

Moonyong Lee

List of Publications by Year in descending order

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333
papers

8,544
citations

50566

48
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107981

68
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336
all docs

336
docs citations

336
times ranked

5769
citing authors

#	ARTICLE	IF	CITATIONS
1	Biogas upgrading using ionic liquid [Bmim][PF6] followed by thermal-plasma-assisted renewable hydrogen and solid carbon production. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 42075-42083.	3.8	9
2	State-of-the-art assessment of natural gas liquids recovery processes: Techno-economic evaluation, policy implications, open issues, and the way forward. <i>Energy</i> , 2022, 238, 121684.	4.5	18
3	Neural network-inspired performance enhancement of synthetic natural gas liquefaction plant with different minimum approach temperatures. <i>Fuel</i> , 2022, 308, 121858.	3.4	9
4	Carbon-dioxide-precooled hydrogen liquefaction process: An innovative approach for performance enhancement—Energy, exergy, and economic perspectives. <i>Energy Conversion and Management</i> , 2022, 251, 114947.	4.4	38
5	State-of-the-art assessment of cryogenic technologies for biogas upgrading: Energy, economic, and environmental perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 154, 111826.	8.2	29
6	Assessment of working fluids, thermal resources and cooling utilities for Organic Rankine Cycles: State-of-the-art comparison, challenges, commercial status, and future prospects. <i>Energy Conversion and Management</i> , 2022, 252, 115055.	4.4	48
7	Valorization of algal cells for biomass and bioenergy production from wastewater: Sustainable strategies, challenges, and techno-economic limitations. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 157, 112024.	8.2	28
8	State-of-the-art process simulations and techno-economic assessments of ionic liquid-based biogas upgrading techniques: Challenges and prospects. <i>Fuel</i> , 2022, 314, 123064.	3.4	29
9	Performance enhancement of hydrogen liquefaction process via absorption refrigeration and organic Rankine cycle-assisted liquid air energy system. <i>Energy Conversion and Management</i> , 2022, 254, 115200.	4.4	26
10	Hydrogen enrichment by CO ₂ anti-sublimation integrated with triple mixed refrigerant-based liquid hydrogen production process. <i>Journal of Cleaner Production</i> , 2022, 341, 130745.	4.6	13
11	Harvesting biohydrogen from industrial wastewater: Production potential, pilot-scale bioreactors, commercialization status, techno-economics, and policy analysis. <i>Journal of Cleaner Production</i> , 2022, 340, 130809.	4.6	33
12	Intelligent Human–Machine Interface: An Agile Operation and Decision Support for an ANAMMOX SBR System at a Pilot-Scale Wastewater Treatment Plant. <i>IEEE Transactions on Industrial Informatics</i> , 2022, 18, 6224-6232.	7.2	8
13	Solar photo-oxidation of recalcitrant industrial wastewater: a review. <i>Environmental Chemistry Letters</i> , 2022, 20, 1839-1862.	8.3	49
14	Reclamation of Halon 1301 using industrial-scale heat-pump-assisted batch distillation: Design, simulation, and experiment. <i>International Journal of Refrigeration</i> , 2022, 138, 31-39.	1.8	1
15	Hydrofluoroolefin-based mixed refrigerant for enhanced performance of hydrogen liquefaction process. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 41648-41662.	3.8	13
16	Intensified and hybrid distillation technologies for production of high value-added products from lignocellulosic biomass. , 2022, , 197-229.		1
17	Thermodynamic, economic, and emissions assessment of integrated power to methanol concept with membrane-based biogas up-gradation and plasma electrolysis. <i>Journal of Cleaner Production</i> , 2022, 363, 132367.	4.6	10
18	Exploitation of distillation for energy-efficient and cost-effective environmentally benign process of waste solvents recovery from semiconductor industry. <i>Science of the Total Environment</i> , 2022, 841, 156743.	3.9	7

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19	Energy saving anammox technology-based nitrogen removal and bioenergy recovery from wastewater: Inhibition mechanisms, state-of-the-art control strategies, and prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 135, 110126.	8.2	89
20	Redox-additive electrolyte-driven enhancement of the electrochemical energy storage performance of asymmetric Co ₃ O ₄ /carbon nano-onions supercapacitors. <i>Energy</i> , 2021, 218, 119436.	4.5	44
21	Single mixed refrigerant LNG process: Investigation of improvement potential, operational optimization, and real potential for further improvements. <i>Journal of Cleaner Production</i> , 2021, 284, 125379.	4.6	23
22	Introduction to Particle Swarm Optimization and Its Paradigms: A Bibliographic Survey. <i>Studies in Big Data</i> , 2021, , 105-124.	0.8	1
23	Biogas upgrading through blends of deep eutectic solvents and monoethanol amine: 4 E analysis (energy, exergy, environmental, and economic). <i>Green Chemistry</i> , 2021, 23, 6076-6089.	4.6	14
24	Novel Hybrid Reactive Distillation with Extraction and Distillation Processes for Furfural Production from an Actual Xylose Solution. <i>Energies</i> , 2021, 14, 1152.	1.6	18
25	Sustainable Bio-Energy Production in Microbial Fuel Cell Using MnO ₂ Nanoparticle-Decorated Hollow Carbon Nanofibers as Active Cathode Materials. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2021, 16, 127-135.	0.1	5
26	Metal-organic frameworks for biogas upgrading: Recent advancements, challenges, and future recommendations. <i>Applied Materials Today</i> , 2021, 22, 100925.	2.3	16
27	Desulfurization scrubbing in a squared spray column for a 720 kW marine diesel engine: Design, construction, simulation, and experiment. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 161, 108317.	1.8	5
28	Determination of Kinetic and Thermodynamic Parameters of Pyrolysis of Coal and Sugarcane Bagasse Blends Pretreated by Ionic Liquid: A Step towards Optimization of Energy Systems. <i>Energies</i> , 2021, 14, 2544.	1.6	6
29	Design and Energy Analysis of a Solar Desiccant Evaporative Cooling System with Built-In Daily Energy Storage. <i>Energies</i> , 2021, 14, 2429.	1.6	7
30	Methoxy-methylheptane as a cleaner fuel additive: An energy and cost-efficient enhancement for separation and purification units. <i>Energy Science and Engineering</i> , 2021, 9, 1632-1646.	1.9	1
31	Process Systems Engineering Evaluation of Prospective Working Fluids for Organic Rankine Cycles Facilitated by Biogas Combustion Flue Gases. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	2
32	Direct Analytical Modeling for Optimal, On-Design Performance of Ejector for Simulating Heat-Driven Systems. <i>Energies</i> , 2021, 14, 2819.	1.6	4
33	Refining and Reuse of Waste Lube Oil in SI Engines: A Novel Approach for a Sustainable Environment. <i>Energies</i> , 2021, 14, 2937.	1.6	10
34	Energy-efficient and cost-effective alternative separation techniques for 2-methoxyethanol-toluene azeotropic mixture: Design and control studies. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 163, 108376.	1.8	4
35	Advanced predicting technique for optimal operation of wastewater treatment process: A ProActive scheduling approach. <i>Journal of Cleaner Production</i> , 2021, 303, 126968.	4.6	2
36	Novel Heat-Integrated Hybrid Distillation and Adsorption Process for Coproduction of Cellulosic Ethanol, Heat, and Electricity from Actual Lignocellulosic Fermentation Broth. <i>Energies</i> , 2021, 14, 3377.	1.6	3

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37	Availability, versatility, and viability of feedstocks for hydrogen production: Product space perspective. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 145, 110843.	8.2	57
38	Response Surface Methodology Routed Optimization of Performance of Hydroxy Gas Enriched Diesel Fuel in Compression Ignition Engines. <i>Processes</i> , 2021, 9, 1355.	1.3	7
39	Fermentation-based nanoparticle systems for sustainable conversion of black-liquor into biohydrogen. <i>Journal of Cleaner Production</i> , 2021, 309, 127349.	4.6	56
40	Recent Approaches for the Production of High Value-Added Biofuels from Gelatinous Wastewater. <i>Energies</i> , 2021, 14, 4936.	1.6	13
41	Developing machine learning models for relative humidity prediction in air-based energy systems and environmental management applications. <i>Journal of Environmental Management</i> , 2021, 292, 112736.	3.8	12
42	Synthesis of biodiesel from non-edible (<i>Brachychiton populneus</i>) oil in the presence of nickel oxide nanocatalyst: Parametric and optimisation studies. <i>Chemosphere</i> , 2021, 278, 130469.	4.2	71
43	Teaching-learning self-study approach for optimal retrofitting of dual mixed refrigerant LNG process: Energy and exergy perspective. <i>Applied Energy</i> , 2021, 298, 117187.	5.1	23
44	Chemically synthesized copper sulfide nanoflakes on reduced graphene oxide for asymmetric supercapacitors. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 101, 423-429.	2.9	15
45	Renewable LNG production: Biogas upgrading through CO ₂ solidification integrated with single-loop mixed refrigerant biomethane liquefaction process. <i>Energy Conversion and Management</i> , 2021, 243, 114363.	4.4	18
46	100% saturated liquid hydrogen production: Mixed-refrigerant cascaded process with two-stage ortho-to-para hydrogen conversion. <i>Energy Conversion and Management</i> , 2021, 246, 114659.	4.4	36
47	Dual production of hydrogen and biochar from industrial effluent containing phenolic compounds. <i>Fuel</i> , 2021, 301, 121087.	3.4	35
48	Robustness enhancement of biomass steam gasification thermodynamic models for biohydrogen production: Introducing new correction factors. <i>Journal of Cleaner Production</i> , 2021, 321, 128954.	4.6	15
49	Performance improvement potential of harnessing LNG regasification for hydrogen liquefaction process: Energy and exergy perspectives. <i>Applied Energy</i> , 2021, 301, 117471.	5.1	33
50	Auto-Tuning of Identified Highly Sensitive Parameters for ANAMMOX System: Advanced Modeling Approach. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 7238-7245.	7.2	5
51	Improvement of marine carbon capture onboard diesel fueled ships. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 168, 108535.	1.8	22
52	Sustainable economic growth and export diversification potential for Asian LNG-exporting countries: LNG's petrochemical nexus development using product space model. <i>Energy</i> , 2021, 236, 121334.	4.5	5
53	Development of Smart AnAmmOx System and Its Agile Operation and Decision Support for Pilot-Scale WWTP. , 2021, , 423-454.		0
54	Weed colonization-based performance improvement opportunities in dual mixed refrigerant natural gas liquefaction process. <i>Energy Science and Engineering</i> , 2021, 9, 297-312.	1.9	8

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55	Pressure Swing-Based Reactive Distillation and Dividing Wall Column for Improving Manufacture of Propylene Glycol Monomethyl Ether Acetate. <i>Energies</i> , 2021, 14, 7416.	1.6	0
56	Design of Simplified Decoupling Control System of Pulsed MIG Welding Process for Aluminum Alloy. <i>Advances in Intelligent Systems and Computing</i> , 2021, , 364-374.	0.5	0
57	Two-phase expander refrigeration cycles with ethane-nitrogen: A cost-efficient alternative LNG processes for offshore applications. <i>Journal of Cleaner Production</i> , 2020, 248, 119189.	4.6	18
58	Gas-liquid dual-expander natural gas liquefaction process with confirmation of biogeography-based energy and cost savings. <i>Applied Thermal Engineering</i> , 2020, 166, 114643.	3.0	11
59	Purification step enhancement of the 2,3-butanediol production process through minimization of high pressure steam consumption. <i>Chemical Engineering Research and Design</i> , 2020, 153, 697-708.	2.7	8
60	Integrated biomethane liquefaction using exergy from the discharging end of a liquid air energy storage system. <i>Applied Energy</i> , 2020, 260, 114260.	5.1	42
61	Biogas to liquefied biomethane: Assessment of 3P's-Production, processing, and prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 119, 109561.	8.2	51
62	Membrane-Assisted Removal of Hydrogen and Nitrogen from Synthetic Natural Gas for Energy-Efficient Liquefaction. <i>Energies</i> , 2020, 13, 5023.	1.6	10
63	Growth of 2D nanoflakes from 1D long leaf arrays: Electrochemical influence of copper and nickel co-substituted cobalt oxide. <i>Journal of Energy Storage</i> , 2020, 32, 101871.	3.9	22
64	Advanced and Intensified Seawater Flue Gas Desulfurization Processes: Recent Developments and Improvements. <i>Energies</i> , 2020, 13, 5917.	1.6	7
65	Performance Enhancement of Nitrogen Dual Expander and Single Mixed Refrigerant LNG Processes Using Jaya Optimization Approach. <i>Energies</i> , 2020, 13, 3278.	1.6	12
66	Purification of R-12 for refrigerant reclamation using existing industrial-scale batch distillation: design, optimization, simulation, and experimental studies. <i>Korean Journal of Chemical Engineering</i> , 2020, 37, 1823-1828.	1.2	2
67	Energy Saving through Efficient BOG Prediction and Impact of Static Boil-off-Rate in Full Containment-Type LNG Storage Tank. <i>Energies</i> , 2020, 13, 5578.	1.6	12
68	Shuffled Complex Evolution-Based Performance Enhancement and Analysis of Cascade Liquefaction Process for Large-Scale LNG Production. <i>Energies</i> , 2020, 13, 2511.	1.6	13
69	Simultaneous capture of acid gases from natural gas adopting ionic liquids: Challenges, recent developments, and prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 123, 109771.	8.2	70
70	Impact of mixed refrigerant selection on energy and exergy performance of natural gas liquefaction processes. <i>Energy</i> , 2020, 199, 117378.	4.5	38
71	HETP measurement using industrial-scale batch distillation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 148, 107800.	1.8	4
72	Electrical-driven self-heat recuperative pressure-swing azeotropic distillation to minimize process cost and CO2 emission: Process electrification and simultaneous optimization. <i>Energy</i> , 2020, 195, 116998.	4.5	31

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73	Single-Solution-Based Vortex Search Strategy for Optimal Design of Offshore and Onshore Natural Gas Liquefaction Processes. <i>Energies</i> , 2020, 13, 1732.	1.6	19
74	Dual-effect single-mixed refrigeration cycle: An innovative alternative process for energy-efficient and cost-effective natural gas liquefaction. <i>Applied Energy</i> , 2020, 268, 115022.	5.1	44
75	Simulation study of deep eutectic solvent-based biogas upgrading process integrated with single mixed refrigerant biomethane liquefaction. <i>Biofuel Research Journal</i> , 2020, 7, 1245-1255.	7.2	33
76	Investigation of improvement potential of Modified Single Mixed Refrigerant (MSMR) LNG process in terms of avoidable and unavoidable exergy destruction. , 2020, , .		3
77	Fractional order Modeling and Control of a Quadruple-tank Process. , 2020, , .		3
78	Reactive Pressure-Swing Distillation toward Sustainable Process of Novel Continuous Ultra-High-Purity Electronic-Grade Propylene Glycol Monomethyl Ether Acetate Manufacture. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18677-18689.	3.2	25
79	Self-recuperative high temperature co-electrolysis-based methanol production with vortex search-based exergy efficiency enhancement. <i>Journal of Cleaner Production</i> , 2019, 239, 118029.	4.6	17
80	Design method for the feasibility and technical evaluation of side-reactor column configurations. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 144, 107648.	1.8	10
81	Process Design Alternatives for Producing Ultra-high-purity Electronic-Grade Propylene Glycol Monomethyl Ether Acetate. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 2246-2257.	1.8	14
82	Novel reaction-hybrid-extraction-distillation process for furfuryl alcohol production from raw bio-furfural. <i>Biochemical Engineering Journal</i> , 2019, 148, 143-151.	1.8	3
83	Particle Swarm Optimization Methodology for Optimal Distillation Retrofit. <i>Journal of Chemical Engineering of Japan</i> , 2019, 52, 333-341.	0.3	9
84	Simulation study of biomethane liquefaction followed by biogas upgrading using an imidazolium-based cationic ionic liquid. <i>Journal of Cleaner Production</i> , 2019, 231, 953-962.	4.6	30
85	Comprehensive Review of Control and Operational Strategies for Partial Nitration/ANAMMOX System. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 10635-10651.	1.8	15
86	Fabrication of polyaniline/activated carbon composite and its testing for methyl orange removal: Optimization, equilibrium, isotherm and kinetic study. <i>Polymer Testing</i> , 2019, 77, 105909.	2.3	22
87	Heating load depreciation in the solvent-regeneration step of absorption-based acid gas removal using an ionic liquid with an imidazolium-based cation. <i>International Journal of Greenhouse Gas Control</i> , 2019, 87, 89-99.	2.3	23
88	Dual mixed refrigerant LNG process: Uncertainty quantification and dimensional reduction sensitivity analysis. <i>Applied Energy</i> , 2019, 250, 1446-1456.	5.1	31
89	Data Authorization and Forecasting by a Proactive Soft Sensing Tool—Anammox Based Process. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 9552-9563.	1.8	13
90	Optimal operation of a dividing wall column using an enhanced active vapor distributor. <i>Chemical Engineering Research and Design</i> , 2019, 144, 512-519.	2.7	18

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91	Economical retrofit of reactive distillation with a total reflux design or a total boil-up design. <i>Chemical Engineering Research and Design</i> , 2019, 145, 53-63.	2.7	2
92	Control of a wastewater treatment plant using relay auto-tuning. <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 505-512.	1.2	13
93	Optimization of mixed fluid cascade LNG process using a multivariate Coggins step-up approach: Overall compression power reduction and exergy loss analysis. <i>International Journal of Refrigeration</i> , 2019, 104, 189-200.	1.8	32
94	Membrane separation processes for dehydration of bioethanol from fermentation broths: Recent developments, challenges, and prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 105, 427-443.	8.2	94
95	Vortex tube shape optimization for hot control valves through computational fluid dynamics. <i>International Journal of Refrigeration</i> , 2019, 102, 151-158.	1.8	22
96	Analytical design of constraint handling optimal two parameter internal model control for dead-time processes. <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 356-367.	1.2	6
97	Enhancement of a R-410A Reclamation Process Using Various Heat-Pump-Assisted Distillation Configurations. <i>Energies</i> , 2019, 12, 3776.	1.6	6
98	Ecofriendly Anaerobic Ammonium Oxidation System: Optimum Operation and Inhibition Control Strategies for Enhanced Nitrogen Removal. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 20847-20856.	1.8	15
99	Significance of operating pressure on process intensification in a distillation with side-reactor configuration. <i>Separation and Purification Technology</i> , 2019, 213, 533-544.	3.9	8
100	Nitrogen self-recuperation expansion-based process for offshore coproduction of liquefied natural gas, liquefied petroleum gas, and pentane plus. <i>Applied Energy</i> , 2019, 235, 247-257.	5.1	53
101	Coal to clean energy: Energy-efficient single-loop mixed-refrigerant-based schemes for the liquefaction of synthetic natural gas. <i>Journal of Cleaner Production</i> , 2019, 211, 574-589.	4.6	37
102	Design of a renewable energy system with battery and power-to-methanol unit. <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 12-20.	1.2	11
103	Design and optimization of multi-effect-evaporation-assisted distillation configuration for recovery of 2,3-butanediol from fermentation broth. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 136, 107-115.	1.8	20
104	Knowledge-inspired operational reliability for optimal LNG production at the offshore site. <i>Applied Thermal Engineering</i> , 2019, 150, 19-29.	3.0	14
105	Optimal plant-wide control of the wet sulfuric acid process in an integrated gasification combined cycle power plant. <i>Journal of Process Control</i> , 2019, 74, 147-159.	1.7	2
106	Cost effective nitrogen removal “Novel control strategies. <i>International Journal of Computational Methods and Experimental Measurements</i> , 2019, 7, 376-384.	0.1	7
107	Plantwide design for high-purity formic acid reactive distillation process with dividing wall column and external heat integration arrangements. <i>Korean Journal of Chemical Engineering</i> , 2018, 35, 926-940.	1.2	18
108	Closed-Loop Self-Cooling Recuperative N ₂ Expander Cycle for the Energy Efficient and Ecological Natural Gas Liquefaction Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 5021-5033.	3.2	32

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109	Measuring the reliability of a natural gas refrigeration plant: Uncertainty propagation and quantification with polynomial chaos expansion based sensitivity analysis. <i>Reliability Engineering and System Safety</i> , 2018, 172, 103-117.	5.1	9
110	Design optimization of single mixed refrigerant LNG process using a hybrid modified coordinate descent algorithm. <i>Cryogenics</i> , 2018, 89, 131-140.	0.9	44
111	A cost-effective retrofit of conventional distillation sequence to dividing-wall prefractionator configuration. <i>Computers and Chemical Engineering</i> , 2018, 110, 93-105.	2.0	12
112	Energy efficiency enhancement of a single mixed refrigerant LNG process using a novel hydraulic turbine. <i>Energy</i> , 2018, 144, 968-976.	4.5	70
113	Innovative propane-nitrogen two-phase expander refrigeration cycle for energy-efficient and low-global warming potential LNG production. <i>Applied Thermal Engineering</i> , 2018, 139, 157-165.	3.0	44
114	Global Sensitivity Analysis and Uncertainty Quantification of Crude Distillation Unit Using Surrogate Model Based on Gaussian Process Regression. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 5035-5044.	1.8	13
115	Optimal retrofit and debottlenecking using novel multi-effect dividing wall column. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 127, 65-71.	1.8	7
116	Energy optimization for single mixed refrigerant natural gas liquefaction process using the metaheuristic vortex search algorithm. <i>Applied Thermal Engineering</i> , 2018, 129, 782-791.	3.0	49
117	Feasibility study of environmental relative humidity through the thermodynamic effects on the performance of natural gas liquefaction process. <i>Applied Thermal Engineering</i> , 2018, 128, 51-63.	3.0	28
118	Grid-search-and-box-search-assisted coordinate descent methodology for practical retrofit of the existing distillation columns to dividing wall columns. <i>Chemical Engineering Research and Design</i> , 2018, 131, 55-65.	2.7	4
119	Design of an Intensified Reactive Distillation Configuration for 2-Methoxy-2-methylheptane. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 316-328.	1.8	13
120	Applying SVM framework for modeling of CO ₂ solubility in oil during CO ₂ flooding. <i>Fuel</i> , 2018, 214, 73-87.	3.4	43
121	Analytical design of an industrial two-term controller for optimal regulatory control of open-loop unstable processes under operational constraints. <i>ISA Transactions</i> , 2018, 72, 66-76.	3.1	3
122	Comprehensive Review of the Design Optimization of Natural Gas Liquefaction Processes: Current Status and Perspectives. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 5819-5844.	1.8	86
123	Novel hybrid-blower-and-evaporator-assisted distillation for separation and purification in biorefineries. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 123, 195-203.	1.8	11
124	Krill-Herd-Based Investigation for Energy Saving Opportunities in Offshore Liquefied Natural Gas Processes. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 14162-14172.	1.8	22
125	Cost- and Energy-Efficient Butanol-Based Extraction-Assisted Distillation Designs for Purification of 2,3-Butanediol for Use as a Drop-in Fuel. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14901-14910.	3.2	38
126	Design trade-offs in a column with side-reactor configuration for improving selectivity in multiple reaction systems. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 134, 86-96.	1.8	7

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127	Synergistic Effect in Moisture Sensing of Nylon-6 Polymer Films through Molecular-Level Interfacial Interactions of Amide Linkages in the Presence of Graphene. <i>Journal of Physical Chemistry C</i> , 2018, 122, 24672-24683.	1.5	3
128	Techno-economic analysis of various process schemes for the production of fuel grade 2,3-butanediol from fermentation broth. <i>Biochemical Engineering Journal</i> , 2018, 140, 93-107.	1.8	26
129	Optimal design of an intensified column with side-reactor configuration for the methoxy-methylheptane process. <i>Chemical Engineering Research and Design</i> , 2018, 136, 11-24.	2.7	11
130	Hydrofluoroolefin-based novel mixed refrigerant for energy efficient and ecological LNG production. <i>Energy</i> , 2018, 157, 483-492.	4.5	34
131	Distillation design and optimization of quaternary azeotropic mixtures for waste solvent recovery. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 67, 255-265.	2.9	17
132	Reactive distillation with pervaporation hybrid configuration for enhanced ethyl levulinate production. <i>Chemical Engineering Science</i> , 2018, 190, 297-311.	1.9	22
133	An innovative vortex-tube turbo-expander refrigeration cycle for performance enhancement of nitrogen-based natural-gas liquefaction process. <i>Applied Thermal Engineering</i> , 2018, 144, 117-125.	3.0	32
134	Surrogate-assisted modeling and optimization of a natural-gas liquefaction plant. <i>Computers and Chemical Engineering</i> , 2018, 118, 132-142.	2.0	33
135	Purification of 2,3-butanediol from fermentation broth: process development and techno-economic analysis. <i>Biotechnology for Biofuels</i> , 2018, 11, 18.	6.2	61
136	Recrystallization techniques for the synthesis of ZnO nanorods: an in situ process for carbon doping and enhancing the dispersion concentration of ZnO nanorods. <i>RSC Advances</i> , 2018, 8, 16927-16936.	1.7	11
137	Sparse Bayesian learning for data driven polynomial chaos expansion with application to chemical processes. <i>Chemical Engineering Research and Design</i> , 2018, 137, 553-565.	2.7	8
138	Co-electrolysis for power-to-methanol applications. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 95, 227-241.	8.2	67
139	Effect of Gallium doping on CdS thin film properties and corresponding Cu(InGa)Se ₂ /CdS:Ga solar cell performance. <i>Thin Solid Films</i> , 2018, 660, 207-212.	0.8	21
140	Alignment of Carbon Nanotubes in Carbon Nanotube Fibers Through Nanoparticles: A Route for Controlling Mechanical and Electrical Properties. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 5530-5542.	4.0	20
141	Conceptual designs of integrated process for simultaneous production of potable water, electricity, and salt. <i>Desalination</i> , 2017, 409, 96-107.	4.0	5
142	Process Design and Optimization of an Acetic Acid Recovery System in Terephthalic Acid Production via Hybrid Extraction–Distillation Using a Novel Mixed Solvent. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 2168-2176.	1.8	36
143	Simplified design of proportional-integral-derivative (PID) controller to give a time domain specification for high order processes. <i>Korean Journal of Chemical Engineering</i> , 2017, 34, 961-968.	1.2	3
144	Techno-economic assessment of hybrid extraction and distillation processes for furfural production from lignocellulosic biomass. <i>Biotechnology for Biofuels</i> , 2017, 10, 81.	6.2	52

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