Jay H Lee

List of Publications by Year
in descending order

292	13,141	38742 50	27406 106
papers	citations	h-index	g-index

296	296	296	8929
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Algal-based feedstocks. , 2022, , 121-141.		0
2	Superstructure optimization of microalgal biorefinery producing biodiesel. , 2022, , 713-738.		1
3	Multiscale modeling of fiber deformation: Application to a batch pulp digester for model predictive control of fiber strength. Computers and Chemical Engineering, 2022, 158, 107640.	3.8	7
4	Global evaluation of economics of microalgae-based biofuel supply chain using GIS-based framework. Korean Journal of Chemical Engineering, 2022, 39, 1524-1541.	2.7	6
5	Optimal design and evaluation of electrochemical CO2 reduction system with renewable energy generation using two-stage stochastic programming. Journal of CO2 Utilization, 2022, 61, 102026.	6.8	3
6	Computer-aided identification and evaluation of technologies for sustainable carbon capture and utilization using a superstructure approach. Journal of CO2 Utilization, 2022, 61, 102032.	6.8	10
7	Risk-based uncertainty assessment to identify key sustainability hurdles for emerging CO₂ utilization technologies. Green Chemistry, 2022, 24, 4588-4605.	9.0	4
8	A dynamic penalty approach to state constraint handling in deep reinforcement learning. Journal of Process Control, 2022, 115, 157-166.	3.3	2
9	CFD analysis and scale up of a baffled membrane reactor for hydrogen production by steam methane reforming. Computers and Chemical Engineering, 2022, 165, 107912.	3.8	16
10	New model for S-shaped isotherm data and its application to process modeling using IAST. Chemical Engineering Journal, 2021, 420, 127580.	12.7	9
11	Reinforcement learning based optimal control of batch processes using Monte-Carlo deep deterministic policy gradient with phase segmentation. Computers and Chemical Engineering, 2021, 144, 107133.	3.8	64
12	A Dynamic Penalty Function Approach for Constraint-Handling in Reinforcement Learning. IFAC-PapersOnLine, 2021, 54, 487-491.	0.9	9
13	Integrated design and control of reactive distillation processes using the driving force approach. AICHE Journal, 2021, 67, e17227.	3.6	13
14	Process systems engineering â€“ The generation next?. Computers and Chemical Engineering, 2021, 147, 107252.	3.8	128
15	Two-stage stochastic programming formulation for optimal design and operation of multi-microgrid system using data-based modeling of renewable energy sources. Applied Energy, 2021, 291, 116830.	10.1	48
16	Techno-economic and environmental feasibility of mineral carbonation technology for carbon neutrality: A Perspective. Korean Journal of Chemical Engineering, 2021, 38, 1757-1767.	2.7	9
17	Machine learning-based discovery of molecules, crystals, and composites: A perspective review. Korean Journal of Chemical Engineering, 2021, 38, 1971-1982.	2.7	4
18	Model predictive control for amine-based CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1196" altimg="si3.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> capture process with advanced flash stripper. Control Engineering Practice, 2021, 114, 104885.	5.5	9

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19	Multi-scale fluid dynamics simulation based on MP-PIC-PBE method for PMMA suspension polymerization. Computers and Chemical Engineering, 2021, 152, 107391.	3.8	5
20	Erratum to â€œForty years of computers & chemical engineering: A bibliometric analysisâ€•[Computers & Chemical Engineering 141 (2020) 106978]. Computers and Chemical Engineering, 2021, 152, 107377.	3.8	0
21	Kinetic modeling of diesel autothermal reforming for fuel cell auxiliary power units. Chemical Engineering Journal, 2021, 424, 130564.	12.7	7
22	Catholyte-free electroreduction of CO₂ for sustainable production of CO: concept, process development, techno-economic analysis, and CO₂ reduction assessment. Green Chemistry, 2021, 23, 2397-2410.	9.0	29
23	Reinforcement learning for batch process control: Review and perspectives. Annual Reviews in Control, 2021, 52, 108-119.	7.9	31
24	Dynamic Modeling of Acetoneâ€“Butanolâ€“Ethanol Fermentation with ex Situ Butanol Recovery using Glucose/Xylose Mixtures. Industrial & Engineering Chemistry Research, 2020, 59, 2581-2592.	3.7	2
25	Mathematical Modeling of Microalgal Internal Metabolic Behaviors under Heterotrophic Conditions and Its Application. Industrial & Engineering Chemistry Research, 2020, 59, 1631-1645.	3.7	8
26	Multi-phase particle-in-cell coupled with population balance equation (MP-PIC-PBE) method for multiscale computational fluid dynamics simulation. Computers and Chemical Engineering, 2020, 134, 106686.	3.8	12
27	Techno-economic and environmental evaluation of nano calcium carbonate production utilizing the steel slag. Journal of CO2 Utilization, 2020, 37, 113-121.	6.8	25
28	In-situ FT-IR quantitative analysis of amine concentrations and CO2 loading amount in solvent mixtures for CO2 capture. International Journal of Greenhouse Gas Control, 2020, 94, 102920.	4.6	1
29	An investigation into the hydrodynamics of a spinning cone column: CFD simulations by an Eulerian-Lagrangian approach. Computers and Chemical Engineering, 2020, 132, 106635.	3.8	8
30	Isotherm parameter library and evaluation software for CO2 capture adsorbents. Computers and Chemical Engineering, 2020, 143, 107105.	3.8	9
31	Modeling, simulation and optimization of the rotating packed bed (RPB) absorber and stripper for MEA-based carbon capture. Computers and Chemical Engineering, 2020, 143, 107102.	3.8	10
32	Inputâ€“Output Surrogate Models for Efficient Economic Evaluation of Amine Scrubbing CO₂ Capture Processes. Industrial & Engineering Chemistry Research, 2020, 59, 18951-18964.	3.7	22
33	The carbon footprint of the carbon feedstock CO₂. Energy and Environmental Science, 2020, 13, 2979-2992.	30.8	110
34	Saline water electrolysis system with double-layered cation exchange membrane for low-energy consumption and its application for CO2 mineralization. Journal of CO2 Utilization, 2020, 41, 101269.	6.8	6
35	Early-stage evaluation of emerging CO₂utilization technologies at low technology readiness levels. Green Chemistry, 2020, 22, 3842-3859.	9.0	71
36	Multi-objective optimization of operation of lignocellulosic acetone-butanol-ethanol fermentation with ex situ butanol recovery (ESBR). Computers and Chemical Engineering, 2020, 140, 106915.	3.8	3

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37	Dynamic analysis and linear model predictive control for operational flexibility of post-combustion CO2 capture processes. Computers and Chemical Engineering, 2020, 140, 106968.	3.8	18
38	Forty years of computers & chemical engineering: A bibliometric analysis. Computers and Chemical Engineering, 2020, 141, 106978.	3.8	18
39	Three-stage design of high-resolution microalgae-based biofuel supply chain using geographic information system. Applied Energy, 2020, 265, 114773.	10.1	34
40	Softâ€constrained model predictive control based on <scp>dataâ€driven</scp> distributionally robust optimization. AICHE Journal, 2020, 66, e16546.	3.6	36
41	A model-based deep reinforcement learning method applied to finite-horizon optimal control of nonlinear control-affine system. Journal of Process Control, 2020, 87, 166-178.	3.3	41
42	Impacts of deploying co-electrolysis of CO2 and H2O in the power generation sector: A case study for South Korea. Energy Reports, 2020, 6, 761-770.	5.1	4
43	Robust Adaptive Control with Active Learning for Fed-Batch Process based on Approximate Dynamic Programming. IFAC-PapersOnLine, 2020, 53, 5201-5206.	0.9	2
44	Robust Dual Control of Batch Processes with Parametric Uncertainty using Proximal Policy Optimization. , 2020, , .		0
45	Mathematical Modeling of Acetoneâ€“Butanolâ€“Ethanol Fermentation with Simultaneous Utilization of Glucose and Xylose by RecombinantClostridium acetobutylicum. Energy & Fuels, 2019, 33, 8620-8631.	5.1	10
46	Design, simulation and feasibility study of a combined CO2 mineralization and brackish water desalination process. Journal of CO2 Utilization, 2019, 34, 446-464.	6.8	14
47	Technoeconomic and Environmental Evaluation of Sodium Bicarbonate Production Using CO₂ from Flue Gas of a Coal-Fired Power Plant. Industrial & Engineering Chemistry Research, 2019, 58, 15533-15541.	3.7	15
48	Statistical Process Monitoring of the Tennessee Eastman Process Using Parallel Autoassociative Neural Networks and a Large Dataset. Processes, 2019, 7, 411.	2.8	18
49	110th Anniversary: Modeling and Optimization of a Butyl Glycol Ether Plant Based on an Experimental Kinetic Study. Industrial & Engineering Chemistry Research, 2019, 58, 13260-13273.	3.7	1
50	Parameter subset selection and biased estimation for a class of ill-conditioned estimation problems. Journal of Process Control, 2019, 81, 65-75.	3.3	12
51	Identification of significant proxy variable for the physiological status affecting salt stress-induced lipid accumulation in Chlorella sorokiniana HS1. Biotechnology for Biofuels, 2019, 12, 242.	6.2	7
52	Comparative Techno-Economic Analysis of Transesterification Technologies for Microalgal Biodiesel Production. Industrial & Engineering Chemistry Research, 2019, 58, 18772-18779.	3.7	35
53	Simplifying biodiesel production from microalgae via wet in situ transesterification: A review in current research and future prospects. Algal Research, 2019, 41, 101557.	4.6	56
54	Reinforcement Learning â€“ Overview of recent progress and implications for process control. Computers and Chemical Engineering, 2019, 127, 282-294.	3.8	155

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55	Improved Microalgae Production by Using a Heat Supplied Open Raceway Pond. Industrial & Engineering Chemistry Research, 2019, 58, 9099-9108.	3.7	12
56	Integrated scheduling of vessel dispatching and port operations in the closed-loop shipping system for transporting petrochemicals. Computers and Chemical Engineering, 2019, 126, 485-498.	3.8	8
57	Parallel neural networks for improved nonlinear principal component analysis. Computers and Chemical Engineering, 2019, 127, 1-10.	3.8	21
58	Robust Batch-to-Batch Optimization with Scenario Adaptation. Industrial & Engineering Chemistry Research, 2019, 58, 13664-13674.	3.7	10
59	Design and Evaluation of Sustainable Lactide Production Process with an One-Step Gas Phase Synthesis Route. ACS Sustainable Chemistry and Engineering, 2019, 7, 6178-6184.	6.7	17
60	Optimizationâ€based identification of CO₂ capture and utilization processing paths for life cycle greenhouse gas reduction and economic benefits. AIChE Journal, 2019, 65, e16580.	3.6	27
61	Optimal design of heat and water recovery system utilizing waste flue gases for refinery CO2 reduction. Computers and Chemical Engineering, 2019, 124, 140-152.	3.8	5
62	A model-based optimization of microalgal cultivation strategies for lipid production under photoautotrophic condition. Computers and Chemical Engineering, 2019, 121, 57-66.	3.8	28
63	Techno-economic Analysis of Microalgae-Based Lipid Production: Considering Influences of Microalgal Species. Industrial & Engineering Chemistry Research, 2019, 58, 944-955.	3.7	27
64	Multi-timescale, multi-period decision-making model development by combining reinforcement learning and mathematical programming. Computers and Chemical Engineering, 2019, 121, 556-573.	3.8	16
65	Analysis and model-based optimization of a pectin extraction process. Journal of Food Engineering, 2019, 244, 159-169.	5.2	16
66	Process Design and Evaluation Framework of the Algal Biomass Co-firing Plant to set Target R&D Parameters. , 2019, , .		0
67	Development of batch proportional-integral-derivative controller. Korean Journal of Chemical Engineering, 2018, 35, 1240-1246.	2.7	4
68	Integrating operations and control: A perspective and roadmap for future research. Computers and Chemical Engineering, 2018, 115, 179-184.	3.8	50
69	Sustainability analysis of CO2 capture and utilization processes using a computer-aided tool. Journal of CO2 Utilization, 2018, 26, 60-69.	6.8	39
70	An optimization based strategy for crude selection in a refinery with lube hydro-processing. Computers and Chemical Engineering, 2018, 116, 91-111.	3.8	3
71	Machine learning: Overview of the recent progresses and implications for the process systems engineering field. Computers and Chemical Engineering, 2018, 114, 111-121.	3.8	254
72	User-friendly graphical user interface software for ideal adsorbed solution theory calculations. Korean Journal of Chemical Engineering, 2018, 35, 214-221.	2.7	88

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73	Deep Reinforcement Learning Based Finite-Horizon Optimal Control for a Discrete-Time Affine Nonlinear System. , 2018, , .		1
74	Improved Parameter Estimation of Ill-Conditioned Problems. , 2018, , .		1
75	Design and sustainability analysis of a combined CO2 mineralization and desalination process. IFAC-PapersOnLine, 2018, 51, 85-90.	0.9	6
76	Dynamic Modeling and Analysis of Amine-based Carbon Capture Systems. IFAC-PapersOnLine, 2018, 51, 91-96.	0.9	8
77	Fault detection and classification using artificial neural networks. IFAC-PapersOnLine, 2018, 51, 470-475.	0.9	122
78	Deep reinforcement learning based finite-horizon optimal tracking control for nonlinear system. IFAC-PapersOnLine, 2018, 51, 257-262.	0.9	9
79	Design and evaluation of CO2 capture plants for the steelmaking industry by means of amine scrubbing and membrane separation. International Journal of Greenhouse Gas Control, 2018, 74, 259-270.	4.6	40
80	Reinforcement Learning â€“ Overview of Recent Progress and Implications for Process Control. Computer Aided Chemical Engineering, 2018, , 71-85.	0.5	17
81	A mathematical model of intracellular behavior of microalgae for predicting growth and intracellular components syntheses under nutrientâ€replete and â€deplete conditions. Biotechnology and Bioengineering, 2018, 115, 2441-2455.	3.3	21
82	Techno-economic and environmental evaluation of CO2 mineralization technology based on bench-scale experiments. Journal of CO2 Utilization, 2018, 26, 522-536.	6.8	30
83	New performance indicators for adsorbent evaluation derived from a reduced order model of an idealized PSA process for CO 2 capture. Computers and Chemical Engineering, 2017, 102, 188-212.	3.8	37
84	Model-Based Optimization of Cyclic Operation of Acetone-Butanol-Ethanol (ABE) Fermentation Process with ex Situ Butanol Recovery (ESBR) for Continuous Biobutanol Production. Industrial & Engineering Chemistry Research, 2017, 56, 2071-2082.	3.7	11
85	Operational planning and optimal sizing of microgrid considering multi-scale wind uncertainty. Applied Energy, 2017, 195, 616-633.	10.1	86
86	Change of Hydrocarbon Structure Type in Lube Hydroprocessing and Correlation Model for Viscosity Index. Industrial & Engineering Chemistry Research, 2017, 56, 8016-8028.	3.7	11
87	Crude Selection Integrated with Optimal Refinery Operation by Combining Optimal Learning and Mathematical Programming. IFAC-PapersOnLine, 2017, 50, 9032-9037.	0.9	0
88	Synthesis of the optimal heat and water recovery system for reduction of the refinery CO2 emission. , 2017, , .		0
89	Stochastic optimization with value function approximation for micro-grid operation. , 2016, , .		1
90	A robust NMPC scheme for semi-batch polymerization reactors. IFAC-PapersOnLine, 2016, 49, 37-42.	0.9	28

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91	Open Loop Optimal Operation and Sensitivity Analysis of a Continuous Biobutanol Fermentation Process with Ex-Situ Adsorption Recovery. IFAC-PapersOnLine, 2016, 49, 925-930.	0.9	0
92	New Performance Indicators for Evaluation of Adsorbents for CO2 Capture with PSA processes. IFAC-PapersOnLine, 2016, 49, 651-656.	0.9	2
93	Process systems engineering issues and applications towards reducing carbon dioxide emissions through conversion technologies. Chemical Engineering Research and Design, 2016, 116, 27-47.	5.6	43
94	Regularized maximum likelihood estimation of sparse stochastic monomolecular biochemical reaction networks. Computers and Chemical Engineering, 2016, 90, 111-120.	3.8	4
95	Estimation of local concentration from measurements of stochastic adsorption dynamics using carbon nanotube-based sensors. Korean Journal of Chemical Engineering, 2016, 33, 33-45.	2.7	0
96	Multi-time scale procurement planning considering multiple suppliers and uncertainty in supply and demand. Computers and Chemical Engineering, 2016, 91, 114-126.	3.8	8
97	A methodology for the sustainable design and implementation strategy of CO2 utilization processes. Computers and Chemical Engineering, 2016, 91, 407-421.	3.8	39
98	A methodological framework for the development of feasible CO 2 conversion processes. International Journal of Greenhouse Gas Control, 2016, 47, 250-265.	4.6	46
99	Optimal design for flexible operation of the post-combustion CO2 capture plant with uncertain economic factors. Computers and Chemical Engineering, 2016, 84, 199-207.	3.8	9
100	Economic assessment and optimization of the Selexol process with novel additives. International Journal of Greenhouse Gas Control, 2015, 42, 109-116.	4.6	19
101	Optimization of the Cyclic Operation of a Continuous Biobutanol Fermentation Process Integrated with Ex-Situ Adsorption Recovery. IFAC-PapersOnLine, 2015, 48, 1204-1209.	0.9	2
102	An Extended Constrained Total Least-Squares Method for the Identification of Genetic Networks from Noisy Measurements. Industrial & Engineering Chemistry Research, 2015, 54, 10583-10592.	3.7	1
103	Multiloop Control Strategies for a Dry Feeding Gasifier in the Integrated Gasification Combined Cycle. Industrial & Engineering Chemistry Research, 2015, 54, 11113-11125.	3.7	3
104	Development of sustainable CO2 conversion processes for the methanol production. Computer Aided Chemical Engineering, 2015, , 1145-1150.	0.5	19
105	Synthesis of Optimal Processing Pathway for Microalgae-based Biorefinery under Uncertainty. Computer Aided Chemical Engineering, 2015, 37, 2303-2308.	0.5	2
106	Notice of Retraction - Synthesis of self-triggered receding horizon controllers: A relaxed dynamic programming approach. , 2015, , .		1
107	State estimation for a carbon nanotube-based sensor array system. , 2015, , .		0
108	Shortcut formula for the evaluation of adsorbents in pressure swing adsorption. , 2015, , .		0

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109	Procurement scheduling under supply and demand uncertainty: Case study for comparing classical, reactive, and proactive scheduling. , 2015, , .		1
110	Optimization of the various modes of flexible operation for post-combustion CO2 capture plant. Computers and Chemical Engineering, 2015, 75, 14-27.	3.8	44
111	An effective chemical pretreatment method for lignocellulosic biomass with substituted imidazoles. Biotechnology Progress, 2015, 31, 25-34.	2.6	8
112	Move blocking strategy applied to re-entrant manufacturing line scheduling. International Journal of Control, Automation and Systems, 2015, 13, 410-418.	2.7	7
113	Immobilization of Carbonic Anhydrase on Modified Electrospun Poly(Lactic Acid) Membranes: Quest for Optimum Biocatalytic Performance. Catalysis Letters, 2015, 145, 519-526.	2.6	18
114	Biomimetically Synthesized Hierarchical TiO₂-Graphitic Carbon as Anodic Catalysts for Direct Alkaline Sulfide Fuel Cell. ACS Sustainable Chemistry and Engineering, 2015, 3, 1764-1770.	6.7	16
115	MDP formulation and solution algorithms for inventory management with multiple suppliers and supply and demand uncertainty. Computer Aided Chemical Engineering, 2015, , 1907-1912.	0.5	1
116	Optimal Harvest Management AdaptationÂfor a New Biorefinery Investment inÂa Timberlands SupplyÂChain Using a Modified Cyclic Scheduling Model. Computer Aided Chemical Engineering, 2015, 36, 521-554.	0.5	1
117	Two stage stochastic bilevel programming model of a pre-established timberlands supply chain with biorefinery investment interests. Computers and Chemical Engineering, 2015, 73, 141-153.	3.8	33
118	Optimal design of microalgae-based biorefinery: Economics, opportunities and challenges. Applied Energy, 2015, 150, 69-79.	10.1	107
119	Sustainable Process Design. Computer Aided Chemical Engineering, 2015, 36, 175-195.	0.5	11
120	Dynamic Modeling of a Fermentation Process with Ex situ Butanol Recovery (ESBR) for Continuous Biobutanol Production. Energy & Fuels, 2015, 29, 7254-7265.	5.1	26
121	Optimal processing pathway selection for microalgae-based biorefinery under uncertainty. Computers and Chemical Engineering, 2015, 82, 362-373.	3.8	18
122	Comments on â€œDynamic modeling and simulation of Shell gasifier in IGCCâ€• Fuel Processing Technology, 2015, 129, 75.	7.2	2
123	State Estimation of the Time-Varying and Spatially Localized Concentration of Signal Molecules from the Stochastic Adsorption Dynamics on the Carbon Nanotube-Based Sensors and Its Application to Tumor Cell Detection. PLoS ONE, 2015, 10, e0141930.	2.5	0
124	Optimal design and operation of an extractive fermentation process for continuous biobutanol production. , 2014, , .		0
125	Sparse identification in chemical master equations for monomolecular reaction networks. , 2014, , .		0
126	Fast moving horizon estimation for a two-dimensional distributed parameter system. Computers and Chemical Engineering, 2014, 63, 159-172.	3.8	10

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127	Progress and Challenges in Control of Chemical Processes. Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 383-404.	6.8	25
128	Energy supply planning and supply chain optimization under uncertainty. Journal of Process Control, 2014, 24, 323-331.	3.3	39
129	Protein engineering of cellulases. Current Opinion in Biotechnology, 2014, 29, 139-145.	6.6	52
130	From robust model predictive control to stochastic optimal control and approximate dynamic programming: A perspective gained from a personal journey. Computers and Chemical Engineering, 2014, 70, 114-121.	3.8	17
131	Special issue in Honor of Manfred Morari's 60th Birthday. Computers and Chemical Engineering, 2014, 70, 1-2.	3.8	0
132	Facile fabrication of silver nanoparticle embedded CaCO₃microspheres via microalgae-templated CO₂biomineralization: application in antimicrobial paint development. RSC Advances, 2014, 4, 32562.	3.6	40
133	Control Structure Selection for the Elevated-Pressure Air Separation Unit in an IGCC Power Plant: Self-Optimizing Control Structure for Economical Operation. Industrial & Engineering Chemistry Research, 2014, 53, 7479-7488.	3.7	6
134	An auto-framing method for stochastic process signal by using a hidden Markov model based approach. International Journal of Control, Automation and Systems, 2014, 12, 251-258.	2.7	0
135	Reducing the computational effort of optimal process controllers for continuous state spaces by using incremental learning and post-decision state formulations. Journal of Process Control, 2014, 24, 133-143.	3.3	12
136	Analysis and comparison of single period single level and bilevel programming representations of a pre-existing timberlands supply chain with a new biorefinery facility. Computers and Chemical Engineering, 2014, 68, 242-254.	3.8	18
137	On integrating the Droop model with the flux balance model for predicting metabolic shifts in microalgae growth. , 2014, , .		0
138	Two Stage Bilevel Programming Approach for Representation of Biorefinery Investment Decision Making in a Pre-Established Timberlands Supply Chain. Computer Aided Chemical Engineering, 2014, 34, 645-650.	0.5	2
139	Linear Model Predictive Control of an Entrained-flow Gasifier for an IGCC Power Plant. Korean Chemical Engineering Research, 2014, 52, 592-602.	0.2	2
140	A Survey on State Estimation of Nonlinear Systems. Journal of Institute of Control, Robotics and Systems, 2014, 20, 277-288.	0.2	0
141	Optimal processing pathway for the production of biodiesel from microalgal biomass: A superstructure based approach. Computers and Chemical Engineering, 2013, 58, 305-314.	3.8	65
142	Carbon capture from stationary power generation sources: A review of the current status of the technologies. Korean Journal of Chemical Engineering, 2013, 30, 1497-1526.	2.7	128
143	MILP based value backups in partially observed Markov decision processes (POMDPs) with very large or continuous action and observation spaces. Computers and Chemical Engineering, 2013, 56, 101-113.	3.8	2
144	Modeling of a Biobutanol Adsorption Process for Designing an Extractive Fermentor. Industrial & Engineering Chemistry Research, 2013, 52, 603-611.	3.7	33

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145	Processing History Dependent Control Parameter Estimation in Multi-step Batch Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 750-755.	0.4	0
146	Energy Supply Chain Optimization: A Challenge for Control Engineers?1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 361-370.	0.4	2
147	On defect propagation in multi-machine stochastically deteriorating systems with incomplete information. Journal of Process Control, 2012, 22, 1478-1489.	3.3	1
148	Genome-scale metabolic model of the fission yeast Schizosaccharomyces pombe and the reconciliation of in silico/in vivo mutant growth. BMC Systems Biology, 2012, 6, 49.	3.0	30
149	Elucidation of cellulose accessibility, hydrolysability and reactivity as the major limitations in the enzymatic hydrolysis of cellulose. Bioresource Technology, 2012, 107, 243-250.	9.6	58
150	Postdecision-State-Based Approximate Dynamic Programming for Robust Predictive Control of Constrained Stochastic Processes. Industrial & Engineering Chemistry Research, 2011, 50, 1389-1399.	3.7	7
151	Model predictive control: Review of the three decades of development. International Journal of Control, Automation and Systems, 2011, 9, 415-424.	2.7	482
152	Biological pretreatment of cellulose: Enhancing enzymatic hydrolysis rate using cellulose-binding domains from cellulases. Bioresource Technology, 2011, 102, 2910-2915.	9.6	57
153	Optimal design and global sensitivity analysis of biomass supply chain networks for biofuels under uncertainty. Computers and Chemical Engineering, 2011, 35, 1738-1751.	3.8	309
154	Design of biomass processing network for biofuel production using an MILP model. Biomass and Bioenergy, 2011, 35, 853-871.	5.7	201
155	A Risk based Approach to Estimate Key Uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 583-588.	0.4	1
156	Strategic capacity decisionâ€making in a stochastic manufacturing environment using realâ€time approximate dynamic programming. Naval Research Logistics, 2010, 57, 211-224.	2.2	8
157	A reinforcement learningâ€based scheme for direct adaptive optimal control of linear stochastic systems. Optimal Control Applications and Methods, 2010, 31, 365-374.	2.1	11
158	Optimal design of periodic test input signals for multivariable impulse response models. Optimal Control Applications and Methods, 2010, 31, 451-469.	2.1	3
159	Approximate dynamic programming approach for process control. Journal of Process Control, 2010, 20, 1038-1048.	3.3	49
160	Optimal decision-oriented Bayesian design of experiments. Journal of Process Control, 2010, 20, 1084-1091.	3.3	2
161	Multivariate statistical analysis of X-ray data from cellulose: A new method to determine degree of crystallinity and predict hydrolysis rates. Bioresource Technology, 2010, 101, 4461-4471.	9.6	150
162	Hybrid cybernetic model-based simulation of continuous production of lignocellulosic ethanol: Rejecting abruptly changing feed conditions. Control Engineering Practice, 2010, 18, 177-189.	5.5	7

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163	Cellulose crystallinityâ€ƒâ€“â€ƒa key predictor of the enzymatic hydrolysis rate. FEBS Journal, 2010, 277, 1571-1582.	4.7	473
164	Bilevel Optimizing Control Structure for a Simulated Moving Bed Process Based on a Reduced-Order Model Using the Cubic Spline Collocation Method. Industrial & Engineering Chemistry Research, 2010, 49, 3689-3699.	3.7	9
165	Fault Detection and Diagnosis Using Hidden Markov Disturbance Models. Industrial & Engineering Chemistry Research, 2010, 49, 7901-7908.	3.7	15
166	Modeling cellulase kinetics on lignocellulosic substrates. Biotechnology Advances, 2009, 27, 833-848.	11.7	347
167	Approximate dynamic programming based optimal control applied to an integrated plant with a reactor and a distillation column with recycle. AICHE Journal, 2009, 55, 919-930.	3.6	10
168	Synthesis of run-to-run repetitive control methods using finite impulse response models. Journal of Process Control, 2009, 19, 364-369.	3.3	3
169	Robust forecasts and run-to-run control for processes with linear drifts. Journal of Process Control, 2009, 19, 636-643.	3.3	5
170	An approximate dynamic programming based approach to dual adaptive control. Journal of Process Control, 2009, 19, 859-864.	3.3	47
171	Realistic disturbance modeling using Hidden Markov Models: Applications in model-based process control. Journal of Process Control, 2009, 19, 1438-1450.	3.3	15
172	Controlled exploration of state space in off-line ADP and its application to stochastic shortest path problems. Computers and Chemical Engineering, 2009, 33, 2111-2122.	3.8	3
173	Proactive Scheduling Strategy Applied to Decoking Operations of an Industrial Naphtha Cracking Furnace System. Industrial & Engineering Chemistry Research, 2009, 48, 3024-3032.	3.7	23
174	Fault Detection in Process Systems using Hidden Markov Disturbance Models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 291-296.	0.4	2
175	Approximate dynamic programming approach for process control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 26-35.	0.4	4
176	Modified subspace identification for long-range prediction model for inferential control. Control Engineering Practice, 2008, 16, 1487-1500.	5.5	6
177	Value function-based approach to the scheduling of multiple controllers. Journal of Process Control, 2008, 18, 533-542.	3.3	20
178	Identifying interacting residues using Boolean Learning and Support Vector Machines: Case study on mRFP and DsRed proteins. Biotechnology Journal, 2008, 3, 63-73.	3.5	0
179	A reinforcement learning-based scheme for adaptive optimal control of linear stochastic systems. , 2008, , .		2
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