

# Hee-Deung Park

## List of Publications by Year in descending order

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114  
papers

6,859  
citations

87401

40  
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73587

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114  
all docs

114  
docs citations

114  
times ranked

8381  
citing authors

#	ARTICLE	IF	CITATIONS
1	Current understanding and perspectives in anaerobic digestion based on genome-resolved metagenomic approaches. <i>Bioresource Technology</i> , 2022, 344, 126350.	4.8	23
2	Recent Advance in Small Molecules Targeting RhIR of <i>Pseudomonas Aeruginosa</i> . <i>Antibiotics</i> , 2022, 11, 274.	1.5	7
3	Deciphering the Role of Amine Concentration on Polyamide Formation toward Enhanced RO Performance. <i>ACS ES&amp;T Engineering</i> , 2022, 2, 903-912.	3.7	23
4	Enrichment of <i>Ca. Jettenia</i> in sequencing batch reactors operated with low nitrogen loading rate and high influent nitrogen concentration. <i>Bioresource Technology</i> , 2022, 352, 127079.	4.8	5
5	Electrically conductive carbon nanotube/graphene composite membrane for self-cleaning of biofouling via bubble generation. <i>Desalination</i> , 2022, 535, 115841.	4.0	13
6	Raffinose Inhibits <i>Streptococcus mutans</i> Biofilm Formation by Targeting Glucosyltransferase. <i>Microbiology Spectrum</i> , 2022, 10, e0207621.	1.2	10
7	Enhancing biogas and electricity recovery using an iron-manganese oxide catalyzed bioanode in an integrated submersible microbial fuel cell-anaerobic digester. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 52, 102276.	1.7	3
8	Effect of broad-spectrum biofilm inhibitor raffinose, a plant galactoside, on the inhibition of co-culture biofilm on the microfiltration membrane. <i>Journal of Hazardous Materials</i> , 2021, 402, 123501.	6.5	10
9	Synergistic control of membrane biofouling using linoleic acid and sodium hypochlorite. <i>Chemosphere</i> , 2021, 268, 128802.	4.2	8
10	Linoleic acid inhibits <i>Pseudomonas aeruginosa</i> biofilm formation by activating diffusible signal factor-mediated quorum sensing. <i>Biotechnology and Bioengineering</i> , 2021, 118, 82-93.	1.7	18
11	Transient-rare Bacterial Taxa Are Assembled Neutrally across Temporal Scales. <i>Microbes and Environments</i> , 2021, 36, n/a.	0.7	5
12	Recent advances in methanogenesis through direct interspecies electron transfer via conductive materials: A molecular microbiological perspective. <i>Bioresource Technology</i> , 2021, 322, 124587.	4.8	52
13	Novel Positively Charged Metal-Coordinated Nanofiltration Membrane for Lithium Recovery. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 16906-16915.	4.0	70
14	Investigation of critical sludge characteristics for membrane fouling in a submerged membrane bioreactor: Role of soluble microbial products and extracted extracellular polymeric substances. <i>Chemosphere</i> , 2021, 271, 129879.	4.2	24
15	Unique Approach of a Telemedicine System for CBD-Infused Foods. <i>Processes</i> , 2021, 9, 936.	1.3	4
16	Effect of microbial community structure in inoculum on the stimulation of direct interspecies electron transfer for methanogenesis. <i>Bioresource Technology</i> , 2021, 332, 125100.	4.8	21
17	Interlayered Forward Osmosis Membranes with Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene and Carbon Nanotubes for Enhanced Municipal Wastewater Concentration. <i>Environmental Science &amp; Technology</i> , 2021, 55, 13219-13230.	4.6	16
18	Recent developments of the mainstream anammox processes: Challenges and opportunities. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105583.	3.3	64

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19	Microbiome degrading linear alkylbenzene sulfonate in activated sludge. <i>Journal of Hazardous Materials</i> , 2021, 418, 126365.	6.5	9
20	Development of a new method to evaluate critical flux and system reliability based on particle properties in a membrane bioreactor. <i>Chemosphere</i> , 2021, 280, 130763.	4.2	3
21	Combined Treatment of 6-Gingerol Analog and Tobramycin for Inhibiting <i>Pseudomonas aeruginosa</i> Infections. <i>Microbiology Spectrum</i> , 2021, 9, e0019221.	1.2	9
22	2-Methylisoborneol (2-MIB) Excretion by <i>Pseudanabaena yagii</i> under Low Temperature. <i>Microorganisms</i> , 2021, 9, 2486.	1.6	6
23	Specific enrichment of different <i>Geobacter</i> sp. in anode biofilm by varying interspatial distance of electrodes in air-cathode microbial fuel cell (MFC). <i>Electrochimica Acta</i> , 2020, 331, 135388.	2.6	45
24	Vertically Aligned Carbon Nanotube Membranes: Water Purification and Beyond. <i>Membranes</i> , 2020, 10, 273.	1.4	14
25	Draft Genome Sequence of Putative 2-Methylisoborneol-Producing <i>Pseudanabaena yagii</i> Strain GIHE-NHR1, Isolated from the North Han River in South Korea. <i>Microbiology Resource Announcements</i> , 2020, 9, .	0.3	3
26	A Critical Review on Thin-Film Nanocomposite Membranes with Interlayered Structure: Mechanisms, Recent Developments, and Environmental Applications. <i>Environmental Science &amp; Technology</i> , 2020, 54, 15563-15583.	4.6	308
27	Magnetite and granular activated carbon improve methanogenesis via different metabolic routes. <i>Fuel</i> , 2020, 281, 118768.	3.4	32
28	Discovery and Characterization of Pure RhlR Antagonists against <i>Pseudomonas aeruginosa</i> Infections. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 8388-8407.	2.9	12
29	Photosensitized Production of Singlet Oxygen via C60 Fullerene Covalently Attached to Functionalized Silica-coated Stainless-Steel Mesh: Remote Bacterial and Viral Inactivation. <i>Applied Catalysis B: Environmental</i> , 2020, 270, 118862.	10.8	41
30	Metabolic flux and functional potential of microbial community in an acidogenic dynamic membrane bioreactor. <i>Bioresource Technology</i> , 2020, 305, 123060.	4.8	28
31	Improved anti-biofouling performance of pressure retarded osmosis (PRO) by dosing with chlorhexidine gluconate. <i>Desalination</i> , 2020, 481, 114376.	4.0	16
32	Photocatalytic degradation of microcystin-LR and anatoxin-a with presence of natural organic matter using UV-light emitting diodes/TiO <sub>2</sub> process. <i>Journal of Water Process Engineering</i> , 2020, 34, 101163.	2.6	16
33	Oxidation of tetracycline and oxytetracycline for the photo-Fenton process: Their transformation products and toxicity assessment. <i>Water Research</i> , 2020, 172, 115514.	5.3	193
34	Draft Genome Sequence of <i>Raphidiopsis raciborskii</i> Strain GIHE 2018, Isolated from a Shallow Freshwater Pond in South Korea. <i>Microbiology Resource Announcements</i> , 2020, 9, .	0.3	2
35	Effect of inoculum concentration on methanogenesis by direct interspecies electron transfer: Performance and microbial community composition. <i>Bioresource Technology</i> , 2019, 291, 121881.	4.8	25
36	Effects of atomic layer deposition conditions on the formation of thin ZnO films and their photocatalytic characteristics. <i>Ceramics International</i> , 2019, 45, 18823-18830.	2.3	31

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37	Effect of biofilm inhibitor on biofouling resistance in RO processes. <i>Fuel</i> , 2019, 253, 823-832.	3.4	19
38	Linoleic acid, a plant fatty acid, controls membrane biofouling via inhibition of biofilm formation. <i>Fuel</i> , 2019, 253, 754-761.	3.4	20
39	Implications of Chemical Reduction Using Hydriodic Acid on the Antimicrobial Properties of Graphene Oxide and Reduced Graphene Oxide Membranes. <i>Small</i> , 2019, 15, e1901023.	5.2	56
40	Control of membrane biofouling by 6-gingerol analogs: Quorum sensing inhibition. <i>Fuel</i> , 2019, 250, 79-87.	3.4	34
41	Formation of a dynamic membrane altered the microbial community and metabolic flux in fermentative hydrogen production. <i>Bioresource Technology</i> , 2019, 282, 63-68.	4.8	36
42	Antibacterial application of covalently immobilized photosensitizers on a surface. <i>Environmental Research</i> , 2019, 172, 34-42.	3.7	16
43	Granular activated carbon supplementation alters the metabolic flux of <i>Clostridium butyricum</i> for enhanced biohydrogen production. <i>Bioresource Technology</i> , 2019, 281, 318-325.	4.8	25
44	Triclosan-immobilized polyamide thin film composite membranes with enhanced biofouling resistance. <i>Applied Surface Science</i> , 2018, 443, 458-466.	3.1	38
45	Mitigation of membrane biofouling by a quorum quenching bacterium for membrane bioreactors. <i>Bioresource Technology</i> , 2018, 258, 220-226.	4.8	39
46	Special Issue on Current Trends in Biotechnology for Waste Conversion (ETBWC-2017). <i>Bioresource Technology</i> , 2018, 259, 475.	4.8	0
47	Direct interspecies electron transfer via conductive materials: A perspective for anaerobic digestion applications. <i>Bioresource Technology</i> , 2018, 254, 300-311.	4.8	316
48	Kinetic modeling and microbial community analysis for high-rate biohydrogen production using a dynamic membrane. <i>Bioresource Technology</i> , 2018, 262, 59-64.	4.8	19
49	Metagenomic insight into methanogenic reactors promoting direct interspecies electron transfer via granular activated carbon. <i>Bioresource Technology</i> , 2018, 259, 414-422.	4.8	108
50	Ultrasonic spray pyrolysis synthesis of reduced graphene oxide/anatase TiO <sub>2</sub> composite and its application in the photocatalytic degradation of methylene blue in water. <i>Chemosphere</i> , 2018, 191, 738-746.	4.2	34
51	Effect of substrate concentration on the competition between <i>Clostridium</i> and <i>Lactobacillus</i> during biohydrogen production. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 11460-11469.	3.8	46
52	Sharkskin-mimetic desalination membranes with ultralow biofouling. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23034-23045.	5.2	78
53	Comparison of DNA Extraction Efficiency and Reproducibility of Different Aeration Diffuser Biofilms Using Bead-Beating Protocol. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2018, 28, 293-304.	1.0	2
54	Identifying the Nonradical Mechanism in the Peroxymonosulfate Activation Process: Singlet Oxygenation Versus Mediated Electron Transfer. <i>Environmental Science &amp; Technology</i> , 2018, 52, 7032-7042.	4.6	777

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55	Impact of fouling on the decline of aeration efficiency under different operational conditions at WRRFs. <i>Science of the Total Environment</i> , 2018, 639, 248-257.	3.9	13
56	Enhanced electrochemical oxidation of phenol by boron-doped diamond nanowire electrode. <i>RSC Advances</i> , 2017, 7, 6229-6235.	1.7	44
57	Biohydrogen production integrated with an external dynamic membrane: A novel approach. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27543-27549.	3.8	40
58	Antibacterial activity of the thin ZnO film formed by atomic layer deposition under UV-A light. <i>Chemical Engineering Journal</i> , 2017, 328, 988-996.	6.6	48
59	Structure-Activity Relationships of 6- and 8-Gingerol Analogs as Anti-Biofilm Agents. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 9821-9837.	2.9	45
60	Mesophilic biogenic H <sub>2</sub> production using galactose in a fixed bed reactor. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 3658-3666.	3.8	37
61	Microbial responses to various process disturbances in a continuous hydrogen reactor fed with galactose. <i>Journal of Bioscience and Bioengineering</i> , 2017, 123, 216-222.	1.1	17
62	Polyvinylidene Fluoride Alters Inflammatory Responses by Activation-induced Cell Death in Macrophages. <i>Immune Network</i> , 2017, 17, 402.	1.6	3
63	Effects of an applied voltage on direct interspecies electron transfer via conductive materials for methane production. <i>Waste Management</i> , 2017, 68, 165-172.	3.7	27
64	Expression of the <i>nirS</i> , <i>hzsA</i> and <i>hdh</i> Genes in Response to Nitrite Shock and Recovery in <i>Candidatus</i> <i>Kuenenia stuttgartiensis</i> . <i>Environmental Science &amp; Technology</i> , 2016, 50, 6940-6947.	4.6	75
65	Direct incorporation of silver nanoparticles onto thin-film composite membranes via arc plasma deposition for enhanced antibacterial and permeation performance. <i>Journal of Membrane Science</i> , 2016, 513, 226-235.	4.1	72
66	Effect of transmembrane pressure, linear velocity, and temperature on permeate water flux of high-density vertically aligned carbon nanotube membranes. <i>Desalination and Water Treatment</i> , 2016, 57, 26706-26717.	1.0	15
67	Raffinose, a plant galactoside, inhibits <i>Pseudomonas aeruginosa</i> biofilm formation via binding to LecA and decreasing cellular cyclic diguanylate levels. <i>Scientific Reports</i> , 2016, 6, 25318.	1.6	39
68	Effect of different salinity adaptation on the performance and microbial community in a sequencing batch reactor. <i>Bioresource Technology</i> , 2016, 216, 808-816.	4.8	109
69	A survey of biofilms on wastewater aeration diffusers suggests bacterial community composition and function vary by substrate type and time. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 6361-6373.	1.7	9
70	The most densified vertically-aligned carbon nanotube membranes and their normalized water permeability and high pressure durability. <i>Journal of Membrane Science</i> , 2016, 501, 144-151.	4.1	41
71	High antibiofouling property of vertically aligned carbon nanotube membranes at a low cross-flow velocity operation in different bacterial solutions. <i>Desalination and Water Treatment</i> , 2016, 57, 23505-23515.	1.0	5
72	Lauroyl arginate ethyl: An effective antibiofouling agent applicable for reverse osmosis processes producing potable water. <i>Journal of Membrane Science</i> , 2016, 507, 24-33.	4.1	36

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73	Linking biofilm growth to fouling and aeration performance of fine-pore diffuser in activated sludge. <i>Water Research</i> , 2016, 90, 317-328.	5.3	36
74	Metagenomes reveal microbial structures, functional potentials, and biofouling-related genes in a membrane bioreactor. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 5109-5121.	1.7	46
75	Enrichment of specific electro-active microorganisms and enhancement of methane production by adding granular activated carbon in anaerobic reactors. <i>Bioresource Technology</i> , 2016, 205, 205-212.	4.8	259
76	HRT dependent performance and bacterial community population of granular hydrogen-producing mixed cultures fed with galactose. <i>Bioresource Technology</i> , 2016, 206, 188-194.	4.8	66
77	Failure of biohydrogen production by low levels of substrate and lactic acid accumulation. <i>Renewable Energy</i> , 2016, 86, 889-894.	4.3	33
78	Feasibility of enriched mixed cultures obtained by repeated batch transfer in continuous hydrogen fermentation. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 4393-4403.	3.8	39
79	The effect of morphologies of carbon nanotube-based membranes and their leachates on antibacterial property. <i>Desalination and Water Treatment</i> , 2016, 57, 7562-7573.	1.0	3
80	Inhibition of biofouling by modification of forward osmosis membrane using quaternary ammonium cation. <i>Water Science and Technology</i> , 2015, 72, 738-745.	1.2	9
81	6-Gingerol reduces <i>Pseudomonas aeruginosa</i> biofilm formation and virulence via quorum sensing inhibition. <i>Scientific Reports</i> , 2015, 5, 8656.	1.6	229
82	Use of rhamnolipid biosurfactant for membrane biofouling prevention and cleaning. <i>Biofouling</i> , 2015, 31, 211-220.	0.8	27
83	Design, synthesis and biological evaluation of 4-(alkyloxy)-6-methyl-2H-pyran-2-one derivatives as quorum sensing inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 2913-2917.	1.0	41
84	The effect of hydrodynamic cavitation on <i>Microcystis aeruginosa</i> : Physical and chemical factors. <i>Chemosphere</i> , 2015, 136, 245-251.	4.2	18
85	Influence of influent wastewater communities on temporal variation of activated sludge communities. <i>Water Research</i> , 2015, 73, 132-144.	5.3	115
86	Evidence of syntrophic acetate oxidation by <i>Spirochaetes</i> during anaerobic methane production. <i>Bioresource Technology</i> , 2015, 190, 543-549.	4.8	89
87	Tributyl tetradecyl phosphonium chloride for biofouling control in reverse osmosis processes. <i>Desalination</i> , 2015, 372, 39-46.	4.0	21
88	Changes in performance and bacterial communities in response to various process disturbances in a high-rate biohydrogen reactor fed with galactose. <i>Bioresource Technology</i> , 2015, 188, 109-116.	4.8	55
89	Polyvinylchloride Ultrafiltration Membranes Modified with Different SiO <sub>2</sub> Particles and Their Antifouling Mechanism for Oil Extraction Wastewater. <i>Journal of Environmental Engineering, ASCE</i> , 2015, 141, 04015009.	0.7	7
90	Protein immobilization onto various surfaces using a polymer-bound isocyanate. <i>Applied Surface Science</i> , 2015, 324, 198-204.	3.1	10

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91	Estrogenic Endocrine-Disrupting Chemicals Modulate the Production of Inflammatory Mediators and Cell Viability of Lipopolysaccharide-Stimulated Macrophages. <i>Inflammation</i> , 2015, 38, 595-605.	1.7	17
92	Diverse Influences of Androgen-Disrupting Chemicals on Immune Responses Mounted by Macrophages. <i>Inflammation</i> , 2014, 37, 649-656.	1.7	12
93	Bacterial communities in a bioelectrochemical denitrification system: The effects of supplemental electron acceptors. <i>Water Research</i> , 2014, 51, 25-36.	5.3	144
94	Simultaneous utilization of galactose and glucose by <i>Saccharomyces cerevisiae</i> mutant strain for ethanol production. <i>Renewable Energy</i> , 2014, 65, 213-218.	4.3	19
95	Comparison of bacterial communities of biofilms formed on different membrane surfaces. <i>World Journal of Microbiology and Biotechnology</i> , 2014, 30, 777-782.	1.7	18
96	Predominance of cluster I <i>Clostridium</i> in hydrogen fermentation of galactose seeded with various heat-treated anaerobic sludges. <i>Bioresource Technology</i> , 2014, 157, 98-106.	4.8	56
97	Rapid enrichment of (homo)acetogenic consortia from animal feces using a high mass-transfer gas-lift reactor fed with syngas. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2013, 40, 995-1003.	1.4	26
98	Optimization of batch dilute-acid hydrolysis for biohydrogen production from red algal biomass. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 6130-6136.	3.8	76
99	General and rare bacterial taxa demonstrating different temporal dynamic patterns in an activated sludge bioreactor. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 1755-1765.	1.7	96
100	Hydrodynamic effects on bacterial biofilm development in a microfluidic environment. <i>Lab on A Chip</i> , 2013, 13, 1846.	3.1	60
101	Ginger Extract Inhibits Biofilm Formation by <i>Pseudomonas aeruginosa</i> PA14. <i>PLoS ONE</i> , 2013, 8, e76106.	1.1	169
102	Biofouling control by quorum sensing inhibition and its dependence on membrane surface. <i>Water Science and Technology</i> , 2012, 66, 1424-1430.	1.2	25
103	Microfluidic Approaches to Bacterial Biofilm Formation. <i>Molecules</i> , 2012, 17, 9818-9834.	1.7	122
104	Preparation of single-walled carbon nanotubes/polyvinylchloride membrane and its antibacterial property. <i>Water Science and Technology</i> , 2012, 66, 2275-2283.	1.2	19
105	Monitoring bacterial community structure and variability in time scale in full-scale anaerobic digesters. <i>Journal of Environmental Monitoring</i> , 2012, 14, 1893.	2.1	122
106	Fine-scale bacterial community dynamics and the taxa-time relationship within a full-scale activated sludge bioreactor. <i>Water Research</i> , 2011, 45, 5476-5488.	5.3	136
107	Feasibility of biohydrogen production from <i>Gelidium amansii</i> . <i>International Journal of Hydrogen Energy</i> , 2011, 36, 13997-14003.	3.8	154
108	Microbial community analysis and identification of alternative host-specific fecal indicators in fecal and river water samples using pyrosequencing. <i>Journal of Microbiology</i> , 2011, 49, 585-594.	1.3	34

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109	Reduction of membrane fouling by simultaneous upward and downward air sparging in a pilot-scale submerged membrane bioreactor treating municipal wastewater. <i>Desalination</i> , 2010, 251, 75-82.	4.0	28
110	Ammonia-oxidizing communities in a highly aerated full-scale activated sludge bioreactor: betaproteobacterial dynamics and low relative abundance of Crenarchaea. <i>Environmental Microbiology</i> , 2009, 11, 2310-2328.	1.8	234
111	Evaluation of a low-pressure membrane filtration for drinking water treatment: pretreatment by coagulation/sedimentation for the MF membrane. <i>Desalination</i> , 2009, 247, 271-284.	4.0	41
112	Taking Advantage of Aerated-Anoxic Operation in a Full-Scale University of Cape Town Process. <i>Water Environment Research</i> , 2006, 78, 637-642.	1.3	14
113	Occurrence of Ammonia-Oxidizing Archaea in Wastewater Treatment Plant Bioreactors. <i>Applied and Environmental Microbiology</i> , 2006, 72, 5643-5647.	1.4	347
114	Evaluating the effect of dissolved oxygen on ammonia-oxidizing bacterial communities in activated sludge. <i>Water Research</i> , 2004, 38, 3275-3286.	5.3	280