Jeehoon Han

List of Publications by Citations

96 papers	1,983 citations	23 h-index	42 g-index
98 ext. papers	2,391 ext. citations	8.3 avg, IF	5.86 L-index

#	Paper	IF	Citations
96	Nonenzymatic sugar production from biomass using biomass-derived γ-valerolactone. *Science*, **2014**, 343, 277-80	33.3	519
95	A strategy for the simultaneous catalytic conversion of hemicellulose and cellulose from lignocellulosic biomass to liquid transportation fuels. *Green Chemistry*, **2014**, 16, 653-661	10	109
94	A lignocellulosic ethanol strategy via nonenzymatic sugar production: process synthesis and analysis. *Bioresource Technology*, **2015**, 182, 258-266	11	84
93	Design and operation of renewable energy sources based hydrogen supply system: Technology integration and optimization. *Renewable Energy*, **2017**, 103, 226-238	8.1	78
92	Strategic planning design of microalgae biomass-to-biodiesel supply chain network: Multi-period deterministic model. *Applied Energy*, **2015**, 154, 528-542	10.7	64
91	Development of a Scalable and Comprehensive Infrastructure Model for Carbon Dioxide Utilization and Disposal. *Industrial & Engineering Chemistry Research*, **2011**, 50, 6297-6315	3.9	48
90	Process systems engineering studies for the synthesis of catalytic biomass-to-fuels strategies. *Computers and Chemical Engineering*, **2015**, 81, 57-69	4	44
89	Modeling the operation of hydrogen supply networks considering facility location. *International Journal of Hydrogen Energy*, **2012**, 37, 5328-5346	6.7	43
88	A multi-objective optimization model for sustainable electricity generation and CO2 mitigation (EGCM) infrastructure design considering economic profit and financial risk. *Applied Energy*, **2012**, 95, 186-195	10.7	42
87	Sustainable development of biorefineries: integrated assessment method for co-production pathways. *Energy and Environmental Science*, **2020**, 13, 2233-2242	35.4	41
86	Coproducing Value-Added Chemicals and Hydrogen with Electrocatalytic Glycerol Oxidation Technology: Experimental and Techno-Economic Investigations. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 6626-6634	8.3	41
85	Bioalcohol production from acidogenic products via a two-step process: A case study of butyric acid to butanol. *Applied Energy*, **2019**, 252, 113482	10.7	37
84	A bio-based "green" process for catalytic adipic acid production from lignocellulosic biomass using cellulose and hemicellulose derived γ-valerolactone. *Energy Conversion and Management*, **2016**, 129, 75-80	10.6	37
83	Design under uncertainty of carbon capture and storage infrastructure considering cost, environmental impact, and preference on risk. *Applied Energy*, **2017**, 189, 725-738	10.7	36
82	Multi-objective optimization design of hydrogen infrastructures simultaneously considering economic cost, safety and CO2 emission. *Chemical Engineering Research and Design*, **2013**, 91, 1427-1439	5.5	33
81	Multiperiod Stochastic Optimization Model for Carbon Capture and Storage Infrastructure under Uncertainty in CO2 Emissions, Product Prices, and Operating Costs. *Industrial & Engineering Chemistry Research*, **2012**, 51, 11445-11457	3.9	32
80	Mathematical model to optimize design of integrated utility supply network and future global hydrogen supply network under demand uncertainty. *Applied Energy*, **2017**, 195, 257-267	10.7	28

79	System-level analysis and life cycle assessment of CO2 and fossil-based formic acid strategies. *Green Chemistry*, **2019**, 21, 3442-3455	10	26
78	An integrated strategy for catalytic co-production of jet fuel range alkenes, tetrahydrofurfuryl alcohol, and 1,2-pentanediol from lignocellulosic biomass. *Green Chemistry*, **2017**, 19, 5214-5229	10	25
77	Two-Stage Stochastic Programming Model for Planning CO2Utilization and Disposal Infrastructure Considering the Uncertainty in the CO2Emission. *Industrial & Engineering Chemistry Research*, **2011**, 50, 13435-13443	3.9	25
76	Development of a scalable infrastructure model for planning electricity generation and CO2 mitigation strategies under mandated reduction of GHG emission. *Applied Energy*, **2011**, 88, 5056-5068	10.7	25
75	Design under uncertainty of carbon capture, utilization and storage infrastructure considering profit, environmental impact, and risk preference. *Applied Energy*, **2019**, 238, 34-44	10.7	24
74	Techno-economic analysis of methanol production from joint feedstock of coke oven gas and basic oxygen furnace gas from steel-making. *Journal of Industrial and Engineering Chemistry*, **2019**, 75, 77-85	6.3	23
73	Process synthesis and analysis for catalytic conversion of lignocellulosic biomass to fuels: Separate conversion of cellulose and hemicellulose using 2-sec-butylphenol (SBP) solvent. *Applied Energy*, **2016**, 171, 483-490	10.7	22
72	Economic process design for separation of CO2 from the off-gas in ironmaking and steelmaking plants. *Energy*, **2015**, 88, 756-764	7.9	21
71	Food waste valorization to green energy vehicles: sustainability assessment. *Energy and Environmental Science*, **2021**, 14, 3651-3663	35.4	21
70	Catalytic production of biofuels (butene oligomers) and biochemicals (tetrahydrofurfuryl alcohol) from corn stover. *Bioresource Technology*, **2016**, 211, 360-6	11	20
69	A catalytic biofuel production strategy involving separate conversion of hemicellulose and cellulose using 2-sec-butylphenol (SBP) and lignin-derived (LD) alkylphenol solvents. *Bioresource Technology*, **2016**, 204, 1-8	11	19
68	Biorenewable Strategy for Catalytic ε-Caprolactam Production Using Cellulose- and Hemicellulose-Derived γ-Valerolactone. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 1892-1898	8.3	18
67	Techno-economic and climate impact analysis of carbon utilization process for methanol production from blast furnace gas over Cu/ZnO/Al2O3 catalyst. *Energy*, **2020**, 198, 117355	7.9	17
66	A Comprehensive Infrastructure Assessment Model for Carbon Capture and Storage Responding to Climate Change under Uncertainty. *Industrial & Engineering Chemistry Research*, **2013**, 52, 3805-3815	3.9	17
65	Process design and techno-economic evaluation for catalytic production of cellulosic γ-Valerolactone using lignin derived propyl guaiacol. *Journal of Industrial and Engineering Chemistry*, **2017**, 52, 218-223	6.3	16
64	A Multiobjective Optimization Approach for CCS Infrastructure Considering Cost and Environmental Impact. *Industrial & Engineering Chemistry Research*, **2012**, 51, 14145-14157	3.9	15
63	Simulation study of a strategy to produce gamma-valerolactone from ethyl levulinate. *Energy*, **2018**, 163, 986-991	7.9	15
62	Recent advances in valorization of organic municipal waste into energy using biorefinery approach, environment and economic analysis. *Bioresource Technology*, **2021**, 337, 125498	11	15

61	A preliminary infrastructure design to use fossil fuels with carbon capture and storage and renewable energy systems. *International Journal of Hydrogen Energy*, **2012**, 37, 17321-17335	6.7	14
60	Process systems engineering studies for catalytic production of bio-based platform molecules from lignocellulosic biomass. *Energy Conversion and Management*, **2017**, 138, 511-517	10.6	13
59	A systematic process integration framework for the optimal design and techno-economic performance analysis of energy supply and CO2 mitigation strategies. *Applied Energy*, **2014**, 125, 136-146	10.7	12
58	Catalytic production of 1,4-pentanediol from corn stover. *Bioresource Technology*, **2017**, 245, 442-448	11	12
57	Optimal strategy for carbon capture and storage infrastructure: A review. *Korean Journal of Chemical Engineering*, **2012**, 29, 975-984	2.8	12
56	Integrated process for electrocatalytic conversion of glycerol to chemicals and catalytic conversion of corn stover to fuels. *Energy Conversion and Management*, **2018**, 163, 180-186	10.6	11
55	Integrated hydrogen supply networks for waste biogas upgrading and hybrid carbon-hydrogen pinch analysis under hydrogen demand uncertainty. *Applied Thermal Engineering*, **2018**, 140, 386-397	5.8	11
54	Development of a Multiperiod Model for Planning CO2 Disposal and Utilization Infrastructure. *Industrial & Engineering Chemistry Research*, **2012**, 51, 2983-2996	3.9	11
53	Binary LLE for Propyl Vinyl Ether (PVE) + Water, Ternary LLE for PVE + Methanol or Ethanol + Water at 298.15 K, and VE and R at 293.15 K for the Mixture of PVE + Ethanol + 2,2,4-Trimethylpentane. *Journal of Chemical & Engineering Data*, **2007**, 52, 2395-2399	2.8	11
52	Development of an integrated network for utility supply and carbon dioxide mitigation systems: applicability of biodiesel production. *Journal of Cleaner Production*, **2019**, 232, 542-558	10.3	10
51	Multi-period stochastic mathematical model for the optimal design of integrated utility and hydrogen supply network under uncertainty in raw material prices. *Energy*, **2016**, 114, 418-430	7.9	10
50	Integrated process for simultaneous production of jet fuel range alkenes and N-methylformanilide using biomass-derived gamma-valerolactone. *Journal of Industrial and Engineering Chemistry*, **2017**, 48, 173-179	6.3	9
49	Optimal design of shale gas supply chain network considering MPC-based pumping schedule of hydraulic fracturing in unconventional reservoirs. *Chemical Engineering Research and Design*, **2019**, 147, 412-429	5.5	9
48	Comprehensive analysis of two catalytic processes to produce formic acid from carbon dioxide. *Applied Energy*, **2020**, 264, 114711	10.7	9
47	Economic optimization of integrated network for utility supply and carbon dioxide mitigation with multi-site and multi-period demand uncertainties. *Applied Energy*, **2018**, 220, 723-734	10.7	9
46	Developing a Two-Stage Stochastic Programming Model for CO2 Disposal Planning under Uncertainty. *Industrial & Engineering Chemistry Research*, **2012**, 51, 3368-3380	3.9	9
45	Enhancement of energy efficiency and economics of process designs for catalytic co-production of bioenergy and bio-based products from lignocellulosic biomass. *International Journal of Energy Research*, **2017**, 41, 1553-1562	4.5	8
44	Catalytic conversion of corn stover for <gamma>-valerolactone production by two different solvent strategies: Techno-economic assessment. *Energy*, **2019**, 175, 546-553	7.9	8

43	Environmental analysis of bioethanol production strategies from corn stover via enzymatic and nonenzymatic sugar production. *Bioresource Technology*, **2021**, 328, 124808	11	8
42	Developing a Mathematical Modeling Framework of Carbon Dioxide Capture, Transport and Storage Networks. *Journal of Chemical Engineering of Japan*, **2012**, 45, 504-527	0.8	6
41	Evaluating the environmental impacts of formic acid production from CO2: catalytic hydrogenation vs. electrocatalytic reduction. *Green Chemistry*,	10	6
40	Integrated polylactic acid and biodiesel production from food waste: Process synthesis and economics. *Bioresource Technology*, **2022**, 343, 126119	11	6
39	Economic feasible strategy of cellulosic biofuels: Co-production of pentanediols. *Energy*, **2020**, 193, 116797	7.9	6
38	Economically feasible thermochemical process for methanol production from kenaf. *Energy*, **2021**, 230, 120729	7.9	6
37	Organic-waste-derived butyric acid-to-biodiesel supply-chain network: Strategic planning design using a deterministic snapshot model. *Journal of Environmental Management*, **2021**, 293, 112848	7.9	6
36	Economically feasible production of green methane from vegetable and fruit-rich food waste. *Energy*, **2021**, 235, 121397	7.9	6
35	Operating Optimization and Economic Evaluation of Multicomponent Gas Separation Process using Pressure Swing Adsorption and Membrane Process. *Korean Chemical Engineering Research*, **2015**, 53, 31-38		5
34	Lifecycle assessment of methanol production from blast furnace gas. *Environmental Science and Pollution Research*, **2021**, 28, 61601-61607	5.1	5
33	Stochastic Approach to Optimize the Supply Chain Network of Microalga-Derived Biodiesel under Uncertain Diesel Demand. *Journal of Chemical Engineering of Japan*, **2020**, 53, 24-35	0.8	4
32	Renewable Butanol Production via Catalytic Routes. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	4
31	Catalytic syngas production from carbon dioxide of two emission source scenarios: techno-economic assessment. *Journal of Industrial and Engineering Chemistry*, **2021**, 96, 213-218	6.3	4
30	Integrated strategy for concurrent production of furfuryl alcohol and glycerol oxygenates. *Journal of Industrial and Engineering Chemistry*, **2019**, 73, 268-275	6.3	3
29	Technoeconomic Feasibility Study of Monoethanolamine-Based CO2 Capture System Deployment to be Retrofitted to an Existing Utility System in a Chemical Plant. *Industrial & Engineering Chemistry Research*, **2013**, 52, 18334-18344	3.9	3
28	Economically-feasible production of a nylon monomer using RANEY catalysts. *Reaction Chemistry and Engineering*, **2021**, 6, 225-234	4.9	3
27	Electrochemical production of formic acid from carbon dioxide: A life cycle assessment study. *Journal of Environmental Chemical Engineering*, **2021**, 9, 106130	6.8	3
26	Integrated strategy for N-methylformanilide production from carbon dioxide of flue gas in coal-fired power plant. *Energy Conversion and Management*, **2017**, 139, 135-139	10.6	2

25	Techno-economic analysis of food waste valorization for integrated production of polyhydroxyalkanoates and biofuels.. *Bioresource Technology*, **2022**, 348, 126796	11	2
24	A stochastic programming approach for the integrated network with utility supply and carbon dioxide mitigation systems in uncertain utility demand. *Energy Conversion and Management*, **2018**, 176, 299-308	10.6	2
23	Environmental analysis of methanol production from coke oven gas. *International Journal of Environmental Science and Technology*,1	3.3	2
22	Impact of uncertainty in technological cycle on circular economy: Bio-based jet fuel range alkenes and pentanediols production. *Journal of Industrial and Engineering Chemistry*, **2021**, 104, 356-356	6.3	2
21	Supply chain management of butyric acid-derived butanol: Stochastic approach. *Applied Energy*, **2021**, 297, 117119	10.7	2
20	Waste-to-bioethanol supply chain network: A deterministic model. *Applied Energy*, **2021**, 300, 117381	10.7	2
19	Bio-based process for the catalytic production of ethyl levulinate from cellulose. *Applied Energy*, **2021**, 300, 117430	10.7	2
18	Process integration and economics of gamma-valerolactone using a cellulose-derived ethyl levulinate intermediate and ethanol solvent. *Energy*, **2022**, 239, 121964	7.9	2
17	Organic waste derived biodiesel supply chain network: Deterministic multi-period planning model. *Applied Energy*, **2022**, 305, 117847	10.7	2
16	Process evaluation and techno-economic analysis of biodiesel production from marine macroalgae Codium tomentosum.. *Bioresource Technology*, **2022**, 351, 126969	11	2
15	Techno-economic Feasibility Study for Catalytic Production of 1,2-Pentanediol from Bio-renewable Furfural. *Computer Aided Chemical Engineering*, **2018**, 44, 145-150	0.6	1
14	Synthesis of catalytic biomass-to-fuels strategies. *Computer Aided Chemical Engineering*, **2014**, 34, 615-620	0.6	1
13	Development an Optimization Model for Green Supply Chains: Integration of CO2 Disposal and Renewable Energy Supply. *Computer Aided Chemical Engineering*, **2012**, 317-321	0.6	1
12	Energy-efficient thermal waste treatment process with no CO2 emission: A case study of waste tea bag. *Energy*, **2022**, 241, 122876	7.9	1
11	Development of a Deterministic Optimization Model for Design of an Integrated Utility and Hydrogen Supply Network. *Korean Chemical Engineering Research*, **2014**, 52, 603-612		1
10	Strategic Planning of Carbon Capture & Storage (CCS) Infrastructure Considering the Uncertainty in the Operating Cost and Carbon Tax. *Korean Chemical Engineering Research*, **2012**, 50, 471-478		1
9	A strategy for food waste-to-biofuels: Co-production of gasoline alternatives from volatile fatty acids. *Journal of Cleaner Production*, **2022**, 348, 131408	10.3	0
8	Climate variability and food waste treatment: Analysis for bioenergy sustainability. *Renewable and Sustainable Energy Reviews*, **2022**, 160, 112336	16.2	0

List of Publications

7	Economically-feasible greener transformation of gamma-valerolactone to nylon 6,6. *Biomass and Bioenergy*, **2022**, 162, 106503	5.3	0
6	Techno-economic analysis of biodiesel production from nonedible biooil using catalytic transesterification **2022**, 601-626		0
5	Optimal design under uncertainty of carbon capture, utilization, and sequestration network considering benefit, environmental impact, and preference on risk. *Computer Aided Chemical Engineering*, **2018**, 44, 1585-1590	0.6	
4	Integrated Design Strategy for Optimization of Utility Supply and Carbon Utilization: Multiperiod Deterministic Model. *Computer Aided Chemical Engineering*, **2018**, 44, 1567-1572	0.6	
3	Catalytic Production of Gamma-Valerolactone from Two Different Feedstocks. *Computer Aided Chemical Engineering*, **2018**, 295-300	0.6	
2	Environmental Analysis of Catalytic Adipic Acid Production Strategies from Two Different Lignocellulosic Biomasses. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 5888-5894	8.3	
1	Environmental analysis of methanol production from steel-making offgas. *Environmental Technology and Innovation*, **2022**, 102694	7	