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	A theoretically correct mixing rule for cubic equations of state. AICHE Journal, 1992, 38, 671-680.	3.6	947
2	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
3	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
4	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
5	Effect of Water on Solubility of Carbon Dioxide in (Aminomethanamide +) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td (2-Hydi Engineering Data, 2009, 54, 1951-1955.	1.9	130
6	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
7	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
8	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
9	Predictive control of quality in batch polymerization using hybrid ANN models. AICHE Journal, 1996, 42, 455-465.	3.6	90
10	Plantwide Control of CO_2 Capture by Absorption and Stripping Using Monoethanolamine Solution. Industrial & Engineering Chemistry Research, 2011, 50, 1338-1345.	3.7	84
11	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
12	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
13	Dynamics and Control of a Heterogeneous Azeotropic Distillation Column:Â Conventional Control Approach. Industrial & Engineering Chemistry Research, 1999, 38, 468-478.	3.7	60
14	Single-crystalline mesoporous ZnO nanosheets prepared with a green antisolvent method exhibiting excellent photocatalytic efficiencies. CrystEngComm, 2012, 14, 4732.	2.6	59
15	Control strategies for flexible operation of power plant with CO_2 capture plant. AICHE Journal, 2012, 58, 2697-2704.	3.6	58
16	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
17	Calculations of solubilities of aromatic compounds in supercritical carbon dioxide. Industrial & Engineering Chemistry Research, 1992, 31, 967-973.	3.7	51
18	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

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19	Diffusion coefficients and conductivities of alkylimidazolium tetrafluoroborates and hexafluorophosphates. Fluid Phase Equilibria, 2007, 252, 74-78.	2.5	48
20	High-performance asymmetric supercapacitor consisting of Ni–Co–Cu oxy-hydroxide nanosheets and activated carbon. Electrochemistry Communications, 2013, 34, 323-326.	4.7	48
21	Application of Vapor Recompression to Heterogeneous Azeotropic Dividing-Wall Distillation Columns. Industrial & Engineering Chemistry Research, 2015, 54, 11592-11609.	3.7	45
22	Product and process development using artificial neural-network model and information analysis. AICHE Journal, 1998, 44, 876-887.	3.6	43
23	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
24	Model predictive control for improving waste heat recovery in coke dry quenching processes. Energy, 2015, 80, 275-283.	8.8	41
25	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
26	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
27	Development of adaptive soft sensor based on statistical identification of key variables. Control Engineering Practice, 2009, 17, 1026-1034.	5.5	37
28	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
29	The effects of polymer additives on the operating windows of slot coating. Polymer Engineering and Science, 2004, 44, 1970-1976.	3.1	35
30	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
31	Performance Analysis of EWMA Controllers Subject to Metrology Delay. IEEE Transactions on Semiconductor Manufacturing, 2008, 21, 413-425.	1.7	34
32	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
33	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
34	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
35	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
36	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

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37	A comparison between packed beds and rotating packed beds for CO2 capture using monoethanolamine and dilute aqueous ammonia solutions. International Journal of Greenhouse Gas Control, 2016, 46, 228-239.	4.6	27
38	Predictive Control of a Decentralized Supply Chain Unit. Industrial & Engineering Chemistry Research, 2005, 44, 9120-9128.	3.7	26
39	Computational modeling with forward and reverse engineering links signaling network and genomic regulatory responses: NF-Î²B signaling-induced gene expression responses in inflammation. BMC Bioinformatics, 2010, 11, 308.	2.6	26
40	Experimental investigation of conventional control strategies for a heterogeneous azeotropic distillation column. Journal of Process Control, 2000, 10, 333-340.	3.3	25
41	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
42	Ultrafast formation of ZnO mesocrystals with excellent photocatalytic activities by a facile Tris-assisted antisolvent process. CrystEngComm, 2011, 13, 6218.	2.6	25
43	Dynamic Transcript Profiling of Candida albicans Infection in Zebrafish: A Pathogen-Host Interaction Study. PLoS ONE, 2013, 8, e72483.	2.5	25
44	Model-based feedforward register control of roll-to-roll web printing systems. Control Engineering Practice, 2016, 51, 58-68.	5.5	24
45	Investigation of hydrodynamic behavior in random packing using CFD simulation. Chemical Engineering Research and Design, 2019, 147, 43-54.	5.6	22
46	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
47	Simulation of dynamics and phase pattern changes for an azeotropic distillation column. Computers and Chemical Engineering, 1991, 15, 325-335.	3.8	20
48	Simplification and Intensification of a C5 Separation Process. Industrial & Engineering Chemistry Research, 2015, 54, 9798-9804.	3.7	20
49	Design and Control of Entrainer-Added Reactive Distillation for Fatty Ester Production. Industrial & Engineering Chemistry Research, 2006, 45, 9042-9049.	3.7	19
50	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
51	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
52	Soft-sensor development with adaptive variable selection using nonnegative garrote. Control Engineering Practice, 2013, 21, 1157-1164.	5.5	18
53	Corresponding states, complex mixtures and mixture models. Fluid Phase Equilibria, 1983, 14, 79-90.	2.5	16
54	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

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55	An inferential modeling method using enumerative PLS based nonnegative garrote regression. Journal of Process Control, 2012, 22, 1637-1646.	3.3	16
56	Homotopy continuation method for calculating critical loci of binary mixtures. Chemical Engineering Science, 1999, 54, 3873-3883.	3.8	15
57	Petri-net based scheduling strategy for semiconductor manufacturing processes. Chemical Engineering Research and Design, 2011, 89, 291-300.	5.6	15
58	A G&P EWMA algorithm for high-mix semiconductor manufacturing processes. Journal of Process Control, 2011, 21, 28-35.	3.3	15
59	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
60	Interfacial reactions at the joints of CoSb 3 -based thermoelectric devices. Journal of Alloys and Compounds, 2017, 699, 448-454.	5.5	15
61	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
62	Adsorption and Diffusion of Benzene in Activated Carbon at High Pressures. Industrial & Engineering Chemistry Research, 1997, 36, 5501-5506.	3.7	13
63	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
64	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
65	A time series model coefficients monitoring approach for controlled processes. Chemical Engineering Research and Design, 2015, 100, 228-236.	5.6	12
66	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
67	Evaporation-Assisted Formation of Three-Dimensional Photonic Crystals. Journal of the American Ceramic Society, 2005, 88, 974-976.	3.8	11
68	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
69	Transfer learning for efficient meta-modeling of process simulations. Chemical Engineering Research and Design, 2018, 138, 546-553.	5.6	10
70	Size Effects on Silica Polymorphism. Journal of the American Ceramic Society, 2002, 85, 2590-2592.	3.8	9
71	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
72	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

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73	A genetic algorithm-based boolean delay model of intracellular signal transduction in inflammation. BMC Bioinformatics, 2011, 12, S17.	2.6	9
74	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
75	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
76	Machine Learning of Molecular Classification and Quantum Mechanical Calculations. Computer Aided Chemical Engineering, 2019, 46, 787-792.	0.5	9
77	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
78	Correlation of steroid solubilities in supercritical carbon dioxide. Fluid Phase Equilibria, 1993, 83, 175-182.	2.5	8
79	Optimal multiloop feedback design using simulated annealing and neural network. AICHE Journal, 1995, 41, 430-434.	3.6	8
80	Rigorous implementation of continuous thermodynamics using orthonormal polynomials. Fluid Phase Equilibria, 1997, 129, 113-127.	2.5	8
81	Threaded EWMA Controller Tuning and Performance Evaluation in a High-Mixed System. IEEE Transactions on Semiconductor Manufacturing, 2009, 22, 507-511.	1.7	8
82	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
83	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
84	Neural Network Correlations of Detonation Properties of High Energy Explosives. Propellants, Explosives, Pyrotechnics, 1998, 23, 296-300.	1.6	7
85	Robust Predictions of Catalyst Deactivation of Atmospheric Residual Desulfurization. Energy & Fuels, 2015, 29, 7089-7100.	5.1	7
86	Design and Performance Comparison of Methanol Production Processes with Carbon Dioxide Utilization. Energies, 2019, 12, 4322.	3.1	7
87	Optimal Design of Filament Winding Using Neural Network Experimental Design Scheme. Journal of Composite Materials, 1999, 33, 2281-2300.	2.4	6
88	Stripe coating with a coffee‒ring effect for color filter solutions. Journal of Applied Polymer Science, 2011, 120, 1555-1565.	2.6	6
89	Sulfur dioxide removal from oxygen-rich exhausts by promoted decomposition. Chemical Engineering Journal, 2016, 284, 431-437.	12.7	6
90	An Adaptive-Tuning Scheme for G&P EWMA Run-to-Run Control. IEEE Transactions on Semiconductor Manufacturing, 2012, 25, 230-237.	1.7	5

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91	Shelf-Life Prediction of Nano-Sol via pH Acceleration. Journal of Quality Technology, 2017, 49, 46-63.	2.5	4
92	Dynamic Profile Monitoring for Flooding Prognosis in Packed Columns. Chemical Engineering and Technology, 2019, 42, 1232-1239.	1.5	4
93	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
94	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
95	An equation of state mixing rule for correlating ternary liquid-liquid equilibria. Fluid Phase Equilibria, 1994, 98, 91-111.	2.5	3
96	Process Monitoring Using a Distance-Based Adaptive Resonance Theory. Industrial & Engineering Chemistry Research, 2002, 41, 2465-2479.	3.7	3
97	Information directed sampling and ordinal optimization for combinatorial material synthesis and library design. Computer Aided Chemical Engineering, 2003, 15, 364-369.	0.5	3
98	A MIMO R2R control using data-driven gain scheduling. Control Engineering Practice, 2011, 19, 1344-1353.	5.5	3
99	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
100	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
101	Flexibility and optimality of distillation column design. AICHE Journal, 1988, 34, 144-146.	3.6	2
102	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
103	Developing a Soft Sensor with Online Variable Selection for Industrial Multi-mode Processes. Computer Aided Chemical Engineering, 2016, 38, 398-403.	0.5	2
104	Computer-aided Modeling and Optimization of Thermal Efficiency for Multi-fuel Boiler. Computer Aided Chemical Engineering, 2013, 32, 265-270.	0.5	2
105	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
106	Intensification of C5 separation process by heat integration and thermal coupling. Computer Aided Chemical Engineering, 2015, 37, 1217-1222.	0.5	1
107	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
108	Information Directed Sampling for Combinatorial Material Synthesis and Library Design. Journal of Chemical Engineering of Japan, 2003, 36, 1034-1044.	0.6	1

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109	Optimal robust linear controller design for chemical processes using an extended regional mapping approach. Chemical Engineering Science, 1992, 47, 2057-2068.	3.8	0
110	Experimental investigation of optimal conventional control strategy for a heterogeneous azeotropic distillation column. Computers and Chemical Engineering, 1999, 23, S249-S252.	3.8	0
111	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
112	Novel plant-wide process design of dichlorohydrin production by glycerol hydrochlorination. Computer Aided Chemical Engineering, 2016, 38, 637-642.	0.5	0
113	Plant-wide design and control of C5 separation processes. , 2017, , .		0
114	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
115	Modeling Amine Aerosol Growth in CO 2 Capture Absorption Process. Computer Aided Chemical Engineering, 2017, 40, 511-516.	0.5	0
116	Plant-wide process design of producing dimethyl carbonate by indirect alcoholysis of urea. Computer Aided Chemical Engineering, 2018, 44, 115-120.	0.5	0