Trend analysis and modeling of nutrient concentrations in a preliminary eutrophic lake in China. Environmental Monitoring and Assessment, 2019, 191, 365.	1.3	6
93	Estimation of freshwater and material fluxes from the Yangtze River into the East China Sea by using TOPEX/Poseidon altimeter data. Hydrological Processes, 2005, 19, 3683-3698.	1.1	5
94	Anomalous current recorded at lower low water off the Changjiang River mouth, China. Geo-Marine Letters, 2004, 24, 252-258.	0.5	4
95	Harnessing of bioenergy from different mixed microalgae consortia obtained from natural ecological niches. Renewable Energy Focus, 2017, 21, 11-15.	2.2	4
96	Comparison of decabromodiphenyl ether degradation in long-term operated anaerobic bioreactors under thermophilic and mesophilic conditions and the pathways involved. Journal of Environmental Management, 2021, 294, 113009.	3.8	4
97	Dynamic Hydrology and Geomorphology of the Yangtze River. , 0, , 457-469.		3
98	Improvement of nutrient removal and phosphorus recovery in the anaerobic/oxic/anoxic process combined with sludge ozonation and phosphorus adsorption. Journal of Water and Environment Technology, 2009, 7, 135-142.	0.3	3
99	Enhanced effects of biotic interactions on predicting multispecies spatial distribution of submerged macrophytes after eutrophication. Ecology and Evolution, 2017, 7, 7719-7728.	0.8	3
100	Distribution characteristics of poly-brominated diphenyl ethers between water and dissolved organic carbon from anaerobic digestate: Effects of digestion conditions. Chemosphere, 2019, 223, 358-365.	4.2	3
101	Bioleaching and removal of radiocesium in anaerobic digestion of biomass crops: Effect of crop type on partitioning of cesium. Biotechnology Reports (Amsterdam, Netherlands), 2020, 28, e00561.	2.1	3
102	Optimisation of an original CO2-Enhanced natural treatment system for reclaiming and reusing anaerobically digested strong wastewater from animal breeding industry. Journal of Cleaner Production, 2021, 291, 125946.	4.6	3
103	Evaluation of Generation and Emission Potential of N₂O and CH₄ from Water Environment using Newly Improved Quick and Effective Sampling Method of Dissolved Gas. Japanese Journal of Water Treatment Biology, 2014, 50, 121-131.	0.2	3
104	Application of vibration milling for advanced wastewater treatment and excess sludge reduction. Water Science and Technology, 2012, 65, 142-148.	1.2	2
105	Performance evaluation and effect of biogas circulation rate of a bubble column for biological desulfurization. Water Science and Technology, 2012, 66, 1914-1922.	1.2	2
106	An integrated anaerobic system for on-site treatment of wastewater from food waste disposer. Environmental Science and Pollution Research, 2020, 27, 17587-17595.	2.7	2
107	Simple solvatochromic spectroscopic quantification of long-chain fatty acids for biological toxicity assay in biogas plants. Environmental Science and Pollution Research, 2020, 27, 17596-17606.	2.7	2
108	EFFECT OF â€œLAND TO LAKEâ€•POLICY AROUND THE DONGTING LAKE ON THE FLOOD PROTECTION IN THE MIDDLE REGION OF THE CHANGJIANG RIVER BASIN, CHINA. Proceedings of the Symposium on Global Environment, 2007, 15, 135-141.	0.0	1

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109	Analysis of Phosphorus Removal Performance in the Saving Energy Type Wastewater Treatment System with Iron Electrolytic Method. Japanese Journal of Water Treatment Biology, 2013, 49, 31-36.	0.2	1
110	Evaluation of Greenhouse Gas Emissions from a Continuous Activated Sludge Process under Power Saving Conditions. Journal of Water and Environment Technology, 2014, 12, 379-388.	0.3	1
111	The Effect of Nematoda on the Chlorination of Bacteria in Water Supply Systems.. Japanese Journal of Water Treatment Biology, 1998, 34, 253-265.	0.2	1
112	Comparative Study on Purification Characteristics of Various Submerged Macrophyte Species in Different Seasons. Japanese Journal of Water Treatment Biology, 2013, 49, 11-19.	0.2	1
113	Influence of Polyferric Sulfate Coagulant on the amoA mRNA Expression of Ammonia Oxidizer in Activated Sludge. Journal of Water and Environment Technology, 2010, 8, 413-419.	0.3	0
114	Characteristics of Chars from Woody Wastes and Their Application to Immobilization Carriers for Fermentative Hydrogen Production. Journal of Water and Environment Technology, 2011, 9, 321-332.	0.3	0
115	Corrigendum to â€œEnhancement of biofuel production via microbial augmentation: The case of dark fermentative hydrogenâ€•[Renew Sustain Energy Rev 57 (2016) 879â€“891]. Renewable and Sustainable Energy Reviews, 2016, 66, 220.	8.2	0
116	Advanced Wastewater Treatment and Power Reduction in a Multiple-Reactor Activated Sludge Process with Automatic Oxygen Supply Device System Installation. Japanese Journal of Water Treatment Biology, 2018, 54, 13-27.	0.2	0
117	Advanced Ammonia Oxidation by Adding Metabolic Mediator. Japanese Journal of Water Treatment Biology, 2005, 41, 9-15.	0.2	0
118	Characteristic Analysis of the Organic Substance and Nutrient Removal and the Green House Gas Emission in the Soil Treatment Systems with Aquatic Plants. Japanese Journal of Water Treatment Biology, 2006, 42, 185-197.	0.2	0
119	Analysis of Relationship among the Influent load, Micro biota and Purification Function in the Wastewater Treatment System Coupled with Disposer. Japanese Journal of Water Treatment Biology, 2006, 42, 169-176.	0.2	0
120	Comparative Evaluation of Wastewater Purification Performance among Ten Different Macrophytes in the Constructed Wetland. Japanese Journal of Water Treatment Biology, 2010, 46, 59-69.	0.2	0