Sungwon Hwang

List of Publications by Year
in descending order

35 papers	518 citations

758635

12 h-index	

676716

22 g-index	

35 all docs	35 docs citations

35 times ranked	527 citing authors

#	Article	IF	Citations
1	Software platform for high-fidelity-data-based artificial neural network modeling and process optimization in chemical engineering. Computers and Chemical Engineering, 2022, 158, 107637.	2.0	5
2	Dynamic analysis of a flare network: Gas blow-by and depressurization system. Korean Journal of Chemical Engineering, 2022, 39, 838.	1.2	0
3	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.	6.6	27
4	Dynamic modeling and predictive control of boil-off gas generation during LNG loading. Computers and Chemical Engineering, 2022, 160, 107698.	2.0	6
5	Life cycle based optimal design of utility system in offshore plants. Korean Journal of Chemical Engineering, 2021, 38, 692-703.	1.2	0
6	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.	3.0	0
7	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.	6.6	22
8	Development of dynamic simulation model of LNG tank and its operational strategy. Energy, 2021, 223, 120060.	4.5	19
9	Machine learnings for CVD graphene analysis: From measurement to simulation of SEM images. Journal of Industrial and Engineering Chemistry, 2021, 101, 430-444.	2.9	3
10	Integrating hydrogen liquefaction with steam methane reforming and CO_2 liquefaction processes using techno-economic perspectives. Energy Conversion and Management, 2021, 245, 114620.	4.4	27
11	Multiscale modeling of dendrite formation in lithium-ion batteries. Computers and Chemical Engineering, 2021, 153, 107415.	2.0	29
12	Estimation of Microstructural Properties of Wormlike Micelles Via a Multi-Scale Multi-Recommendation Batch Bayesian Optimization. Industrial & Engineering Chemistry Research, 2021, 60, 15669-15678.	1.8	13
13	Dynamic analysis and optimization of flare network system for topside process of offshore plant. Chemical Engineering Research and Design, 2020, 134, 260-269.	2.7	10
14	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.	4.6	49
15	3-D Multi-Tubular Reactor Model Development for the Oxidative Dehydrogenation of Butene to 1,3-Butadiene. ChemEngineering, 2020, 4, 46.	1.0	4
16	Development of NOx reduction system utilizing artificial neural network (ANN) and genetic algorithm (GA). Journal of Cleaner Production, 2019, 232, 1418-1429.	4.6	66
17	Development of NOx 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.	2.9	34
18	A new approach to developing a conceptual topside process design for an offshore platform. Korean Journal of Chemical Engineering, 2018, 35, 20-33.	1.2	6

#	Article	IF	Citations
19	Tubular reactor design for the oxidative dehydrogenation of butene using computational fluid dynamics (CFD) modeling. Korean Journal of Chemical Engineering, 2018, 35, 2157-2163.	1.2	7
20	Technology development for the reduction of NOx in flue gas from a burner-type vaporizer and its application. Korean Journal of Chemical Engineering, 2017, 34, 1619-1629.	1.2	5
21	Production of butene and butadiene by oxidative dehydrogenation of butane over carbon nanomaterial catalysts. Korean Journal of Chemical Engineering, 2016, 33, 3417-3424.	1.2	6
22	Modeling and Optimization of High Strength Wastewater Treatment Using the Electro Oxidation Process. Korean Chemical Engineering Research, 2016, 54, 340-349.	0.2	1
23	Catalytic propane dehydrogenation: Advanced strategies for the analysis and design of moving bed reactors. Korean Journal of Chemical Engineering, 2015, 32, 2169-2180.	1.2	3
24	Conceptual Design of a Fischer–Tropsch Reactor in a Gas-to-Liquid Process. Industrial & Engineering Chemistry Research, 2015, 54, 6749-6760.	1.8	7
25	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.	2.9	5
26	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.	1.7	4
27	A novel approach to the design and operation scheduling of heterogeneous catalytic reactors. Korean Journal of Chemical Engineering, 2014, 31, 1136-1147.	1.2	2
28	Electrochemically polymerized vine-like nanostructured polyaniline on activated carbon nanofibers for supercapacitor. Electrochimica Acta, 2013, 111, 136-143.	2.6	48
29	Process integration of solid oxide fuel cells with process utility systems. Clean Technologies and Environmental Policy, 2013, 15, 801-815.	2.1	4
30	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.	1.8	10
31	Application of simulated annealing (SA) to the synthesis of heterogeneous catalytic reactor. Korean Journal of Chemical Engineering, 2012, 29, 25-35.	1.2	3
32	Model Building Methodology for Multiphase Reaction Systems. Industrial & Engineering Chemistry Research, 2011, 50, 10148-10157.	1.8	1
33	OPTIMUM REACTOR DESIGN IN METHANATION PROCESSES WITH NONUNIFORM CATALYSTS. Chemical Engineering Communications, 2008, 196, 616-642.	1.5	17
34	Heterogeneous catalytic reactor design with optimum temperature profile II: application of non-uniform catalyst. Chemical Engineering Science, 2004, 59, 4245-4260.	1.9	23
35	Heterogeneous catalytic reactor design with optimum temperature profile I: application of catalyst dilution and side-stream distribution. Chemical Engineering Science, 2004, 59, 4229-4243.	1.9	52