

Sungwon Hwang

List of Publications by Year in descending order

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Version: 2024-02-01

35
papers

518
citations

759233

12
h-index

677142

22
g-index

35
all docs

35
docs citations

35
times ranked

527
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of NO _x reduction system utilizing artificial neural network (ANN) and genetic algorithm (GA). Journal of Cleaner Production, 2019, 232, 1418-1429.	9.3	66
2	Heterogeneous catalytic reactor design with optimum temperature profile I: application of catalyst dilution and side-stream distribution. Chemical Engineering Science, 2004, 59, 4229-4243.	3.8	52
3	Development of model predictive control system using an artificial neural network: A case study with a distillation column. Journal of Cleaner Production, 2020, 277, 124124.	9.3	49
4	Electrochemically polymerized vine-like nanostructured polyaniline on activated carbon nanofibers for supercapacitor. Electrochimica Acta, 2013, 111, 136-143.	5.2	48
5	Development of NO _x removal process for LNG evaporation system: Comparative assessment between response surface methodology (RSM) and artificial neural network (ANN). Journal of Industrial and Engineering Chemistry, 2019, 74, 136-147.	5.8	34
6	Multiscale modeling of dendrite formation in lithium-ion batteries. Computers and Chemical Engineering, 2021, 153, 107415.	3.8	29
7	Integrating hydrogen liquefaction with steam methane reforming and CO ₂ liquefaction processes using techno-economic perspectives. Energy Conversion and Management, 2021, 245, 114620.	9.2	27
8	Model predictive control of Lithium-ion batteries: Development of optimal charging profile for reduced intracycle capacity fade using an enhanced single particle model (SPM) with first-principled chemical/mechanical degradation mechanisms. Chemical Engineering Journal, 2022, 435, 134768.	12.7	27
9	Heterogeneous catalytic reactor design with optimum temperature profile II: application of non-uniform catalyst. Chemical Engineering Science, 2004, 59, 4245-4260.	3.8	23
10	A unified framework for the mathematical modelling, predictive analysis, and optimization of reaction systems using computational fluid dynamics, deep neural network and genetic algorithm: A case of butadiene synthesis. Chemical Engineering Journal, 2021, 409, 128163.	12.7	22
11	Development of dynamic simulation model of LNG tank and its operational strategy. Energy, 2021, 223, 120060.	8.8	19
12	OPTIMUM REACTOR DESIGN IN METHANATION PROCESSES WITH NONUNIFORM CATALYSTS. Chemical Engineering Communications, 2008, 196, 616-642.	2.6	17
13	Estimation of Microstructural Properties of Wormlike Micelles Via a Multi-Scale Multi-Recommendation Batch Bayesian Optimization. Industrial & Engineering Chemistry Research, 2021, 60, 15669-15678.	3.7	13
14	Model Building Methodology for Multiphase Reaction Systems—Modeling of CO ₂ Absorption in Monoethanolamine for Laminar Jet Absorbers and Packing Beds. Industrial & Engineering Chemistry Research, 2012, 51, 4328-4346.	3.7	10
15	Dynamic analysis and optimization of flare network system for topside process of offshore plant. Chemical Engineering Research and Design, 2020, 134, 260-269.	5.6	10
16	Conceptual Design of a Fischer–Tropsch Reactor in a Gas-to-Liquid Process. Industrial & Engineering Chemistry Research, 2015, 54, 6749-6760.	3.7	7
17	Tubular reactor design for the oxidative dehydrogenation of butene using computational fluid dynamics (CFD) modeling. Korean Journal of Chemical Engineering, 2018, 35, 2157-2163.	2.7	7
18	Production of butene and butadiene by oxidative dehydrogenation of butane over carbon nanomaterial catalysts. Korean Journal of Chemical Engineering, 2016, 33, 3417-3424.	2.7	6

#	ARTICLE	IF	CITATIONS
19	A new approach to developing a conceptual topside process design for an offshore platform. Korean Journal of Chemical Engineering, 2018, 35, 20-33.	2.7	6
20	Dynamic modeling and predictive control of boil-off gas generation during LNG loading. Computers and Chemical Engineering, 2022, 160, 107698.	3.8	6
21	A novel methodology for the modeling of CO ₂ absorption in monoethanolamine (MEA) using discrimination of rival kinetics. Journal of Industrial and Engineering Chemistry, 2015, 25, 78-88.	5.8	5
22	Technology development for the reduction of NO _x in flue gas from a burner-type vaporizer and its application. Korean Journal of Chemical Engineering, 2017, 34, 1619-1629.	2.7	5
23	Software platform for high-fidelity-data-based artificial neural network modeling and process optimization in chemical engineering. Computers and Chemical Engineering, 2022, 158, 107637.	3.8	5
24	Process integration of solid oxide fuel cells with process utility systems. Clean Technologies and Environmental Policy, 2013, 15, 801-815.	4.1	4
25	Influence of graphene nanoplatelets content on the structure and properties of macroporous carbon foams prepared by organic colloidal templates. Journal of Materials Science, 2014, 49, 2063-2069.	3.7	4
26	3-D Multi-Tubular Reactor Model Development for the Oxidative Dehydrogenation of Butene to 1,3-Butadiene. ChemEngineering, 2020, 4, 46.	2.4	4
27	Application of simulated annealing (SA) to the synthesis of heterogeneous catalytic reactor. Korean Journal of Chemical Engineering, 2012, 29, 25-35.	2.7	3
28	Catalytic propane dehydrogenation: Advanced strategies for the analysis and design of moving bed reactors. Korean Journal of Chemical Engineering, 2015, 32, 2169-2180.	2.7	3
29	Machine learnings for CVD graphene analysis: From measurement to simulation of SEM images. Journal of Industrial and Engineering Chemistry, 2021, 101, 430-444.	5.8	3
30	A novel approach to the design and operation scheduling of heterogeneous catalytic reactors. Korean Journal of Chemical Engineering, 2014, 31, 1136-1147.	2.7	2
31	Model Building Methodology for Multiphase Reaction Systems. Industrial & Engineering Chemistry Research, 2011, 50, 10148-10157.	3.7	1
32	Modeling and Optimization of High Strength Wastewater Treatment Using the Electro Oxidation Process. Korean Chemical Engineering Research, 2016, 54, 340-349.	0.2	1
33	Life cycle based optimal design of utility system in offshore plants. Korean Journal of Chemical Engineering, 2021, 38, 692-703.	2.7	0
34	Cooling effects of different molten salts and tube diameters on the performance of chemical reactors using butadiene synthesis as a case study. Applied Thermal Engineering, 2021, 187, 116584.	6.0	0
35	Dynamic analysis of a flare network: Gas blow-by and depressurization system. Korean Journal of Chemical Engineering, 2022, 39, 838.	2.7	0