Kai-Chee Loh

List of Publications by Year
in descending order

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112 papers	4,039 citations	101384 36 h-index	143772 57 g-index
113 all docs	113 docs citations	113 times ranked	3987 citing authors

#	Article	IF	Citations
1	Plastic-containing food waste conversion to biomethane, syngas, and biochar via anaerobic digestion and gasification: Focusing on reactor performance, microbial community analysis, and energy balance assessment. Journal of Environmental Management, 2022, 306, 114471.	3.8	14
2	Acidogenic fermentation of organic wastes for production of volatile fatty acids. , 2022, , 343-366.		4
3	Functional microbial characteristics in acidogenic fermenters of organic wastes for production of volatile fatty acids. , 2022, , 367-394.		0
4	Bioaugmentation strategies via acclimatized microbial consortia for bioenergy production. , 2022, , 179-214.		2
5	Strategies for enhanced microbial fermentation processes. , 2022, , 1-24.		1
6	Microbial succession analysis reveals the significance of restoring functional microorganisms during rescue of failed anaerobic digesters by bioaugmentation of nano-biochar-amended digestate. Bioresource Technology, 2022, 352, 127102.	4.8	9
7	Microbial biodiesel production from industrial organic wastes by oleaginous microorganisms: Current status and prospects. Journal of Hazardous Materials, 2021, 402, 123543.	6.5	45
8	Assessment and optimization of a decentralized food-waste-to-energy system with anaerobic digestion and CHP for energy utilization. Energy Conversion and Management, 2021, 228, 113654.	4.4	38
9	Review and perspectives of enhanced volatile fatty acids production from acidogenic fermentation of lignocellulosic biomass wastes. Bioresources and Bioprocessing, 2021, 8, .	2.0	32
10	Two-Stage Fermentation of Lipomyces starkeyi for Production of Microbial Lipids and Biodiesel. Microorganisms, 2021, 9, 1724.	1.6	11
11	Effects of plastics on reactor performance and microbial communities during acidogenic fermentation of food waste for production of volatile fatty acids. Bioresource Technology, 2021, 337, 125481.	4.8	21
12	Recovery of Nitrogen and Phosphorus Nutrition from Anaerobic Digestate by Natural Superabsorbent Fiber-Based Adsorbent and Reusing as an Environmentally Friendly Slow-Release Fertilizer for Horticultural Plants. Waste and Biomass Valorization, 2020, 11, 5223-5237.	1.8	9
13	Integrating gravity settler with an algal membrane photobioreactor for in situ biomass concentration and harvesting. Bioresource Technology, 2020, 315, 123822.	4.8	12
14	Highly efficient anaerobic co-digestion of food waste and horticultural waste using a three-stage thermophilic bioreactor: Performance evaluation, microbial community analysis, and energy balance assessment. Energy Conversion and Management, 2020, 223, 113290.	4.4	19
15	Biochar enhanced thermophilic anaerobic digestion of food waste: Focusing on biochar particle size, microbial community analysis and pilot-scale application. Energy Conversion and Management, 2020, 209, 112654.	4.4	125
16	Methane yield enhancement of mesophilic and thermophilic anaerobic co-digestion of algal biomass and food waste using algal biochar: Semi-continuous operation and microbial community analysis. Bioresource Technology, 2020, 302, 122892.	4.8	83
17	Mixing strategies â€“ Activated carbon nexus: Rapid start-up of thermophilic anaerobic digestion with the mesophilic anaerobic sludge as inoculum. Bioresource Technology, 2020, 310, 123401.	4.8	20
18	Acidogenic fermentation of food waste for production of volatile fatty acids: Bacterial community analysis and semi-continuous operation. Waste Management, 2020, 109, 75-84.	3.7	62

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19	Enhanced biogas production from anaerobic digestion of solid organic wastes: Current status and prospects. Bioresource Technology Reports, 2019, 5, 280-296.	1.5	107
20	Enhanced food waste anaerobic digestion: An encapsulated metal additive for shear stress-based controlled release. Journal of Cleaner Production, 2019, 235, 85-95.	4.6	23
21	Effects of activated carbon on anaerobic digestion â€“ Methanogenic metabolism, mechanisms of antibiotics and antibiotic resistance genes removal. Bioresource Technology Reports, 2019, 5, 113-120.	1.5	41
22	Synergistic effect of activated carbon and encapsulated trace element additive on methane production from anaerobic digestion of food wastes â€“ Enhanced operation stability and balanced trace nutrition. Bioresource Technology, 2019, 278, 108-115.	4.8	35
23	Mesophilic and thermophilic anaerobic digestion of soybean curd residue for methane production: Characterizing bacterial and methanogen communities and their correlations with organic loading rate and operating temperature. Bioresource Technology, 2019, 288, 121597.	4.8	56
24	Jointly reducing antibiotic resistance genes and improving methane yield in anaerobic digestion of chicken manure by feedstock microwave pretreatment and activated carbon supplementation. Chemical Engineering Journal, 2019, 372, 815-824.	6.6	49
25	Three-stage anaerobic co-digestion of food waste and waste activated sludge: Identifying bacterial and methanogenic archaeal communities and their correlations with performance parameters. Bioresource Technology, 2019, 285, 121333.	4.8	20
26	Optimizing mixing strategy to improve the performance of an anaerobic digestion waste-to-energy system for energy recovery from food waste. Applied Energy, 2019, 249, 28-36.	5.1	73
27	Co-culture of Zymomonas mobilis and Scheffersomyces stipitis immobilized in polymeric membranes for fermentation of glucose and xylose to ethanol. Biochemical Engineering Journal, 2019, 145, 145-152.	1.8	20
28	Low-retention operation to enhance biomass productivity in an algal membrane photobioreactor. Algal Research, 2019, 40, 101487.	2.4	17
29	Nutrient removal in an algal membrane photobioreactor: effects of wastewater composition and light/dark cycle. Applied Microbiology and Biotechnology, 2019, 103, 3571-3580.	1.7	20
30	Bioinformatics analysis of metagenomics data of biogas-producing microbial communities in anaerobic digesters: A review. Renewable and Sustainable Energy Reviews, 2019, 100, 110-126.	8.2	107
31	Wastewater treatment and microbial community dynamics in a sequencing batch reactor operating under photosynthetic aeration. Chemosphere, 2019, 215, 893-903.	4.2	25
32	Activated carbon enhanced anaerobic digestion of food waste â€“ Laboratory-scale and Pilot-scale operation. Waste Management, 2018, 75, 270-279.	3.7	90
33	A hybrid biological and thermal waste-to-energy system with heat energy recovery and utilization for solid organic waste treatment. Energy, 2018, 152, 214-222.	4.5	40
34	Two-stage anaerobic digestion of food waste and horticultural waste in high-solid system. Applied Energy, 2018, 209, 400-408.	5.1	101
35	Evaluating the effects of activated carbon on methane generation and the fate of antibiotic resistant genes and class I integrons during anaerobic digestion of solid organic wastes. Bioresource Technology, 2018, 249, 729-736.	4.8	51
36	Zymomonas mobilis immobilization in polymeric membranes for improved resistance to lignocellulose-derived inhibitors in bioethanol fermentation. Biochemical Engineering Journal, 2018, 140, 29-37.	1.8	22

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37	Enhancing microalgae cultivation in anaerobic digestate through nitrification. Chemical Engineering Journal, 2018, 354, 905-912.	6.6	96
38	Food waste enhanced anaerobic digestion of biologically pretreated yard waste: Analysis of cellulose crystallinity and microbial communities. Waste Management, 2018, 79, 109-119.	3.7	41
39	Effects of disposable plastics and wooden chopsticks on the anaerobic digestion of food waste. Waste Management, 2018, 79, 607-614.	3.7	26
40	Enhancement of biogas production in anaerobic co-digestion of food waste and waste activated sludge by biological co-pretreatment. Energy, 2017, 137, 479-486.	4.5	114
41	Three-stage anaerobic co-digestion of food waste and horse manure. Scientific Reports, 2017, 7, 1269.	1.6	69
42	Enhanced anaerobic digestion of food waste by adding activated carbon: Fate of bacterial pathogens and antibiotic resistance genes. Biochemical Engineering Journal, 2017, 128, 19-25.	1.8	56
43	Metagenomic insight into the microbial networks and metabolic mechanism in anaerobic digesters for food waste by incorporating activated carbon. Scientific Reports, 2017, 7, 11293.	1.6	53
44	Enhancing productivity for cascade biotransformation of styrene to (S)-vicinal diol with biphasic system in hollow fiber membrane bioreactor. Applied Microbiology and Biotechnology, 2017, 101, 1857-1868.	1.7	21
45	Importance of uniform distribution of impregnated trioctylphosphine oxide in hollow fiber membranes for simultaneous extraction/stripping of phenol. Chemical Engineering Journal, 2017, 308, 727-737.	6.6	6
46	Three-stage anaerobic digester for food waste. Applied Energy, 2017, 194, 287-295.	5.1	107
47	Solid/liquid extraction equilibria of phenolic compounds with trioctylphosphine oxide impregnated in polymeric membranes. Chemosphere, 2016, 153, 405-413.	4.2	11
48	Enhancing laboratory experience through e-lessons. Education for Chemical Engineers, 2016, 15, 19-22.	2.8	18
49	Tertiary wastewater treatment in membrane photobioreactor using microalgae: Comparison of forward osmosis & microfiltration. Bioresource Technology, 2016, 222, 448-457.	4.8	63
50	Symbiotic hollow fiber membrane photobioreactor for microalgal growth and bacterial wastewater treatment. Bioresource Technology, 2016, 219, 261-269.	4.8	21
51	Thermodynamic analysis of Cr(VI) extraction using TOPO impregnated membranes. Journal of Hazardous Materials, 2016, 314, 204-210.	6.5	10
52	Osmotic membrane bioreactor for phenol biodegradation under continuous operation. Journal of Hazardous Materials, 2016, 305, 115-122.	6.5	27
53	Nitrogen and phosphorus removal from tertiary wastewater in an osmotic membrane photobioreactor. Bioresource Technology, 2016, 206, 180-187.	4.8	63
54	Formulation of microbial cocktails for BTEX biodegradation. Biodegradation, 2015, 26, 51-63.	1.5	29

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55	Phenolic wastewater treatment through extractive recovery coupled with biodegradation in a two-phase partitioning membrane bioreactor. Chemosphere, 2015, 141, 176-182.	4.2	13
56	Photosynthetic aeration in biological wastewater treatment using immobilized microalgae-bacteria symbiosis. Applied Microbiology and Biotechnology, 2015, 99, 10345-10354.	1.7	46
57	Biodegradation of phenol from saline wastewater using forward osmotic hollow fiber membrane bioreactor coupled chemostat. Biochemical Engineering Journal, 2015, 94, 125-133.	1.8	44
58	Immobilization of growing Sphingomonas sp. HXN-200 to gelatin microspheres: Efficient biotransformation of N-Cbz-pyrrolidine and N-Boc-pyrrolidine into hydroxypyrrolidine derivatives. Journal of Biotechnology, 2014, 182-183, 74-82.	1.9	5
59	An immersed hollow fiber membrane bioreactor for enhanced biotransformation of indene to cis-indandiol using Pseudomonas putida. Biochemical Engineering Journal, 2014, 87, 1-7.	1.8	3
60	Solventless extraction/stripping of phenol using trioctylphosphine oxide impregnated hollow fiber membranes â€“ Experimental & modeling analysis. Chemical Engineering Journal, 2014, 255, 641-649.	6.6	14
61	Molecular biology-based methods for quantification of bacteria in mixed culture: perspectives and limitations. Applied Microbiology and Biotechnology, 2014, 98, 6907-6919.	1.7	17
62	Kinetics modeling of two phase biodegradation in a hollow fiber membrane bioreactor. Separation and Purification Technology, 2014, 122, 350-358.	3.9	9
63	Transcolumn dispersion in a computational mimic of an analytical silica monolith reconstructed from sub-microtomographic scans using computational fluid dynamics. Separation and Purification Technology, 2014, 122, 159-169.	3.9	1
64	Bioinformatics and molecular biology for the quantification of closely related bacteria. Applied Microbiology and Biotechnology, 2013, 97, 6489-6502.	1.7	3
65	Human pIgR mimetic peptidic ligand for affinity purification of IgM Part II: Ligand binding characteristics. Separation and Purification Technology, 2013, 102, 43-49.	3.9	3
66	Two-phase biodegradation of phenol in trioctylphosphine oxide impregnated hollow fiber membrane bioreactor. Biochemical Engineering Journal, 2013, 79, 274-282.	1.8	12
67	Hydrodynamic and dispersion behavior in a non-porous silica monolith through fluid dynamic study of a computational mimic reconstructed from sub-micro-tomographic scans. Journal of Chromatography A, 2013, 1274, 65-76.	1.8	15
68	Simultaneous extraction and biodegradation of phenol in a hollow fiber supported liquid membrane bioreactor. Journal of Membrane Science, 2013, 430, 242-251.	4.1	41
69	Trioctylphosphine oxide-impregnated hollow fiber membranes for removal of phenol from wastewater. Journal of Membrane Science, 2013, 437, 1-6.	4.1	30
70	Response to â€œComments on â€˜Hydrodynamic and dispersion behavior in a non-porous silica monolith through fluid dynamic study of a computational mimic reconstructed from sub-micro-tomographic scansâ€â€™. Journal of Chromatography A, 2013, 1302, 208-212.	1.8	2
71	Human pIgR mimetic peptidic ligand for affinity purification of IgM. Separation and Purification Technology, 2013, 102, 173-179.	3.9	7
72	Two-Phase Biodegradation of Phenol in a Hollow Fiber Membrane Bioreactor. Journal of Environmental Engineering, ASCE, 2013, 139, 654-660.	0.7	8

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73	Immobilization of hydrophobic peptidic ligands to hydrophilic chromatographic matrix: A preconcentration approach. Analytical Biochemistry, 2012, 423, 202-209.	1.1	6
74	Immunoglobulin-M purification â€" Challenges and perspectives. Biotechnology Advances, 2011, 29, 840-849.	6.0	19
75	In situ monitoring of turbid immobilized lipase-catalyzed esterification of oleic acid using fiber-optic Raman spectroscopy. Catalysis Today, 2010, 155, 223-226.	2.2	3
76	Physiological comparison of Pseudomonas putida between two growth phases during cometabolism of 4â€chlorophenol in presence of phenol and glutamate: a proteomics approach. Journal of Chemical Technology and Biotechnology, 2009, 84, 1178-1185.	1.6	7
77	Biodegradation of aromatic compounds: current status and opportunities for biomolecular approaches. Applied Microbiology and Biotechnology, 2009, 85, 207-228.	1.7	256
78	Induction of ortho- and meta-cleavage pathways in Pseudomonas in biodegradation of high benzoate concentration: MS identification of catabolic enzymes. Applied Microbiology and Biotechnology, 2008, 81, 99-107.	1.7	68
79	Ultrasoundâ€facilitated electroâ€oxidation for treating cyan ink effluent. Canadian Journal of Chemical Engineering, 2008, 86, 739-746.	0.9	6
80	Catabolic pathways and cellular responses of Pseudomonas putida P8 during growth on benzoate with a proteomics approach. Biotechnology and Bioengineering, 2008, 101, 1297-1312.	1.7	48
81	Paradigm in biodegradation using Pseudomonas putidaâ€"A review of proteomics studies. Enzyme and Microbial Technology, 2008, 43, 1-12.	1.6	50
82	Hybrid-Hollow-Fiber Membrane Bioreactor for Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol. Journal of Environmental Engineering, ASCE, 2007, 133, 404-410.	0.7	9
83	Continuous phenol biodegradation at high concentrations in an immobilized-cell hollow fiber membrane bioreactor. Journal of Applied Polymer Science, 2007, 105, 1732-1739.	1.3	16
84	Continuous Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol in a Hollow Fiber Membrane Bioreactor. Journal of Environmental Engineering, ASCE, 2006, 132, 309-314.	0.7	12
85	Enhanced Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol by Granular Activated Carbon Adsorption. Canadian Journal of Chemical Engineering, 2006, 84, 248-255.	0.9	2
86	Cometabolic Transformation of 2â€Chlorophenol and 4â€Chlorophenol in the Presence of Phenol by Pseudomonas putida. Canadian Journal of Chemical Engineering, 2006, 84, 356-367.	0.9	22
87	External-loop fluidized bed airlift bioreactor (EFBAB) for the cometabolic biotransformation of 4-chlorophenol (4-cp) in the presence of phenol. Chemical Engineering Science, 2005, 60, 6313-6319.	1.9	21
88	Cometabolic Transformation of High Concentrations of 4-Chlorophenol in an Immobilized Cell Hollow Fiber Membrane Bioreactor. Journal of Environmental Engineering, ASCE, 2005, 131, 1285-1292.	0.7	20
89	Systematic Approach for Quick Quality Assessment of Ink Effluents for Treatment and Discharge. Journal of Environmental Engineering, ASCE, 2004, 130, 417-424.	0.7	1
90	Effects of adsorption kinetics and surface heterogeneity on band spreading in perfusion chromatographyâ€"a network model analysis. Chemical Engineering Science, 2004, 59, 2447-2456.	1.9	6

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91	Hydrodynamic dispersion in perfusion chromatographyâ€"a network model analysis. Chemical Engineering Science, 2003, 58, 3439-3451.	1.9	7
92	Prediction of critical cell growth behavior of Pseudomonas putida to maximize the cometabolism of 4-chlorophenol with phenol and sodium glutamate as carbon sources. Enzyme and Microbial Technology, 2003, 32, 422-430.	1.6	29
93	Effects of Singapore soil type on bioavailability of nutrients in soil bioremediation. Journal of Environmental Management, 2003, 7, 889-900.	1.7	28
94	Biodegradation of High Strength Phenolic Wastewater in a Modified External Loop Inversed Fluidized Bed Airlift Bioreactor (EIFBAB). Canadian Journal of Chemical Engineering, 2003, 81, 1246-1250.	0.9	6
95	Inhibition of p-cresol on aerobic biodegradation of carbazole, and sodium salicylate by Pseudomonas putida. Water Research, 2002, 36, 1794-1802.	5.3	18
96	Ortho pathway of benzoate degradation in Pseudomonas putida: induction of meta pathway at high substrate concentrations. Enzyme and Microbial Technology, 2002, 30, 620-626.	1.6	58
97	Heterogeneity of Surface Energies in Reversed-Phase Perfusive Packings. Journal of Colloid and Interface Science, 2001, 239, 447-457.	5.0	10
98	External loop inversed fluidized bed airlift bioreactor (EIFBAB) for treating high strength phenolic wastewater. Chemical Engineering Science, 2001, 56, 6171-6176.	1.9	35
99	Contribution of axial dispersion to band spreading in perfusion chromatography. Journal of Chromatography A, 2001, 918, 37-46.	1.8	11
100	Biotransformation kinetics of Pseudomonas putida for cometabolism of phenol and 4-chlorophenol in the presence of sodium glutamate. Biodegradation, 2001, 12, 189-199.	1.5	46
101	Growth kinetics ofPseudomonas putida in cometabolism of phenol and 4-chlorophenol in the presence of a conventional carbon source. , 2000, 68, 437-447.		18
102	Activated carbon-filled cellulose acetate hollow-fiber membrane for cell immobilization and phenol degradation. Journal of Applied Polymer Science, 2000, 76, 695-707.	1.3	31
103	Immobilized-Cell Membrane Bioreactor for High-Strength Phenol Wastewater. Journal of Environmental Engineering, ASCE, 2000, 126, 75-79.	0.7	92
104	New cell growth pattern on mixed substrates and substrate utilization in cometabolic transformation of 4-chlorophenol. Water Research, 2000, 34, 3786-3794.	5.3	31
105	Kinetics of carbazole degradation by Pseudomonas putida in presence of sodium salicylate. Water Research, 2000, 34, 4131-4138.	5.3	38
106	Modeling the role of metabolic intermediates in kinetics of phenol biodegradation. Enzyme and Microbial Technology, 1999, 25, 177-184.	1.6	137
107	Polymeric asymmetric membranes made from polyetherimide/polybenzimidazole/poly(ethylene glycol) (PEI/PBI/PEG) for oilâ€"surfactantâ€"water separation. Journal of Membrane Science, 1999, 158, 41-53.	4.1	83
108	Facilitation of cometabolic degradation of 4-chlorophenol using glucose as an added growth substrate. Biodegradation, 1999, 10, 261-269.	1.5	71

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109	Development of cellulose acetate membranes for bacteria immobilization to remove phenol. Journal of Applied Polymer Science, 1998, 68, 1677-1688.	1.3	39
110	Development of polysulfone membranes for bacteria immobilization to remove phenol. Journal of Applied Polymer Science, 1998, 70, 2585-2594.	1.3	34
111	Enhancement of biodegradation of phenol and a nongrowth substrate 4-chlorophenol by medium augmentation with conventional carbon sources. , 1997, 8, 329-338.		96
112	Characterization of pore size distribution of packing materials used in perfusion chromatography using a network model. Journal of Chromatography A, 1995, 718, 239-255.	1.8	36