

Changsoo Lee

List of Publications by Year in descending order

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93
papers

6,214
citations

101543
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docs citations

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times ranked

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citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Group-specific primer and probe sets to detect methanogenic communities using quantitative real-time polymerase chain reaction. <i>Biotechnology and Bioengineering</i> , 2005, 89, 670-679. | 3.3 | 1,321 |
| 2 | Absolute and relative QPCR quantification of plasmid copy number in <i>Escherichia coli</i> . <i>Journal of Biotechnology</i> , 2006, 123, 273-280. | 3.8 | 590 |
| 3 | Role and Potential of Direct Interspecies Electron Transfer in Anaerobic Digestion. <i>Energies</i> , 2018, 11, 107. | 3.1 | 238 |
| 4 | Disintegration of Waste Activated Sludge by Thermally-Activated Persulfates for Enhanced Dewaterability. <i>Environmental Science & Technology</i> , 2016, 50, 7106-7115. | 10.0 | 223 |
| 5 | A critical review of pretreatment technologies to enhance anaerobic digestion and energy recovery. <i>Fuel</i> , 2020, 270, 117494. | 6.4 | 216 |
| 6 | A comprehensive microbial insight into two-stage anaerobic digestion of food waste-recycling wastewater. <i>Water Research</i> , 2010, 44, 4838-4849. | 11.3 | 195 |
| 7 | Qualitative and quantitative assessment of microbial community in batch anaerobic digestion of secondary sludge. <i>Bioresource Technology</i> , 2010, 101, 9461-9470. | 9.6 | 144 |
| 8 | Quantitative analysis of methanogenic community dynamics in three anaerobic batch digesters treating different wastewaters. <i>Water Research</i> , 2009, 43, 157-165. | 11.3 | 141 |
| 9 | The biostimulation of anaerobic digestion with (semi)conductive ferric oxides: their potential for enhanced biomethanation. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 10355-10366. | 3.6 | 128 |
| 10 | Development of anaerobic osmotic membrane bioreactor for low-strength wastewater treatment at mesophilic condition. <i>Journal of Membrane Science</i> , 2015, 490, 197-208. | 8.2 | 116 |
| 11 | Real-time PCR determination of rRNA gene copy number: absolute and relative quantification assays with <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2008, 78, 371-376. | 3.6 | 114 |
| 12 | Quantitative real-time PCR approaches for microbial community studies in wastewater treatment systems: Applications and considerations. <i>Biotechnology Advances</i> , 2013, 31, 1358-1373. | 11.7 | 112 |
| 13 | A long-term study on the effect of magnetite supplementation in continuous anaerobic digestion of dairy effluent – Enhancement in process performance and stability. <i>Bioresource Technology</i> , 2016, 222, 344-354. | 9.6 | 103 |
| 14 | Anaerobic co-digestion of spent coffee grounds with different waste feedstocks for biogas production. <i>Waste Management</i> , 2017, 60, 322-328. | 7.4 | 101 |
| 15 | A long-term study on the effect of magnetite supplementation in continuous anaerobic digestion of dairy effluent – Magnetic separation and recycling of magnetite. <i>Bioresource Technology</i> , 2017, 241, 830-840. | 9.6 | 100 |
| 16 | Psychrophilic methanogenic community development during long-term cultivation of anaerobic granular biofilms. <i>ISME Journal</i> , 2009, 3, 1231-1242. | 9.8 | 96 |
| 17 | Thermo-alkaline pretreatment of waste activated sludge at low-temperatures: Effects on sludge disintegration, methane production, and methanogen community structure. <i>Bioresource Technology</i> , 2013, 144, 194-201. | 9.6 | 96 |
| 18 | Monitoring bacterial and archaeal community shifts in a mesophilic anaerobic batch reactor treating a high-strength organic wastewater. <i>FEMS Microbiology Ecology</i> , 2008, 65, 544-554. | 2.7 | 90 |

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|----|---|------|-----------|
| 19 | Quantitative and qualitative analyses of methanogenic community development in high-rate anaerobic bioreactors. <i>Water Research</i> , 2011, 45, 1298-1308. | 11.3 | 87 |
| 20 | Continuous fermentation of food waste leachate for the production of volatile fatty acids and potential as a denitrification carbon source. <i>Bioresource Technology</i> , 2016, 207, 440-445. | 9.6 | 83 |
| 21 | A review of the effects of iron compounds on methanogenesis in anaerobic environments. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 113, 109282. | 16.4 | 83 |
| 22 | Enrichment of ANAMMOX bacteria from conventional activated sludge entrapped in poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 | 12.7 | 77 |
| 23 | Quantitative and qualitative analysis of methanogenic communities in mesophilically and psychrophilically cultivated anaerobic granular biofilms. <i>Water Research</i> , 2009, 43, 3365-3374. | 11.3 | 74 |
| 24 | Influence of ferric oxyhydroxide addition on biomethanation of waste activated sludge in a continuous reactor. <i>Bioresource Technology</i> , 2014, 166, 596-601. | 9.6 | 60 |
| 25 | Anaerobic co-digestion of food waste, human feces, and toilet paper: Methane potential and synergistic effect. <i>Fuel</i> , 2019, 248, 189-195. | 6.4 | 59 |
| 26 | Development of biocathode during repeated cycles of bioelectrochemical conversion of carbon dioxide to methane. <i>Bioresource Technology</i> , 2017, 241, 1201-1207. | 9.6 | 53 |
| 27 | Absolute dominance of hydrogenotrophic methanogens in full-scale anaerobic sewage sludge digesters. <i>Journal of Environmental Sciences</i> , 2013, 25, 2272-2280. | 6.1 | 52 |
| 28 | Quantitative and qualitative transitions of methanogen community structure during the batch anaerobic digestion of cheese-processing wastewater. <i>Applied Microbiology and Biotechnology</i> , 2010, 87, 1963-1973. | 3.6 | 51 |
| 29 | Response of a continuous anaerobic digester to temperature transitions: A critical range for restructuring the microbial community structure and function. <i>Water Research</i> , 2016, 89, 241-251. | 11.3 | 48 |
| 30 | Comparative study of changes in reaction profile and microbial community structure in two anaerobic repeated-batch reactors started up with different seed sludges. <i>Bioresource Technology</i> , 2013, 129, 495-505. | 9.6 | 45 |
| 31 | Bioaugmentation of anaerobic sludge digestion with iron-reducing bacteria: process and microbial responses to variations in hydraulic retention time. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 927-937. | 3.6 | 45 |
| 32 | Energy production from different organic wastes by anaerobic co-digestion: Maximizing methane yield versus maximizing synergistic effect. <i>Renewable Energy</i> , 2019, 136, 683-690. | 8.9 | 42 |
| 33 | Anaerobic co-digestion of oil-extracted spent coffee grounds with various wastes: Experimental and kinetic modeling studies. <i>Bioresource Technology</i> , 2021, 322, 124470. | 9.6 | 42 |
| 34 | Methanogenic community shift in anaerobic batch digesters treating swine wastewater. <i>Water Research</i> , 2010, 44, 4900-4907. | 11.3 | 41 |
| 35 | Human urine as a forward osmosis draw solution for the application of microalgae dewatering. <i>Journal of Hazardous Materials</i> , 2019, 378, 120724. | 12.4 | 41 |
| 36 | A comparative study of single- and two-phase anaerobic digestion of food waste under uncontrolled pH conditions. <i>Waste Management</i> , 2018, 78, 509-520. | 7.4 | 40 |

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|----|--|------|-----------|
| 37 | Nutrient removal and microalgal biomass production from different anaerobic digestion effluents with <i>Chlorella</i> species. <i>Scientific Reports</i> , 2019, 9, 6123. | 3.3 | 40 |
| 38 | Treatment of Cattle Manure by Anaerobic Co-Digestion with Food Waste and Pig Manure: Methane Yield and Synergistic Effect. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 4737. | 2.6 | 40 |
| 39 | Individual and combined effects of magnetite addition and external voltage application on anaerobic digestion of dairy wastewater. <i>Bioresource Technology</i> , 2020, 297, 122443. | 9.6 | 39 |
| 40 | Microbial community dynamics associated with biomass granulation in low-temperature (15°C) anaerobic wastewater treatment bioreactors. <i>Bioresource Technology</i> , 2010, 101, 6336-6344. | 9.6 | 37 |
| 41 | Mild-temperature thermochemical pretreatment of green macroalgal biomass: Effects on solubilization, methanation, and microbial community structure. <i>Bioresource Technology</i> , 2016, 199, 326-335. | 9.6 | 36 |
| 42 | A review of technologies for in-situ sulfide control in anaerobic digestion. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 157, 112068. | 16.4 | 36 |
| 43 | Carbon amendment and soil depth affect the distribution and abundance of denitrifiers in agricultural soils. <i>Environmental Science and Pollution Research</i> , 2016, 23, 7899-7910. | 5.3 | 35 |
| 44 | Monitoring thiocyanate-degrading microbial community in relation to changes in process performance in mixed culture systems near washout. <i>Water Research</i> , 2008, 42, 1254-1262. | 11.3 | 34 |
| 45 | Characterization of food waste-recycling wastewater as biogas feedstock. <i>Bioresource Technology</i> , 2015, 196, 200-208. | 9.6 | 34 |
| 46 | Response of a continuous biomethanation process to transient organic shock loads under controlled and uncontrolled pH conditions. <i>Water Research</i> , 2015, 73, 68-77. | 11.3 | 33 |
| 47 | Microbial community shifts in a farm-scale anaerobic digester treating swine waste: Correlations between bacteria communities associated with hydrogenotrophic methanogens and environmental conditions. <i>Science of the Total Environment</i> , 2017, 601-602, 167-176. | 8.0 | 32 |
| 48 | Magnetite-assisted in situ microbial oxidation of H ₂ S to S ₀ during anaerobic digestion: A new potential for sulfide control. <i>Chemical Engineering Journal</i> , 2020, 397, 124982. | 12.7 | 32 |
| 49 | Anaerobic treatment of rice winery wastewater in an upflow filter packed with steel slag under different hydraulic loading conditions. <i>Bioresource Technology</i> , 2015, 193, 53-61. | 9.6 | 31 |
| 50 | Performance of methanogenic reactors in temperature phased two-stage anaerobic digestion of swine wastewater. <i>Journal of Bioscience and Bioengineering</i> , 2012, 114, 635-639. | 2.2 | 29 |
| 51 | Common key acidogen populations in anaerobic reactors treating different wastewaters: Molecular identification and quantitative monitoring. <i>Water Research</i> , 2011, 45, 2539-2549. | 11.3 | 27 |
| 52 | Effects of Different pH Control Strategies on Microalgae Cultivation and Nutrient Removal from Anaerobic Digestion Effluent. <i>Microorganisms</i> , 2022, 10, 357. | 3.6 | 27 |
| 53 | Continuous anaerobic co-digestion of <i>Ulva</i> biomass and cheese whey at varying substrate mixing ratios: Different responses in two reactors with different operating regimes. <i>Bioresource Technology</i> , 2016, 221, 366-374. | 9.6 | 26 |
| 54 | Anaerobic co-digestion of high-strength organic wastes pretreated by thermal hydrolysis. <i>Bioresource Technology</i> , 2018, 257, 238-248. | 9.6 | 26 |

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|----|---|------|-----------|
| 55 | Shifts in bacterial and archaeal community structures during the batch biomethanation of Ulva biomass under mesophilic conditions. <i>Bioresource Technology</i> , 2014, 169, 502-509. | 9.6 | 25 |
| 56 | Long-term effectiveness of bioaugmentation with rumen culture in continuous anaerobic digestion of food and vegetable wastes under feed composition fluctuations. <i>Bioresource Technology</i> , 2021, 338, 125500. | 9.6 | 25 |
| 57 | Mesophilic Acidogenesis of Food Waste-Recycling Wastewater: Effects of Hydraulic Retention Time, pH, and Temperature. <i>Applied Biochemistry and Biotechnology</i> , 2016, 180, 980-999. | 2.9 | 23 |
| 58 | Effect of Mild-Temperature Thermo-Alkaline Pretreatment on the Solubilization and Anaerobic Digestion of Spent Coffee Grounds. <i>Energies</i> , 2018, 11, 865. | 3.1 | 22 |
| 59 | Isolation and identification of thiocyanate utilizing chemolithotrophs from gold mine soils. <i>Biodegradation</i> , 2003, 14, 183-188. | 3.0 | 21 |
| 60 | Use of order-specific primers to investigate the methanogenic diversity in acetate enrichment system. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2008, 35, 1345-1352. | 3.0 | 20 |
| 61 | Effects of temperature and pH on the biokinetic properties of thiocyanate biodegradation under autotrophic conditions. <i>Water Research</i> , 2013, 47, 251-258. | 11.3 | 19 |
| 62 | Potential of mixed-culture microalgae enriched from aerobic and anaerobic sludges for nutrient removal and biomass production from anaerobic effluents. <i>Bioresource Technology</i> , 2019, 280, 325-336. | 9.6 | 19 |
| 63 | Temperature Effects on Methanogenesis and Sulfidogenesis during Anaerobic Digestion of Sulfur-Rich Macroalgal Biomass in Sequencing Batch Reactors. <i>Microorganisms</i> , 2019, 7, 682. | 3.6 | 19 |
| 64 | Effect of low pH start-up on continuous mixed-culture lactic acid fermentation of dairy effluent. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 10179-10191. | 3.6 | 17 |
| 65 | Treatment of low-strength ammonia wastewater by single-stage partial nitrification and anammox using upflow dual-bed gel-carrier reactor (UDGR). <i>Bioresource Technology</i> , 2020, 304, 123023. | 9.6 | 17 |
| 66 | Fermentation and growth kinetic study of <i>Aeromonas caviae</i> under anaerobic conditions. <i>Applied Microbiology and Biotechnology</i> , 2009, 83, 767-773. | 3.6 | 15 |
| 67 | Abundance of denitrification genes under different peizometer depths in four Irish agricultural groundwater sites. <i>Environmental Science and Pollution Research</i> , 2013, 20, 6646-6657. | 5.3 | 15 |
| 68 | Long-term monitoring of a thermal hydrolysis-anaerobic co-digestion plant treating high-strength organic wastes: Process performance and microbial community dynamics. <i>Bioresource Technology</i> , 2021, 319, 124138. | 9.6 | 15 |
| 69 | Mycelial cultivation of <i>Phellinus linteus</i> using cheese-processing waste and optimization of bioconversion conditions. <i>Biodegradation</i> , 2011, 22, 103-110. | 3.0 | 14 |
| 70 | Continuous treatment of dairy effluent in a downflow anaerobic filter packed with slag grains: Reactor performance and kinetics. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 68, 147-152. | 5.3 | 14 |
| 71 | Ulva biomass as a co-substrate for stable anaerobic digestion of spent coffee grounds in continuous mode. <i>Bioresource Technology</i> , 2017, 241, 1182-1190. | 9.6 | 14 |
| 72 | Correlation of microbial mass with ATP and DNA concentrations in acidogenesis of whey permeate. <i>Biodegradation</i> , 2008, 19, 187-195. | 3.0 | 13 |

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|----|--|------|-----------|
| 73 | Improving Biomethanation of Chicken Manure by Co-Digestion with Ethanol Plant Effluent. International Journal of Environmental Research and Public Health, 2019, 16, 5023. | 2.6 | 13 |
| 74 | Effectiveness of electromagnetic in situ magnetite capture in anaerobic sequencing batch treatment of dairy effluent under electro-syntrophic conditions. Renewable Energy, 2021, 179, 105-115. | 8.9 | 13 |
| 75 | Formation and characterization of conductive magnetite-embedded granules in upflow anaerobic sludge blanket reactor treating dairy wastewater. Bioresource Technology, 2022, 345, 126492. | 9.6 | 12 |
| 76 | Optimization of adenosine 5'-triphosphate extraction for the measurement of acidogenic biomass utilizing whey wastewater. Biodegradation, 2006, 17, 347-355. | 3.0 | 11 |
| 77 | Effect of mild-temperature H ₂ O ₂ oxidation on solubilization and anaerobic digestion of waste activated sludge. Environmental Technology (United Kingdom), 2014, 35, 1702-1709. | 2.2 | 9 |
| 78 | Co-feeding spent coffee grounds in anaerobic food waste digesters: Effects of co-substrate and stabilization strategy. Bioresource Technology, 2019, 288, 121594. | 9.6 | 9 |
| 79 | Unusual bacterial populations observed in a full-scale municipal sludge digester affected by intermittent seawater inputs. Journal of Industrial Microbiology and Biotechnology, 2009, 36, 769-773. | 3.0 | 8 |
| 80 | Biomethanation potential of marine macroalgal Ulva biomass in sequencing batch mode: Changes in process performance and microbial community structure over five cycles. Biomass and Bioenergy, 2016, 91, 143-149. | 5.7 | 8 |
| 81 | Effect of enhanced biomass retention by sequencing batch operation on biomethanation of sulfur-rich macroalgal biomass: Process performance and microbial ecology. Algal Research, 2017, 28, 128-138. | 4.6 | 8 |
| 82 | Rapid fingerprinting of methanogenic communities by high-resolution melting analysis. Bioresource Technology, 2014, 174, 321-327. | 9.6 | 7 |
| 83 | Assessment of bacterial community structure in nitrifying biofilm under inorganic carbon-sufficient and -limited conditions. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2015, 50, 201-212. | 1.7 | 7 |
| 84 | Pretreatment of spent coffee grounds with alkaline soju bottle-washing wastewater for enhanced biomethanation. Biomass Conversion and Biorefinery, 2022, 12, 803-808. | 4.6 | 7 |
| 85 | Designing a marine outfall to reduce microbial risk on a recreational beach: Field experiment and modeling. Journal of Hazardous Materials, 2021, 409, 124587. | 12.4 | 7 |
| 86 | Biomethanation of Harmful Macroalgal Biomass in Leach-Bed Reactor Coupled to Anaerobic Filter: Effect of Water Regime and Filter Media. International Journal of Environmental Research and Public Health, 2018, 15, 866. | 2.6 | 6 |
| 87 | Changes in Microbial Community Structure During Anaerobic Repeated-Batch Treatment of Cheese-Processing Wastewater. APCBEE Procedia, 2013, 5, 520-526. | 0.5 | 5 |
| 88 | The potential use of human urine as a solvent for biogas upgrading. Journal of Water Process Engineering, 2020, 36, 101343. | 5.6 | 5 |
| 89 | Potential treatment of aged cow manure using spare capacity in anaerobic digesters treating a mixture of food waste and pig manure. Waste Management, 2022, 148, 22-32. | 7.4 | 4 |
| 90 | Enhancement of methanogenic biodegradation of tetramethylammonium hydroxide wastewater by co-digestion with ethyl lactate wastewater. Environmental Technology and Innovation, 2021, 21, 101372. | 6.1 | 2 |

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|----|---|------|-----------|
| 91 | Effects of applying external voltage on development of anaerobic dynamic membrane under high suspended solids conditions. Chemical Engineering Journal, 2022, 438, 135528. | 12.7 | 2 |
| 92 | Science Walden: Exploring the Convergence of Environmental Technologies with Design and Art. Sustainability, 2017, 9, 35. | 3.2 | 1 |
| 93 | Editorial Preface to the Special Issue on “The 2nd International Conference on Alternative Fuels and Energy: Futures and Challenges (ICAFE 2017)” 25th October 2017, Daegu, Republic of Korea. Waste and Biomass Valorization, 2020, 11, 1017-1017. | 3.4 | 1 |