David S H Wong

List of Publications by Year
in descending order

116 papers	4,083 citations	147801 31 h-index	123424 61 g-index
116 all docs	116 docs citations	116 times ranked	3496 citing authors

#	Article	IF	Citations
1	Machine Learning of Molecular Classification and Quantum Mechanical Calculations. Computer Aided Chemical Engineering, 2019, 46, 787-792.	0.5	9
2	Dynamic Profile Monitoring for Flooding Prognosis in Packed Columns. Chemical Engineering and Technology, 2019, 42, 1232-1239.	1.5	4
3	Investigation of hydrodynamic behavior in random packing using CFD simulation. Chemical Engineering Research and Design, 2019, 147, 43-54.	5.6	22
4	An Extended State Observer-Based Run to Run Control for Semiconductor Manufacturing Processes. IEEE Transactions on Semiconductor Manufacturing, 2019, 32, 154-162.	1.7	15
5	Design and Performance Comparison of Methanol Production Processes with Carbon Dioxide Utilization. Energies, 2019, 12, 4322.	3.1	7
6	Eliminating Steam Requirement of Aqueous Ammonia Capture Process by Lean Solution Flash and Vapor Recompression. Process Integration and Optimization for Sustainability, 2019, 3, 307-319.	2.6	4
7	Design and Control of a Novel Plant-Wide Process for Epichlorohydrin Synthesis by Reacting Allyl Chloride with Hydrogen Peroxide. Industrial & Engineering Chemistry Research, 2018, 57, 6926-6936.	3.7	9
8	Design and Control of a Reactive Distillation Process for Synthesizing Propylene Carbonate from Indirect Alcoholysis of Urea. IFAC-PapersOnLine, 2018, 51, 333-338.	0.9	1
9	Transfer learning for efficient meta-modeling of process simulations. Chemical Engineering Research and Design, 2018, 138, 546-553.	5.6	10
10	Plant-wide process design of producing dimethyl carbonate by indirect alcoholysis of urea. Computer Aided Chemical Engineering, 2018, 44, 115-120.	0.5	0
11	Interfacial reactions at the joints of $CoSb_3$-based thermoelectric devices. Journal of Alloys and Compounds, 2017, 699, 448-454.	5.5	15
12	Novel Process Design of Synthesizing Propylene Carbonate for Dimethyl Carbonate Production by Indirect Alcoholysis of Urea. Industrial & Engineering Chemistry Research, 2017, 56, 11531-11544.	3.7	32
13	Plant-wide design and control of C5 separation processes. , 2017, , .		0
14	Plant-wide design and control of an epichlorohydrin synthesis process by reacting allyl chloride and hydrogen peroxide. Computer Aided Chemical Engineering, 2017, 40, 1219-1224.	0.5	0
15	Shelf-Life Prediction of Nano-Sol via pH Acceleration. Journal of Quality Technology, 2017, 49, 46-63.	2.5	4
16	Modeling Amine Aerosol Growth in CO_2 Capture Absorption Process. Computer Aided Chemical Engineering, 2017, 40, 511-516.	0.5	0
17	Developing a Soft Sensor with Online Variable Selection for Industrial Multi-mode Processes. Computer Aided Chemical Engineering, 2016, 38, 398-403.	0.5	2
18	Novel plant-wide process design of dichlorohydrin production by glycerol hydrochlorination. Computer Aided Chemical Engineering, 2016, 38, 637-642.	0.5	0

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19	Development of soft sensor with neural network and nonlinear variable selection for crude distillation unit process. Computer Aided Chemical Engineering, 2016, 38, 337-342.	0.5	3
20	Normalized Relative RBC-Based Minimum Risk Bayesian Decision Approach for Fault Diagnosis of Industrial Process. IEEE Transactions on Industrial Electronics, 2016, 63, 7723-7732.	7.9	50
21	Model-based feedforward register control of roll-to-roll web printing systems. Control Engineering Practice, 2016, 51, 58-68.	5.5	24
22	Effect of mass transfer on the design of an extractive distillation process for separating DMC and methanol. Journal of the Taiwan Institute of Chemical Engineers, 2016, 60, 205-212.	5.3	11
23	A comparison between packed beds and rotating packed beds for CO_2 capture using monoethanolamine and dilute aqueous ammonia solutions. International Journal of Greenhouse Gas Control, 2016, 46, 228-239.	4.6	27
24	Sulfur dioxide removal from oxygen-rich exhausts by promoted decomposition. Chemical Engineering Journal, 2016, 284, 431-437.	12.7	6
25	Integrated statistical process control and engineering process control for a manufacturing process with multiple tools and multiple products. Journal of Industrial and Production Engineering, 2015, 32, 174-185.	3.1	1
26	Application of Vapor Recompression to Heterogeneous Azeotropic Dividing-Wall Distillation Columns. Industrial & Engineering Chemistry Research, 2015, 54, 11592-11609.	3.7	45
27	Aspen Plus rate-based modeling for reconciling laboratory scale and pilot scale CO_2 absorption using aqueous ammonia. International Journal of Greenhouse Gas Control, 2015, 34, 117-128.	4.6	28
28	Model predictive control for improving waste heat recovery in coke dry quenching processes. Energy, 2015, 80, 275-283.	8.8	41
29	A time series model coefficients monitoring approach for controlled processes. Chemical Engineering Research and Design, 2015, 100, 228-236.	5.6	12
30	Modelling accelerated degradation test and shelf-life prediction of dye-sensitized solar cells with different types of solvents. Solar Energy, 2015, 118, 600-610.	6.1	9
31	Intensification of C5 separation process by heat integration and thermal coupling. Computer Aided Chemical Engineering, 2015, 37, 1217-1222.	0.5	1
32	Simplification and Intensification of a C5 Separation Process. Industrial & Engineering Chemistry Research, 2015, 54, 9798-9804.	3.7	20
33	Robust Predictions of Catalyst Deactivation of Atmospheric Residual Desulfurization. Energy & Fuels, 2015, 29, 7089-7100.	5.1	7
34	Layered Protonated Titanate Nanosheets Synthesized with a Simple One-Step, Low-Temperature, Urea-Modulated Method as an Effective Pollutant Adsorbent. ACS Applied Materials & Interfaces, 2014, 6, 16669-16678.	8.0	56
35	A two-tier approach to the data-driven modeling on thermal efficiency of a BFG/coal co-firing boiler. Fuel, 2013, 111, 528-534.	6.4	15
36	Soft-sensor development with adaptive variable selection using nonnegative garrote. Control Engineering Practice, 2013, 21, 1157-1164.	5.5	18

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37	Generation and verification of optimal dispatching policies for multi-product multi-tool semiconductor manufacturing processes. Computers and Chemical Engineering, 2013, 52, 112-121.	3.8	3
38	High-performance asymmetric supercapacitor consisting of Ni–Co–Cu oxy-hydroxide nanosheets and activated carbon. Electrochemistry Communications, 2013, 34, 323-326.	4.7	48
39	Dynamic Transcript Profiling of Candida albicans Infection in Zebrafish: A Pathogen-Host Interaction Study. PLoS ONE, 2013, 8, e72483.	2.5	25
40	Computer-aided Modeling and Optimization of Thermal Efficiency for Multi-fuel Boiler. Computer Aided Chemical Engineering, 2013, 32, 265-270.	0.5	2
41	An Adaptive-Tuning Scheme for G&P EWMA Run-to-Run Control. IEEE Transactions on Semiconductor Manufacturing, 2012, 25, 230-237.	1.7	5
42	Densities of a deep eutectic solvent based on choline chloride and glycerol and its aqueous mixtures at elevated pressures. Fluid Phase Equilibria, 2012, 335, 32-38.	2.5	113
43	An inferential modeling method using enumerative PLS based nonnegative garrote regression. Journal of Process Control, 2012, 22, 1637-1646.	3.3	16
44	Single-crystalline mesoporous ZnO nanosheets prepared with a green antisolvent method exhibiting excellent photocatalytic efficiencies. CrystEngComm, 2012, 14, 4732.	2.6	59
45	Deep Eutectic Solvent–based Ionic Liquid Electrolytes for Electrical Double–layer Capacitors. Journal of the Chinese Chemical Society, 2012, 59, 1280-1287.	1.4	40
46	Circumventing the Black-Hole Problem in Design and Control of Dividing-Wall Distillation Columns. Industrial & Engineering Chemistry Research, 2012, 51, 14771-14792.	3.7	12
47	Control strategies for flexible operation of power plant with CO_2 capture plant. AICHE Journal, 2012, 58, 2697-2704.	3.6	58
48	A Virtual Metrology System for Predicting End-of-Line Electrical Properties Using a MANCOVA Model With Tools Clustering. IEEE Transactions on Industrial Informatics, 2011, 7, 187-195.	11.3	25
49	Plantwide Control of CO_2 Capture by Absorption and Stripping Using Monoethanolamine Solution. Industrial & Engineering Chemistry Research, 2011, 50, 1338-1345.	3.7	84
50	Ultrafast formation of ZnO mesocrystals with excellent photocatalytic activities by a facile Tris-assisted antisolvent process. CrystEngComm, 2011, 13, 6218.	2.6	25
51	A MIMO R2R control using data-driven gain scheduling. Control Engineering Practice, 2011, 19, 1344-1353.	5.5	3
52	A priori predictions of critical loci from the combined use of PRSV equation of state and the COSMO-SAC model through the MHV1 mixing rule. Fluid Phase Equilibria, 2011, 308, 25-34.	2.5	2
53	Petri-net based scheduling strategy for semiconductor manufacturing processes. Chemical Engineering Research and Design, 2011, 89, 291-300.	5.6	15
54	A genetic algorithm-based boolean delay model of intracellular signal transduction in inflammation. BMC Bioinformatics, 2011, 12, S17.	2.6	9

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55	Stripe coating with a coffee‐ring effect for color filter solutions. Journal of Applied Polymer Science, 2011, 120, 1555-1565.	2.6	6
56	A G&P EWMA algorithm for high-mix semiconductor manufacturing processes. Journal of Process Control, 2011, 21, 28-35.	3.3	15
57	A virtual metrology model based on recursive canonical variate analysis with applications to sputtering process. Journal of Process Control, 2011, 21, 830-839.	3.3	8
58	Computational modeling with forward and reverse engineering links signaling network and genomic regulatory responses: NF-κB signaling-induced gene expression responses in inflammation. BMC Bioinformatics, 2010, 11, 308.	2.6	26
59	An EWMA Algorithm With a Cycled Resetting (CR) Discount Factor for Drift and Fault of High-Mix Run-to-Run Control. IEEE Transactions on Industrial Informatics, 2010, 6, 229-242.	11.3	18
60	Development of a Novel Soft Sensor Using a Local Model Network with an Adaptive Subtractive Clustering Approach. Industrial & Engineering Chemistry Research, 2010, 49, 4738-4747.	3.7	21
61	Growth of ZnO Nanostructures with Controllable Morphology Using a Facile Green Antisolvent Method. Journal of Physical Chemistry C, 2010, 114, 8867-8872.	3.1	97
62	Development of adaptive soft sensor based on statistical identification of key variables. Control Engineering Practice, 2009, 17, 1026-1034.	5.5	37
63	Identification of tool and product effects in a mixed product and parallel tool environment. Journal of Process Control, 2009, 19, 591-603.	3.3	27
64	Mixed product run-to-run process control – An ANOVA model with ARIMA disturbance approach. Journal of Process Control, 2009, 19, 604-614.	3.3	29
65	A novel deep eutectic solvent-based ionic liquid used as electrolyte for dye-sensitized solar cells. Electrochemistry Communications, 2009, 11, 209-211.	4.7	270
66	Effect of Water on Solubility of Carbon Dioxide in (Aminomethanamide +) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (2-Hydroxy-<i>N Engineering Data, 2009, 54, 1951-1955.	1.9	130
67	Threaded EWMA Controller Tuning and Performance Evaluation in a High-Mixed System. IEEE Transactions on Semiconductor Manufacturing, 2009, 22, 507-511.	1.7	8
68	Effect of Entrainer Loss on Plant-Wide Design and Control of an Isopropanol Dehydration Process. Industrial & Engineering Chemistry Research, 2008, 47, 6672-6684.	3.7	16
69	Performance Analysis of EWMA Controllers Subject to Metrology Delay. IEEE Transactions on Semiconductor Manufacturing, 2008, 21, 413-425.	1.7	34
70	A Feed-Forward/Feedback Run-to-Run Control of a Mixed Product Process:Â Simulation and Experimental Studies. Industrial & Engineering Chemistry Research, 2007, 46, 6963-6970.	3.7	12
71	Diffusion coefficients and conductivities of alkylimidazolium tetrafluoroborates and hexafluorophosphates. Fluid Phase Equilibria, 2007, 252, 74-78.	2.5	48
72	Design and Control of Entrainer-Added Reactive Distillation for Fatty Ester Production. Industrial & Engineering Chemistry Research, 2006, 45, 9042-9049.	3.7	19

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73	Control of Transesterification Distillation for the Production of Methanol and n-Butyl Acetate. Journal of Chemical Engineering of Japan, 2006, 39, 340-350.	0.6	0
74	Calculation of critical lines of hydrocarbon/water systems by extrapolating mixing rules fitted to subcritical equilibrium data. Fluid Phase Equilibria, 2005, 227, 183-196.	2.5	9
75	Evaporation-Assisted Formation of Three-Dimensional Photonic Crystals. Journal of the American Ceramic Society, 2005, 88, 974-976.	3.8	11
76	Predictive Control of a Decentralized Supply Chain Unit. Industrial & Engineering Chemistry Research, 2005, 44, 9120-9128.	3.7	26
77	Solution of trim-loss problem by an integrated simulated annealing and ordinal optimization approach. Journal of Intelligent Manufacturing, 2004, 15, 701-709.	7.3	9
78	The effects of polymer additives on the operating windows of slot coating. Polymer Engineering and Science, 2004, 44, 1970-1976.	3.1	35
79	Controller design and reduction of bullwhip for a model supply chain system using z-transform analysis. Journal of Process Control, 2004, 14, 487-499.	3.3	91
80	Effect of interaction multiplicity on control system design for a MTBE reactive distillation column. Journal of Process Control, 2003, 13, 503-515.	3.3	42
81	Control of a Reactive Distillation Column in the Kinetic Regime for the Synthesis ofn-Butyl Acetate. Industrial & Engineering Chemistry Research, 2003, 42, 5182-5194.	3.7	37
82	Determination of reactive wetting properties of Sn, Sn–Cu, Sn–Ag, and Sn–Pb alloys using a wetting balance technique. Journal of Materials Research, 2003, 18, 1420-1428.	2.6	34
83	Information directed sampling and ordinal optimization for combinatorial material synthesis and library design. Computer Aided Chemical Engineering, 2003, 15, 364-369.	0.5	3
84	Information Directed Sampling for Combinatorial Material Synthesis and Library Design. Journal of Chemical Engineering of Japan, 2003, 36, 1034-1044.	0.6	1
85	Process Monitoring Using a Distance-Based Adaptive Resonance Theory. Industrial & Engineering Chemistry Research, 2002, 41, 2465-2479.	3.7	3
86	Design Alternatives for the Amyl Acetate Process:Â Coupled Reactor/Column and Reactive Distillation. Industrial & Engineering Chemistry Research, 2002, 41, 3233-3246.	3.7	62
87	Size Effects on Silica Polymorphism. Journal of the American Ceramic Society, 2002, 85, 2590-2592.	3.8	9
88	Experimental investigation of conventional control strategies for a heterogeneous azeotropic distillation column. Journal of Process Control, 2000, 10, 333-340.	3.3	25
89	Optimal Design of Filament Winding Using Neural Network Experimental Design Scheme. Journal of Composite Materials, 1999, 33, 2281-2300.	2.4	6
90	Experimental investigation of optimal conventional control strategy for a heterogeneous azeotropic distillation column. Computers and Chemical Engineering, 1999, 23, S249-S252.	3.8	0

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91	Homotopy continuation method for calculating critical loci of binary mixtures. Chemical Engineering Science, 1999, 54, 3873-3883.	3.8	15
92	Dynamics and Control of a Heterogeneous Azeotropic Distillation Column:Â Conventional Control Approach. Industrial & Engineering Chemistry Research, 1999, 38, 468-478.	3.7	60
93	Product and process development using artificial neural-network model and information analysis. AICHE Journal, 1998, 44, 876-887.	3.6	43
94	Neural Network Correlations of Detonation Properties of High Energy Explosives. Propellants, Explosives, Pyrotechnics, 1998, 23, 296-300.	1.6	7
95	Critical Reflux, Parametric Sensitivity, and Hysteresis in Azeotropic Distillation of Isopropyl Alcohol + Water + Cyclohexane. Industrial & Engineering Chemistry Research, 1998, 37, 2835-2843.	3.7	35
96	Adsorption and Diffusion of Benzene in Activated Carbon at High Pressures. Industrial & Engineering Chemistry Research, 1997, 36, 5501-5506.	3.7	13
97	Adsorption and Desorption of Carbon Dioxide onto and from Activated Carbon at High Pressures. Industrial & Engineering Chemistry Research, 1997, 36, 2808-2815.	3.7	165
98	Rigorous implementation of continuous thermodynamics using orthonormal polynomials. Fluid Phase Equilibria, 1997, 129, 113-127.	2.5	8
99	Predictive control of quality in batch polymerization using hybrid ANN models. AICHE Journal, 1996, 42, 455-465.	3.6	90
100	Optimal multiloop feedback design using simulated annealing and neural network. AICHE Journal, 1995, 41, 430-434.	3.6	8
101	An equation of state mixing rule for correlating ternary liquid-liquid equilibria. Fluid Phase Equilibria, 1994, 98, 91-111.	2.5	3
102	Accurate equation of state predictions at high temperatures and pressures using the existing UNIFAC model. Fluid Phase Equilibria, 1993, 85, 41-54.	2.5	67
103	Correlation of steroid solubilities in supercritical carbon dioxide. Fluid Phase Equilibria, 1993, 83, 175-182.	2.5	8
104	Equation of state mixing rule for nonideal mixtures using available activity coefficient model parameters and that allows extrapolation over large ranges of temperature and pressure. Industrial & Engineering Chemistry Research, 1992, 31, 2033-2039.	3.7	174
105	Calculations of solubilities of aromatic compounds in supercritical carbon dioxide. Industrial & Engineering Chemistry Research, 1992, 31, 967-973.	3.7	51
106	On-line/off-line optimization of complex processes using a linguistic self-organized optimizing control scheme. Fuzzy Sets and Systems, 1992, 47, 23-33.	2.7	3
107	Optimal robust linear controller design for chemical processes using an extended regional mapping approach. Chemical Engineering Science, 1992, 47, 2057-2068.	3.8	0
108	A theoretically correct mixing rule for cubic equations of state. AICHE Journal, 1992, 38, 671-680.	3.6	947

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109	Thermodynamic model for the adsorption of toluene from supercritical carbon dioxide on activated carbon. Industrial & Engineering Chemistry Research, 1991, 30, 2492-2496.	3.7	18
110	Simulation of dynamics and phase pattern changes for an azeotropic distillation column. Computers and Chemical Engineering, 1991, 15, 325-335.	3.8	20
111	A cubic equation of state for predicting vaporâ€"liquid equilibria of hydrocarbon mixtures using a group contribution mixing rule. Fluid Phase Equilibria, 1989, 46, 197-210.	2.5	11
112	Flexibility and optimality of distillation column design. AICHE Journal, 1988, 34, 144-146.	3.6	2
113	Vapor-liquid equilibrium calculations by use of generalized corresponding states principle. 2. Comparison with other methods. Industrial & Engineering Chemistry Fundamentals, 1984, 23, 45-49.	0.7	8
114	Calculation of vapor-liquid-liquid equilibrium with cubic equations of state and a corresponding states principle. Industrial & Engineering Chemistry Fundamentals, 1984, 23, 348-354.	0.7	7
115	Vapor-liquid equilibrium calculations by use of generalized corresponding states principle. 1. New mixing rules. Industrial & Engineering Chemistry Fundamentals, 1984, 23, 38-44.	0.7	28
116	Corresponding states, complex mixtures and mixture models. Fluid Phase Equilibria, 1983, 14, 79-90.	2.5	16