

Tao Chen

List of Publications by Year in descending order

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Version: 2024-02-01

125
papers

2,991
citations

147726

31
h-index

197736

49
g-index

127
all docs

127
docs citations

127
times ranked

2787
citing authors

#	ARTICLE	IF	CITATIONS
1	Polymerization of hydroxylated graphitic carbon nitride as an efficient flame retardant for epoxy resins. <i>Composites Communications</i> , 2022, 29, 101018.	3.3	13
2	Spectral variable selection based on least absolute shrinkage and selection operator with ridge-adding homotopy. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2022, 221, 104487.	1.8	5
3	Fast Burst-Sparsity Learning-Based Baseline Correction (FBSL-BC) Algorithm for Signals of Analytical Instruments. <i>Analytical Chemistry</i> , 2022, 94, 5113-5121.	3.2	5
4	Emerging approaches to determine maturity of citrus fruit. <i>Critical Reviews in Food Science and Nutrition</i> , 2022, 62, 5245-5266.	5.4	23
5	Antibiotics-Free Compounds for Chronic Wound Healing. <i>Pharmaceutics</i> , 2022, 14, 1021.	2.0	9
6	Needleless administration of advanced therapies into the skin via the appendages using a hypobaric patch. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2120340119.	3.3	10
7	Solvent-free and electron transfer-induced phosphorus and nitrogen-containing heterostructures for multifunctional epoxy resin. <i>Composites Part B: Engineering</i> , 2022, 240, 109999.	5.9	21
8	Automatic counting methods in aquaculture: A review. <i>Journal of the World Aquaculture Society</i> , 2021, 52, 269-283.	1.2	44
9	Gas sensor technologies and mathematical modelling for quality sensing in fruit and vegetable cold chains: A review. <i>Trends in Food Science and Technology</i> , 2021, 110, 483-492.	7.8	53
10	Experimental and Numerical Study of the Impact of Initial Turbulence on the Explosion Behavior of Methane-Air Mixtures. <i>Chemical Engineering and Technology</i> , 2021, 44, 1195-1205.	0.9	6
11	Numerical analysis of the strain distribution in skin domes formed upon the application of hypobaric pressure. <i>Skin Research and Technology</i> , 2021, 27, 948-958.	0.8	3
12	Transfer learning for nonlinear batch process operation optimization. <i>Journal of Process Control</i> , 2021, 101, 11-23.	1.7	11
13	A Lagrange Relaxation Based Decomposition Algorithm for Large-Scale Offshore Oil Production Planning Optimization. <i>Processes</i> , 2021, 9, 1257.	1.3	2
14	Quantification of the uncertainties within the radiotherapy dosimetry chain and their impact on tumour control. <i>Physics and Imaging in Radiation Oncology</i> , 2021, 19, 33-38.	1.2	2
15	Adaptive filtering-based soft sensor method for estimating total nitrogen in aquaponic systems. <i>Computers and Electronics in Agriculture</i> , 2021, 186, 106175.	3.7	7
16	Global Sensitivity Analysis for a perfusion bioreactor system in tissue engineering. <i>IFAC-PapersOnLine</i> , 2021, 54, 550-555.	0.5	2
17	An adaptive method for fish growth prediction with empirical knowledge extraction. <i>Biosystems Engineering</i> , 2021, 212, 336-346.	1.9	10
18	Global Sensitivity Analysis for the input parameters of a Perfusion Bioreactor System in Tissue Engineering. , 2021, , .		1

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19	Offshore oil production planning optimization: An MINLP model considering well operation and flow assurance. <i>Computers and Chemical Engineering</i> , 2020, 133, 106674.	2.0	3
20	GA-BP Neural Network Based Meta-Model Method for Computational Fluid Dynamic Approximation. , 2020, , .		0
21	Experimental Investigation of the Impact of CO ₂ , H ₂ , and H ₂ on the Explosion Characteristics of CH ₄ . <i>ACS Omega</i> , 2020, 5, 24684-24692.	1.6	12
22	Prediction and Uncertainty Propagation for Completion Time of Batch Processes Based on Data-Driven Modeling. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 14374-14384.	1.8	4
23	Process fault diagnosis with model- and knowledge-based approaches: Advances and opportunities. <i>Control Engineering Practice</i> , 2020, 105, 104637.	3.2	54
24	Multivariate log file analysis for multi-leaf collimator failure prediction in radiotherapy delivery. <i>Physics and Imaging in Radiation Oncology</i> , 2020, 15, 72-76.	1.2	8
25	Recent Development and Challenges in Spectroscopy and Machine Vision Technologies for Crop Nitrogen Diagnosis: A Review. <i>Remote Sensing</i> , 2020, 12, 2578.	1.8	9
26	In Silico Simulation of Simultaneous Percutaneous Absorption and Xenobiotic Metabolism: Model Development and a Case Study on Aromatic Amines. <i>Pharmaceutical Research</i> , 2020, 37, 241.	1.7	2
27	Pattern Matching and Active Simulation Method for Process Fault Diagnosis. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 12525-12535.	1.8	4
28	Transfer learning for process fault diagnosis: Knowledge transfer from simulation to physical processes. <i>Computers and Chemical Engineering</i> , 2020, 139, 106904.	2.0	57
29	On the use of phase change materials applied on cork-coconut-cork panels. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 138, 4061-4090.	2.0	11
30	Transfer learning for batch process optimal control using LV-PTM and adaptive control strategy. <i>Journal of Process Control</i> , 2019, 81, 197-208.	1.7	19
31	A novel versatile animal-free 3D tool for rapid low-cost assessment of immunodiagnostic microneedles. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126652.	4.0	14
32	Determination of Solute Diffusion Properties in Artificial Sebum. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 3003-3010.	1.6	5
33	A Mixed Integer Linear Programming Model for Production Scheduling of Non-Pipelined Wells. , 2019, , .		1
34	A comparison of the in vitro permeation of niacinamide in mammalian skin and in the Parallel Artificial Membrane Permeation Assay (PAMPA) model. <i>International Journal of Pharmaceutics</i> , 2019, 556, 142-149.	2.6	35
35	Preparation and Optimization of Macroalgae-Derived Solid Acid Catalysts. <i>Waste and Biomass Valorization</i> , 2019, 10, 805-816.	1.8	11
36	A Measurement and Modeling Study of Hair Partition of Neutral, Cationic, and Anionic Chemicals. <i>Journal of Pharmaceutical Sciences</i> , 2018, 107, 1122-1130.	1.6	4

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37	Piecewise Linear Approximation Based MILP Method for PVC Plant Planning Optimization. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 1233-1244.	1.8	17
38	Investigation of pH effect on cationic solute binding to keratin and partition to hair. <i>International Journal of Cosmetic Science</i> , 2018, 40, 93-102.	1.2	3
39	A decision tree based decomposition method for oil refinery scheduling. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 1605-1612.	1.7	3
40	Data-based modelling for predicting the completion time of batch processes. <i>Computer Aided Chemical Engineering</i> , 2018, , 937-942.	0.3	2
41	Fault Detection in Managed Pressure Drilling Using Slow Feature Analysis. <i>IEEE Access</i> , 2018, 6, 34262-34271.	2.6	3
42	Refinery Operation Scheduling Considering Both Varying Feedstocks and Operating Conditions: An Industrial Data-based Modeling Method. <i>Computer Aided Chemical Engineering</i> , 2018, 44, 1297-1302.	0.3	0
43	Determining the Effect of pH on the Partitioning of Neutral, Cationic and Anionic Chemicals to Artificial Sebum: New Physicochemical Insight and QSPR Model. <i>Pharmaceutical Research</i> , 2018, 35, 141.	1.7	6
44	Mathematical modelling of moisture migration in confectionery multicomponent food systems. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 1625-1630.	0.3	2
45	Transfer learning for efficient meta-modeling of process simulations. <i>Chemical Engineering Research and Design</i> , 2018, 138, 546-553.	2.7	10
46	Plant Planning Optimization under Time-Varying Uncertainty: Case Study on a Poly(vinyl chloride) Plant. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 12182-12191.	1.8	3
47	Gaussian process regression with functional covariates and multivariate response. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2017, 163, 1-6.	1.8	8
48	RIMER and SA based thermal efficiency optimization for fired heaters. <i>Fuel</i> , 2017, 205, 272-285.	3.4	5
49	Symptom clusters for revising scale membership in the analysis of prostate cancer patient reported outcome measures: a secondary data analysis of the Medical Research Council RT01 trial (ISCRTN4772397). <i>Quality of Life Research</i> , 2017, 26, 2103-2116.	1.5	7
50	Meta-modelling in chemical process system engineering. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 73, 135-145.	2.7	27
51	Radiotherapy reference dose audit in the United Kingdom by the National Physical Laboratory: 20 years of consistency and improvements. <i>Physics and Imaging in Radiation Oncology</i> , 2017, 3, 21-27.	1.2	16
52	Meta-Model-Based Calibration and Sensitivity Studies of Computational Fluid Dynamics Simulation of Jet Pumps. <i>Chemical Engineering and Technology</i> , 2017, 40, 1674-1684.	0.9	6
53	Non-destructive testing of CFRP using pulsed thermographic data enhanced by wavelet transform-based image denoising. , 2017, , .		0
54	Simultaneous identification of parameter and time-delay based on subspace method and cross-correlation function. , 2017, , .		1

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55	Development of a Two-Dimensional Model for Predicting Transdermal Permeation with the Follicular Pathway: Demonstration with a Caffeine Study. <i>Pharmaceutical Research</i> , 2017, 34, 2036-2048.	1.7	30
56	Smoothed ℓ_1 -regularization-based line search for sparse signal recovery. <i>Soft Computing</i> , 2017, 21, 4813-4828.	2.1	4
57	Soft-sensing method for optimizing combustion efficiency of reheating furnaces. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 73, 112-122.	2.7	10
58	A multi-centre analysis of radiotherapy beam output measurement. <i>Physics and Imaging in Radiation Oncology</i> , 2017, 4, 39-43.	1.2	11
59	Kriging meta-model assisted calibration of computational fluid dynamics models. <i>AIChE Journal</i> , 2016, 62, 4308-4320.	1.8	18
60	PID based nonlinear processes control model uncertainty improvement by using Gaussian process model. <i>Journal of Process Control</i> , 2016, 42, 77-89.	1.7	12
61	A spreadsheet calculator for estimating biogas production and economic measures for UK-based farm-fed anaerobic digesters. <i>Bioresource Technology</i> , 2016, 220, 479-489.	4.8	18
62	Multiperiod Planning of a PVC Plant for the Optimization of Process Operation and Energy Consumption: An MINLP Approach. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 12430-12443.	1.8	11
63	In Silico Modelling of Transdermal and Systemic Kinetics of Topically Applied Solutes: Model Development and Initial Validation for Transdermal Nicotine. <i>Pharmaceutical Research</i> , 2016, 33, 1602-1614.	1.7	26
64	Modelling and Bayesian adaptive prediction of individual patients' tumour volume change during radiotherapy. <i>Physics in Medicine and Biology</i> , 2016, 61, 2145-2161.	1.6	15
65	Optimizing scheduling of refinery operations based on piecewise linear models. <i>Computers and Chemical Engineering</i> , 2015, 75, 105-119.	2.0	22
66	Gaussian process regression with multiple response variables. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2015, 142, 159-165.	1.8	69
67	Auto-Switch Gaussian Process Regression-Based Probabilistic Soft Sensors for Industrial Multigrade Processes with Transitions. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 5037-5047.	1.8	66
68	Mathematical modelling of tumour volume dynamics in response to stereotactic ablative radiotherapy for non-small cell lung cancer. <i>Physics in Medicine and Biology</i> , 2015, 60, 3695-3713.	1.6	12
69	Patient-reported Outcome Measures in Radiotherapy: Clinical Advances and Research Opportunities in Measurement for Survivorship. <i>Clinical Oncology</i> , 2015, 27, 679-685.	0.6	24
70	Refinery scheduling with varying crude: A deep belief network classification and multimodel approach. <i>AIChE Journal</i> , 2014, 60, 2525-2532.	1.8	25
71	Nonlinear process monitoring and fault isolation using extended maximum variance unfolding. <i>Journal of Process Control</i> , 2014, 24, 880-891.	1.7	34
72	Meta-modelling for fast analysis of CFD-simulated vapour cloud dispersion processes. <i>Computers and Chemical Engineering</i> , 2014, 69, 89-97.	2.0	23

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73	Root cause analysis in multivariate statistical process monitoring: Integrating reconstruction-based multivariate contribution analysis with fuzzy-signed directed graphs. <i>Computers and Chemical Engineering</i> , 2014, 64, 167-177.	2.0	27
74	Mixture Discriminant Monitoring: A Hybrid Method for Statistical Process Monitoring and Fault Diagnosis/Isolation. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 10720-10731.	1.8	16
75	An integrated approach to active model adaptation and on-line dynamic optimisation of batch processes. <i>Journal of Process Control</i> , 2013, 23, 1350-1359.	1.7	2
76	Optimization and statistical analysis of Au-ZnO/Al ₂ O ₃ catalyst for CO oxidation. <i>Journal of Energy Chemistry</i> , 2013, 22, 498-505.	7.1	0
77	Penalized Reconstruction-Based Multivariate Contribution Analysis for Fault Isolation. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 7784-7794.	1.8	18
78	Response to the discussion of "The effect of parameter uncertainty on achieved safety integrity of safety system". <i>Reliability Engineering and System Safety</i> , 2013, 109, 1-2.	5.1	0
79	Nonlinear process monitoring by integrating manifold learning with Gaussian process. <i>Computer Aided Chemical Engineering</i> , 2013, , 1009-1014.	0.3	2
80	Mass transfer studies in shallow bubble column reactors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2012, 62, 18-25.	1.8	38
81	Response surface methodology with prediction uncertainty: A multi-objective optimisation approach. <i>Chemical Engineering Research and Design</i> , 2012, 90, 1235-1244.	2.7	52
82	Reconstruction-based multivariate contribution analysis for fault isolation: A branch and bound approach. <i>Journal of Process Control</i> , 2012, 22, 1228-1236.	1.7	42
83	Optimal dosing of cancer chemotherapy using model predictive control and moving horizon state/parameter estimation. <i>Computer Methods and Programs in Biomedicine</i> , 2012, 108, 973-983.	2.6	81
84	GPR model with signal preprocessing and bias update for dynamic processes modeling. <i>Control Engineering Practice</i> , 2012, 20, 1281-1292.	3.2	23
85	QSAR prediction of HIV inhibition activity of styrylquinoline derivatives by genetic algorithm coupled with multiple linear regressions. <i>Medicinal Chemistry Research</i> , 2012, 21, 437-443.	1.1	19
86	Model-aided optimization and analysis of multi-component catalysts: Application to selective hydrogenation of cinnamaldehyde. <i>Chemical Engineering Science</i> , 2012, 76, 26-36.	1.9	17
87	The effect of parameter uncertainty on achieved safety integrity of safety system. <i>Reliability Engineering and System Safety</i> , 2012, 99, 15-23.	5.1	15
88	Optimal replacement policy for safety-related multi-component multi-state systems. <i>Reliability Engineering and System Safety</i> , 2012, 99, 87-95.	5.1	21
89	Multivariate Calibration of Near Infrared Spectroscopy in the Presence of Light Scattering Effect: A Comparative Study. <i>Analytical Letters</i> , 2011, 44, 824-836.	1.0	24
90	Chemometric determination of the length distribution of single walled carbon nanotubes through optical spectroscopy. <i>Analytica Chimica Acta</i> , 2011, 708, 28-36.	2.6	5

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91	Development of high performance catalysts for CO oxidation using data-based modeling. Catalysis Today, 2011, 174, 127-134.	2.2	11
92	Bayesian migration of Gaussian process regression for rapid process modeling and optimization. Chemical Engineering Journal, 2011, 166, 1095-1103.	6.6	40
93	Bagging for robust non-linear multivariate calibration of spectroscopy. Chemometrics and Intelligent Laboratory Systems, 2011, 105, 1-6.	1.8	35
94	Interpretation of non-linear empirical data-based process models using global sensitivity analysis. Chemometrics and Intelligent Laboratory Systems, 2011, 107, 116-123.	1.8	9
95	Efficient meta-modelling of complex process simulations with time- and space-dependent outputs. Computers and Chemical Engineering, 2011, 35, 502-509.	2.0	36
96	Quality prediction for polypropylene production process based on CLGPR model. Control Engineering Practice, 2011, 19, 423-432.	3.2	71
97	Iterative Data-based Modelling and Optimization for Rapid Design of Dynamic Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 475-480.	0.4	0
98	A Branch and Bound Method for Fault Isolation through Missing Variable Analysis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 121-126.	0.4	0
99	Bayesian variable selection for Gaussian process regression: Application to chemometric calibration of spectrometers. Neurocomputing, 2010, 73, 2718-2726.	3.5	34
100	Surface-functionalized TUD-1 mesoporous molecular sieve supported palladium for solvent-free aerobic oxidation of benzyl alcohol. Journal of Catalysis, 2010, 275, 11-24.	3.1	106
101	Multivariate statistical monitoring of two-dimensional dynamic batch processes utilizing non-Gaussian information. Journal of Process Control, 2010, 20, 1188-1197.	1.7	43
102	A branch and bound method for isolation of faulty variables through missing variable analysis. Journal of Process Control, 2010, 20, 1198-1206.	1.7	69
103	Response surface methodology using Gaussian processes: Towards optimizing the trans-stilbene epoxidation over Co ₂ +NaX catalysts. Chemical Engineering Journal, 2010, 156, 423-431.	6.6	53
104	QSPR predictions of heat of fusion of organic compounds using Bayesian regularized artificial neural networks. Chemometrics and Intelligent Laboratory Systems, 2010, 104, 260-264.	1.8	27
105	On reducing false alarms in multivariate statistical process control. Chemical Engineering Research and Design, 2010, 88, 430-436.	2.7	35
106	On-line multivariate statistical monitoring of batch processes using Gaussian mixture model. Computers and Chemical Engineering, 2010, 34, 500-507.	2.0	92
107	Revisit of the Wall Effect on the Settling of Cylindrical Particles in the Inertial Regime. Industrial & Engineering Chemistry Research, 2010, 49, 8870-8876.	1.8	14
108	Bagging for Gaussian process regression. Neurocomputing, 2009, 72, 1605-1610.	3.5	124

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109	Bayesian linear regression and variable selection for spectroscopic calibration. <i>Analytica Chimica Acta</i> , 2009, 631, 13-21.	2.6	69
110	Probabilistic contribution analysis for statistical process monitoring: A missing variable approach. <i>Control Engineering Practice</i> , 2009, 17, 469-477.	3.2	73
111	Statistical Modelling and Analysis of the Aerobic Oxidation of Benzyl Alcohol over Mn/C Catalysts. <i>Catalysis Letters</i> , 2009, 128, 210-220.	1.4	18
112	Robust probabilistic PCA with missing data and contribution analysis for outlier detection. <i>Computational Statistics and Data Analysis</i> , 2009, 53, 3706-3716.	0.7	100
113	Determination of Actual Object Size Distribution from Direct Imaging. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 10136-10146.	1.8	8
114	On-line statistical monitoring of batch processes using Gaussian mixture model. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 667-672.	0.4	0
115	Dynamic data rectification using particle filters. <i>Computers and Chemical Engineering</i> , 2008, 32, 451-462.	2.0	35
116	The impact of temperature variations on spectroscopic calibration modelling: a comparative study. <i>Journal of Chemometrics</i> , 2007, 21, 198-207.	0.7	30
117	Gaussian process regression for multivariate spectroscopic calibration. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2007, 87, 59-71.	1.8	136
118	Response to the discussion of "Gaussian process regression for multivariate spectroscopic calibration". <i>Chemometrics and Intelligent Laboratory Systems</i> , 2007, 87, 69-71.	1.8	3
119	Particle Filters for Dynamic Data Rectification and Process Change Detection. , 2007, , 204-209.		1
120	PARTICLE FILTERS FOR DYNAMIC DATA RECTIFICATION AND PROCESS CHANGE DETECTION. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006, 39, 204-209.	0.4	0
121	Probability density estimation via an infinite Gaussian mixture model: application to statistical process monitoring. <i>Journal of the Royal Statistical Society Series C: Applied Statistics</i> , 2006, 55, 699-715.	0.5	70
122	Particle filters for state and parameter estimation in batch processes. <i>Journal of Process Control</i> , 2005, 15, 665-673.	1.7	141
123	Accent Issues in Large Vocabulary Continuous Speech Recognition. <i>International Journal of Speech Technology</i> , 2004, 7, 141-153.	1.4	56
124	Particle filters for the estimation of a state space model. <i>Computer Aided Chemical Engineering</i> , 2004, , 613-618.	0.3	9
125	Bayesian Control Limits for Statistical Process Monitoring. , 0, , .		1