

Dae Ryook Yang

List of Publications by Year in descending order

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102
papers

2,155
citations

236925

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h-index

243625

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102
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102
docs citations

102
times ranked

2043
citing authors

#	ARTICLE	IF	CITATIONS
1	A comprehensive review of energy consumption of seawater reverse osmosis desalination plants. <i>Applied Energy</i> , 2019, 254, 113652.	10.1	284
2	Gliding arc plasma processing of CO ₂ conversion. <i>Journal of Hazardous Materials</i> , 2007, 146, 309-315.	12.4	170
3	Towards a low-energy seawater reverse osmosis desalination plant: A review and theoretical analysis for future directions. <i>Journal of Membrane Science</i> , 2020, 595, 117607.	8.2	154
4	Toward a combined system of forward osmosis and reverse osmosis for seawater desalination. <i>Desalination</i> , 2009, 247, 239-246.	8.2	125
5	Simulation of forward osmosis membrane process: Effect of membrane orientation and flow direction of feed and draw solutions. <i>Desalination</i> , 2011, 277, 83-91.	8.2	91
6	Mathematical model of flat sheet membrane modules for FO process: Plate-and-frame module and spiral-wound module. <i>Journal of Membrane Science</i> , 2011, 379, 403-415.	8.2	85
7	Artificial neural network model for optimizing operation of a seawater reverse osmosis desalination plant. <i>Desalination</i> , 2009, 247, 180-189.	8.2	68
8	Experimental application of a quadratic optimal iterative learning control method for control of wafer temperature uniformity in rapid thermal processing. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2003, 16, 36-44.	1.7	63
9	Advanced VOCs decomposition method by gliding arc plasma. <i>Chemical Engineering Journal</i> , 2007, 131, 337-341.	12.7	54
10	Partial oxidation of methane with Cu-Zn-Al catalyst in a dielectric barrier discharge. <i>Chemical Engineering and Processing: Process Intensification</i> , 2008, 47, 780-786.	3.6	48
11	Optimization on a new hybrid Forward osmosis-Electrodialysis-Reverse osmosis seawater desalination process. <i>Desalination</i> , 2016, 398, 265-281.	8.2	43
12	Completion times and optimal scheduling for serial multi-product processes with transfer and set-up times in zero-wait policy. <i>Computers and Chemical Engineering</i> , 1994, 18, 537-543.	3.8	35
13	Integrated run-to-run and on-line model-based control of particle size distribution for a semi-batch precipitation reactor. <i>Computers and Chemical Engineering</i> , 2002, 26, 1117-1131.	3.8	35
14	Comprehensive analysis of a hybrid FO/crystallization/RO process for improving its economic feasibility to seawater desalination. <i>Water Research</i> , 2020, 171, 115426.	11.3	34
15	Development and Current Status of the Korea Thermophysical Properties Databank (KDB). <i>International Journal of Thermophysics</i> , 2001, 22, 487-494.	2.1	31
16	Effect of potassium addition on bimetallic PtSn supported γ -Al ₂ O ₃ catalyst for n-butane dehydrogenation to olefins. <i>Catalysis Today</i> , 2014, 232, 40-52.	4.4	31
17	Cost-based feasibility study and sensitivity analysis of a new draw solution assisted reverse osmosis (DSARO) process for seawater desalination. <i>Desalination</i> , 2017, 422, 182-193.	8.2	30
18	Feasibility study of a forward osmosis/crystallization/reverse osmosis hybrid process with high-temperature operation: Modeling, experiments, and energy consumption. <i>Journal of Membrane Science</i> , 2018, 555, 206-219.	8.2	30

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19	Lys296 and Arg299 residues in the C-terminus of MD-ACO1 are essential for a 1-aminocyclopropane-1-carboxylate oxidase enzyme activity. <i>Journal of Structural Biology</i> , 2006, 156, 407-420.	2.8	29
20	Modeling and Parameter Identification of the Simultaneous Saccharification-Fermentation Process for Ethanol Production. <i>Biotechnology Progress</i> , 2007, 23, 1454-1462.	2.6	29
21	Indirect adaptive nonlinear control of a pH process. <i>Computers and Chemical Engineering</i> , 2002, 26, 1223-1230.	3.8	27
22	The active site and substrate-binding mode of 1-aminocyclopropane-1-carboxylate oxidase determined by site-directed mutagenesis and comparative modelling studies. <i>Biochemical Journal</i> , 2004, 380, 339-346.	3.7	27
23	Theoretical analysis of a seawater desalination process integrating forward osmosis, crystallization, and reverse osmosis. <i>Journal of Membrane Science</i> , 2013, 444, 440-448.	8.2	27
24	Theoretical Analysis of Pressure Retarded Membrane Distillation (PRMD) Process for Simultaneous Production of Water and Electricity. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 14888-14901.	3.7	27
25	The process design and simulation for the methanol production on the FPSO (floating production,) Tj ETQq1 1 0.784314 rgBTJ /Overlock	5.6	26
26	Low-recovery, -energy-consumption, -emission hybrid systems of seawater desalination: Energy optimization and cost analysis. <i>Desalination</i> , 2019, 468, 114085.	8.2	26
27	Enhancement of Cephalosporin C production by cultivation of <i>Cephalosporium acremonium</i> M25 using a mixture of inocula. <i>Letters in Applied Microbiology</i> , 2001, 32, 402-406.	2.2	23
28	CCL4DECOMPOSITION BY GLIDING ARC PLASMA: ROLE OF C2COMPOUNDS ON PRODUCTS DISTRIBUTION. <i>Chemical Engineering Communications</i> , 2007, 194, 1111-1125.	2.6	23
29	A fouling model for simulating long-term performance of SWRO desalination process. <i>Journal of Membrane Science</i> , 2012, 401-402, 282-291.	8.2	23
30	pH Control Using an Identification Reactor. <i>Industrial & Engineering Chemistry Research</i> , 1995, 34, 2418-2426.	3.7	22
31	Monitoring of a distillation column using modified extended Kalman filter and a reduced order model. <i>Computers and Chemical Engineering</i> , 1997, 21, S565-S570.	3.8	22
32	Operating Strategy for Continuous Multistage Mixed Suspension and Mixed Product Removal (MSMPR) Crystallization Processes Depending on Crystallization Kinetic Parameters. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 7142-7153.	3.7	22
33	The Importance of the Aging Time to Prepare Cu/ZnO/Al ₂ O ₃ Catalyst with High Surface Area in Methanol Synthesis. <i>Bulletin of the Korean Chemical Society</i> , 2010, 31, 1241-1246.	1.9	22
34	Cybernetic modeling of the cephalosporin C fermentation process by <i>Cephalosporium acremonium</i> . <i>Biotechnology Letters</i> , 2003, 25, 611-616.	2.2	20
35	Site-specific raw seawater quality impact study on SWRO process for optimizing operation of the pressurized step. <i>Desalination</i> , 2009, 238, 140-157.	8.2	20
36	Reduction of Energy Consumption in the Process Industry Using a Heat-Integrated Hybrid Distillation Pervaporation Process. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 4484-4494.	3.7	20

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37	Theoretical investigation of hybrid desalination system combining reverse osmosis and forward osmosis. <i>Desalination and Water Treatment</i> , 2010, 15, 114-120.	1.0	19
38	Synthesis of maximum energy recovery networks in batch processes. <i>Korean Journal of Chemical Engineering</i> , 1994, 11, 162-171.	2.7	15
39	An explicit solution of the mathematical model for osmotic desalination process. <i>Korean Journal of Chemical Engineering</i> , 2013, 30, 1691-1699.	2.7	15
40	Modeling of Metastable Zone Width Behavior with Dynamic Equation. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 8158-8165.	3.7	14
41	Development of a package model for process simulation and cost estimation of seawater reverse osmosis desalination plant. <i>Desalination</i> , 2009, 247, 326-335.	8.2	13
42	Comprehensive assessment of the effects of operating conditions on membrane intrinsic parameters of forward osmosis (FO) based on principal component analysis (PCA). <i>Journal of Membrane Science</i> , 2022, 641, 119909.	8.2	13
43	Prediction of reverse osmosis membrane fouling due to scale formation in the presence of dissolved organic matters using genetic programming. <i>Desalination and Water Treatment</i> , 2010, 15, 121-128.	1.0	12
44	Energetic and exergetic analyses of a closed-loop pressure retarded membrane distillation (PRMD) for low-grade thermal energy utilization and freshwater production. <i>Desalination</i> , 2022, 534, 115799.	8.2	12
45	Modelling of crystallization process and optimization of the cooling strategy. <i>Korean Journal of Chemical Engineering</i> , 2009, 26, 1220-1225.	2.7	11
46	Simulation of Taylor-Couette reactor for particle classification using CFD. <i>Journal of Crystal Growth</i> , 2013, 373, 106-110.	1.5	11
47	Supersonically sprayed thermal barrier layers using clay micro-particles. <i>Applied Clay Science</i> , 2016, 120, 142-146.	5.2	10
48	Experimental simultaneous state and parameter identification of a pH neutralization process based on an extended Kalman Filter. <i>Korean Journal of Chemical Engineering</i> , 2004, 21, 753-760.	2.7	9
49	Process systems engineering approaches to speed-up the auto-titrator operations. <i>Korean Journal of Chemical Engineering</i> , 2009, 26, 636-640.	2.7	9
50	Measurement and Correlation of the Solubility of Carbon Dioxide in the Mixtures of Aqueous Monoethanolamine Solution and Benzoic Acid. <i>Journal of Chemical & Engineering Data</i> , 2012, 57, 3744-3750.	1.9	9
51	A novel method for measurement of crystal growth rate. <i>Journal of Crystal Growth</i> , 2013, 373, 54-58.	1.5	9
52	Quantitative estimation of internal concentration polarization in a spiral wound forward osmosis membrane module compared to a flat sheet membrane module. <i>Korean Journal of Chemical Engineering</i> , 2017, 34, 844-853.	2.7	9
53	Half order plus time delay (HOPTD) models to tune PI controllers. <i>AIChE Journal</i> , 2017, 63, 601-609.	3.6	9
54	Indirect Adaptive Backstepping Control of a pH Neutralization Process Based on Recursive Prediction Error Method for Combined State and Parameter Estimation. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 4102-4110.	3.7	8

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55	A new method of amine solvent recovery with acid addition for energy reduction in the CO ₂ absorption process. <i>Chemical Engineering Research and Design</i> , 2013, 91, 2630-2638.	5.6	7
56	Membrane transport behavior characterization method with constant water flux in pressure-assisted forward osmosis. <i>Desalination</i> , 2021, 498, 114738.	8.2	7
57	Adsorption and Desorption Dynamics of Evaporative Fuel Gas in Canister of ORVR (On-Board Refueling) Tj ETQq1 1,0,784314,rgBT /O	1.5	6
58	Simple Proportional Integral Controller Tuning Rules for FOPTD and HOPTD Models Based on Matching Two Asymptotes. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 2905-2916.	3.7	6
59	Optimal synthesis for the retrofitting of multiproduct batch plants. <i>Industrial & Engineering Chemistry Research</i> , 1993, 32, 1087-1092.	3.7	5
60	Online estimation of fouling development for SWRO system using real data. <i>Desalination</i> , 2009, 247, 200-209.	8.2	5
61	Application of hybrid systems techniques for cleaning and replacement of a RO membrane. <i>Desalination</i> , 2009, 247, 25-32.	8.2	5
62	A rapid performance diagnosis of seawater reverse osmosis membranes: simulation approach. <i>Desalination and Water Treatment</i> , 2010, 15, 11-19.	1.0	5
63	Modeling of solute transport in multi-component solution for reverse osmosis membranes. <i>Desalination and Water Treatment</i> , 2010, 15, 20-28.	1.0	5
64	A composition estimator for multicomponent flash drum using recursive equation error method. <i>Computers and Chemical Engineering</i> , 2000, 24, 1281-1286.	3.8	4
65	Reduced Model and Simulation of Neuron with Passive Dendritic Cable: An Eigenfunction Expansion Approach. <i>Journal of Computational Neuroscience</i> , 2005, 19, 379-397.	1.0	4
66	Design of isosorbide crystallization process as recovery system for poly(ethylene-co-isosorbide) terephthalate production via solubility measurements and crystallization kinetic parameter estimation. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 92, 191-199.	5.8	4
67	Run-to-run control of inductively coupled C ₂ F ₆ plasma etching of SiO ₂ : Construction of a numerical process with a computational fluid dynamics code. <i>Korean Journal of Chemical Engineering</i> , 2005, 22, 822-829.	2.7	3
68	Improving Dynamics of Glass pH Electrodes. <i>IEEE Sensors Journal</i> , 2009, 9, 1793-1796.	4.7	3
69	Effects of sweating time and cooling strategy on purification of N-vinyl-2-pyrrolidinone using a melt crystallizer. <i>Korean Journal of Chemical Engineering</i> , 2013, 30, 1997-2000.	2.7	3
70	Role of ZrO_2 on $Cu/ZnO/Al_2O_3$ in Methanol Synthesis. <i>Bulletin of the Korean Chemical Society</i> , 2015, 36, 2875-2880.	1.9	3
71	Solubility Measurement and Recrystallization Process Design for 1,1,2,2,9,9,10,10-Octafluoro[2.2]paracyclophane (AF4) Purification. <i>Crystal Growth and Design</i> , 2019, 19, 1748-1755.	3.0	3
72	Control of pH neutralization process using simulation based dynamic programming. <i>Korean Journal of Chemical Engineering</i> , 2004, 21, 942-949.	2.7	2

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73	Run-to-run control of inductively coupled C2F6 plasma etching of SiO2: Multivariable controller design and numerical application. Korean Journal of Chemical Engineering, 2006, 23, 199-202.	2.7	2
74	Use of Calorimetry Model and Batch Control Technique for Scale-Up of Unseeded Batch Cooling Crystallization of Poly(hydroxybenzophenone). Industrial & Engineering Chemistry Research, 2009, 48, 6776-6782.	3.7	2
75	A Quantitative Structure-Property Relationship Model for Predicting the Critical Pressures of Organic Compounds Containing Oxygen, Sulfur, and Nitrogen. Journal of Chemical Engineering of Japan, 2017, 50, 397-407.	0.6	2
76	A modified scaled variable reduced coordinate (SVRC)-quantitative structure property relationship (QSPR) model for predicting liquid viscosity of pure organic compounds. Korean Journal of Chemical Engineering, 2017, 34, 2715-2724.	2.7	2
77	Java applet modules for undergraduate process control education. , 0, , .		1
78	Modeling and identification of the bio-ethanol production process from starch: Cybernetic vs. unstructured modeling. Computer Aided Chemical Engineering, 2008, , 707-712.	0.5	1
79	Prediction of Parathyroid Hormone Signalling Potency Using SVMs. Molecules and Cells, 2009, 27, 547-556.	2.6	1
80	On the use of pseudo-spectral method in model reduction and simulation of active dendrites. Computers in Biology and Medicine, 2009, 39, 340-345.	7.0	1
81	Understanding boron rejection by reverse osmosis membranes. Desalination and Water Treatment, 2010, 15, 129-133.	1.0	1
82	Optimization of temperature swing strategy for selective cooling crystallization of \pm -form l-glutamic acid crystals. Korean Journal of Chemical Engineering, 2013, 30, 1836-1842.	2.7	1
83	Economic analysis of waste recycle process in perhydropolysiloxazane synthesis. Korean Journal of Chemical Engineering, 2014, 31, 748-753.	2.7	1
84	Relative Roles of Methanol Synthesis and Solid Acid Catalysts in the Direct DME Synthesis from Syngas. Bulletin of the Korean Chemical Society, 2015, 36, 1221-1225.	1.9	1
85	Modeling and Simulation for Feasibility Study of Taylor-Couette Crystallizer as Crystal Seed Manufacturing System. IFAC-PapersOnLine, 2015, 48, 321-324.	0.9	1
86	Operation strategy of industrial crystallization for the production of 2,3,4,4-tetrahydroxybenzophenon. Korean Journal of Chemical Engineering, 2015, 32, 1222-1228.	2.7	1
87	Cost-based analysis about a newly designed two-staged reverse osmosis process with draw solute. Computer Aided Chemical Engineering, 2016, 38, 223-228.	0.5	1
88	Double First-Order Plus Time Delay Models To Tune Proportional-Integral Controllers. Industrial & Engineering Chemistry Research, 2016, 55, 10328-10335.	3.7	1
89	Modified kinetic rate equation model for cooling crystallization. Korean Journal of Chemical Engineering, 2019, 36, 2095-2103.	2.7	1
90	Shallow Fully Connected Neural Network Training by Forcing Linearization into Valid Region and Balancing Training Rates. Processes, 2022, 10, 1157.	2.8	1

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91	Adaptive output feedback nonlinear control of a pH process with an input constraint. , 0, , .		0
92	Cybernetic modeling of the cephalosporin C fermentation process. Computer Aided Chemical Engineering, 2003, 15, 1187-1192.	0.5	0
93	THE APPLICATION OF CONTROL USING NEURO-DYNAMIC PROGRAMMING WITH A FEATURE MAP. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 995-1000.	0.4	0
94	Dynamic Simulation of Plate-Type Reformer and Combustor System for Molten Carbonate Fuel Cell. Studies in Surface Science and Catalysis, 2006, 159, 629-632.	1.5	0
95	The Simulation and Control of the Reactive Distillation Process for Dimethylcarbonate Production. Studies in Surface Science and Catalysis, 2006, , 665-668.	1.5	0
96	Speed-up of the auto-titrator operation. , 2008, , .		0
97	Optimization of hysteresis on the liquid level system and hysteresis process implemented with siphon in the liquid level system. , 2015, , .		0
98	Feasibility study of solvent recycle process in spin-on hard mask material manufacturing system. Korean Journal of Chemical Engineering, 2015, 32, 2375-2383.	2.7	0
99	Economic Evaluation of Hybrid FO-crystallization-RO Desalination Process. Computer Aided Chemical Engineering, 2016, , 919-924.	0.5	0
100	Process Design and Operating Strategies for a Continuous Vaporization System for Purifying Organic Holeá€¢Transport Materials. Chemical Engineering and Technology, 2019, 42, 109-118.	1.5	0
101	10.2478/s11814-009-0207-6. , 2011, 26, 1220.		0
102	Simulation and Control of the Molten Carbonate System using Aspen DynamicTMand ACM. Korean Chemical Engineering Research, 2011, 49, 423-431.	0.2	0