Wangyun

List of Publications by Year
in descending order

61 papers	1,847 citations	331670 21 h-index	265206 42 g-index
61 all docs	61 docs citations	61 times ranked	2289 citing authors

#	Article	IF	Citations
1	Toward Economical and Sustainable Production of Renewable Plastic: Integrative System‐Level Analyses. ChemSusChem, 2022, 15, .	6.8	10
2	Development of Co–Nb–CeO$_2$ Catalyst for Hydrogen Production from Waste-Derived Synthesis Gas Using Techno-Economic and Environmental Assessment. ACS Sustainable Chemistry and Engineering, 2022, 10, 6289-6303.	6.7	10
3	Rethinking of conventional Gas-to-Liquid via dimethyl ether intermediate incorporating renewable energy against Power-to-Liquid. Energy Conversion and Management, 2022, 261, 115643.	9.2	10
4	System-level analyses for the production of 1,6-hexanediol from cellulose. Energy, 2021, 214, 118974.	8.8	15
5	Improving revenue from lignocellulosic biofuels: An integrated strategy for coproducing liquid transportation fuels and high value-added chemicals. Fuel, 2021, 287, 119369.	6.4	21
6	Simultaneous production of 1,6-hexanediol, furfural, and high-purity lignin from white birch: Process integration and techno-economic evaluation. Bioresource Technology, 2021, 331, 125009.	9.6	19
7	Integrated strategy for coproducing bioethanol and adipic acid from lignocellulosic biomass. Journal of Cleaner Production, 2021, 311, 127849.	9.3	16
8	Coproduction of butene oligomers and adipic acid from lignocellulosic biomass: Process design and evaluation. Energy, 2021, 235, 121278.	8.8	14
9	Techno-Economic Analysis and Life-Cycle Assessment for the Production of Hydrogen from Biogas. Transactions of the Korean Hydrogen and New Energy Society, 2021, 32, 417-429.	0.6	3
10	Fluorine-containing polyimide/polysilsesquioxane carbon molecular sieve membranes and techno-economic evaluation thereof for C3H6/C3H8 separation. Journal of Membrane Science, 2020, 598, 117660.	8.2	34
11	Economical process for the co-production of renewable polymers and value-added chemicals from lignocellulosic biomass. Journal of Cleaner Production, 2020, 276, 124237.	9.3	21
12	Technical and economic feasibility under uncertainty for methane dry reforming of coke oven gas as simultaneous H2 production and CO2 utilization. Renewable and Sustainable Energy Reviews, 2020, 133, 110056.	16.4	29
13	Process synthesis and analysis of green plastic monomer production from cellulose. Journal of Cleaner Production, 2020, 277, 124072.	9.3	15
14	Process integration and optimization for economical production of commodity chemicals from lignocellulosic biomass. Renewable Energy, 2020, 162, 242-248.	8.9	26
15	Sustainable Production of Bioplastics from Lignocellulosic Biomass: Technoeconomic Analysis and Life-Cycle Assessment. ACS Sustainable Chemistry and Engineering, 2020, 8, 12419-12429.	6.7	64
16	Production of a sustainable and renewable biomass-derived monomer: conceptual process design and techno-economic analysis. Green Chemistry, 2020, 22, 7070-7079.	9.0	32
17	The economical production of functionalized Ashe juniper derived-biochar with high hazardous dye removal efficiency. Industrial Crops and Products, 2019, 137, 672-680.	5.2	29
18	Networked column compartment model for a tilted packed column with structured packing. Korean Journal of Chemical Engineering, 2019, 36, 789-799.	2.7	0

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19	Economic Analysis and Environmental Impact Assessment of Heat Pump-Assisted Distillation in a Gas Fractionation Unit. Energies, 2019, 12, 852.	3.1	14
20	Techno-economic optimization of the integration of an organic Rankine cycle into a molten carbonate fuel cell power plant. Korean Journal of Chemical Engineering, 2019, 36, 345-355.	2.7	11
21	Development and Optimization of the Biological Conversion of Ethane to Ethanol Using Whole-Cell Methanotrophs Possessing Methane Monooxygenase. Molecules, 2019, 24, 591.	3.8	9
22	An integrated strategy for the production of hydrocarbon fuels from lignocellulosic biomass. , 2019, , .		0
23	A new modeling approach for a CO2 capture process based on a blended amine solvent. Journal of Natural Gas Science and Engineering, 2019, 61, 206-214.	4.4	14
24	Liquid holdup and pressure drop in packed column with structured packing under offshore conditions. Chemical Engineering Science, 2019, 195, 894-903.	3.8	11
25	One-dimensional modeling of a turbulent fluidized bed for a sorbent-based CO2 capture process with solidâ€"solid sensible heat exchange. Energy, 2019, 168, 1168-1180.	8.8	22
26	Toward biomass-derived renewable plastics: Production of 2,5-furandicarboxylic acid from fructose. Science Advances, 2018, 4, eaap9722.	10.3	276
27	Simulated moving bed adsorption process based on a polyethylenimine-silica sorbent for CO2 capture with sensible heat recovery. Energy, 2018, 150, 950-964.	8.8	39
28	Risk based 3-dimensional and multifloor plant layout optimization for liquefied natural gas (LNG) liquefaction process. Korean Journal of Chemical Engineering, 2018, 35, 1053-1064.	2.7	10
29	Improving economics of lignocellulosic biofuels: An integrated strategy for coproducing 1,5-pentanediol and ethanol. Applied Energy, 2018, 213, 585-594.	10.1	60
30	A superstructure optimization approach for process synthesis under complex reaction networks. Chemical Engineering Research and Design, 2018, 137, 589-608.	5.6	18
31	An optimization-based design and analysis of a biomass derived hydrogen energy system. Computer Aided Chemical Engineering, 2018, 44, 1573-1578.	0.5	1
32	Delta-operator-based adaptive model predictive control and online optimization of a natural gas liquefaction process. Chemical Engineering Science, 2017, 162, 21-32.	3.8	12
33	Scenario-based approach for design and comparatively analysis of conventional and renewable energy systems. Energy, 2017, 129, 86-100.	8.8	14
34	Integration of carbon capture and sequestration and renewable resource technologies for sustainable energy supply in the transportation sector. Energy Conversion and Management, 2017, 143, 227-240.	9.2	17
35	Design and operation of renewable energy sources based hydrogen supply system: Technology integration and optimization. Renewable Energy, 2017, 103, 226-238.	8.9	121
36	An energy-efficient operation system for a natural gas liquefaction process: Development and application to a 100 ton-per-day plant. Computers and Chemical Engineering, 2017, 97, 208-219.	3.8	12

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37	Increasing the revenue from lignocellulosic biomass: Maximizing feedstock utilization. Science Advances, 2017, 3, e1603301.	10.3	352
38	A co-solvent hydrolysis strategy for the production of biofuels: process synthesis and technoeconomic analysis. Reaction Chemistry and Engineering, 2017, 2, 397-405.	3.7	38
39	Combined iterative learning and delta-operator adaptive linear quadratic Gaussian control of a commercial rapid thermal processing system. Chemical Engineering Science, 2017, 174, 146-156.	3.8	2
40	Thermal fractionation and catalytic upgrading of lignocellulosic biomass to biofuels: Process synthesis and analysis. Renewable Energy, 2017, 114, 357-366.	8.9	41
41	Bi-level optimizing operation of natural gas liquefaction process. Computers and Chemical Engineering, 2017, 96, 87-102.	3.8	17
42	A superstructure model of an isolated power supply system using renewable energy: Development and application to Jeju Island, Korea. Renewable Energy, 2016, 97, 177-188.	8.9	27
43	Effects of varying the ambient temperature on the performance of a single mixed refrigerant liquefaction process. Journal of Natural Gas Science and Engineering, 2016, 34, 958-968.	4.4	44
44	An engineered solvent system for sugar production from lignocellulosic biomass using biomass derived $\hat{I}^3$-valerolactone. Green Chemistry, 2016, 18, 5756-5763.	9.0	55
45	An intermittently moving bed adsorption process for carbon dioxide capture. International Journal of Greenhouse Gas Control, 2016, 49, 34-46.	4.6	14
46	Current trends for the floating liquefied natural gas (FLNG) technologies. Korean Journal of Chemical Engineering, 2014, 31, 732-743.	2.7	61
47	Study on the Flare Load Estimation of the Deethanizer using Dynamic Simulation. Korean Chemical Engineering Research, 2014, 52, 613-619.	0.2	0
48	Extended Kalman filter with adaptive grid allocation for a fixed-bed adsorption process. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 886-891.	0.4	1
49	Nonlinear observer with adaptive grid allocation for a fixed-bed adsorption process. Computers and Chemical Engineering, 2012, 46, 69-77.	3.8	12
50	Identification of a multivariable delta-operator stochastic state-space model with distributed time delays: Application to a rapid thermal processor. Computers and Chemical Engineering, 2012, 40, 223-230.	3.8	8
51	Modeling and parameter estimation for a fixed-bed adsorption process for CO2 capture using zeolite 13X. Separation and Purification Technology, 2012, 85, 120-129.	7.9	61
52	Parameter estimation and dynamic control analysis of central carbon metabolism in Escherichia coli. Biotechnology and Bioprocess Engineering, 2011, 16, 216-228.	2.6	9
53	Adaptive predictive collocation with a cubic spline interpolation function for convection-dominant fixed-bed processes: Application to a fixed-bed adsorption process. Chemical Engineering Journal, 2011, 166, 240-248.	12.7	20
54	Repetitive control and online optimization of Catofin propane process. Computers and Chemical Engineering, 2010, 34, 508-517.	3.8	25

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55	Combined run-to-run and LQG control of a 12-inch RTP equipment. Korean Journal of Chemical Engineering, 2009, 26, 1453-1460.	2.7	5
56	Synthesis of run-to-run repetitive control methods using finite impulse response models. Journal of Process Control, 2009, 19, 364-369.	3.3	3
57	Repetitive Control and Online Optimization of Catofin Propane Process. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 273-278.	0.4	2
58	Model predictive control of condensate recycle process in a cogeneration power station: Controller design and numerical application. Korean Journal of Chemical Engineering, 2008, 25, 972-979.	2.7	4
59	Online optimization of CATOFIN process. , 2007, , .		0
60	Repetitive control of CATOFIN process. Korean Journal of Chemical Engineering, 2007, 24, 921-926.	2.7	17
61	Model Predictive Control of Condensate Recycle Process in a Cogeneration Power Station : I. Controller Design and Numerical Application. , 2006, , .		0