Manabu Kano

List of Publications by Year
in descending order

232 papers	5,398 citations	126708 33 h-index	95083 68 g-index
235 all docs	235 docs citations	235 times ranked	2932 citing authors

#	Article	IF	Citations
1	Data-based process monitoring, process control, and quality improvement: Recent developments and applications in steel industry. Computers and Chemical Engineering, 2008, 32, 12-24.	2.0	429
2	Monitoring independent components for fault detection. AICHE Journal, 2003, 49, 969-976.	1.8	377
3	Soft–sensor development using correlation–based just–in–time modeling. AICHE Journal, 2009, 55, 1754-1765.	1.8	261
4	The state of the art in chemical process control in Japan: Good practice and questionnaire survey. Journal of Process Control, 2010, 20, 969-982.	1.7	226
5	Biodiesel Production from Palm Oil, Its By-Products, and Mill Effluent: A Review. Energies, 2018, 11, 2132.	1.6	197
6	A new multivariate statistical process monitoring method using principal component analysis. Computers and Chemical Engineering, 2001, 25, 1103-1113.	2.0	181
7	Comparison of multivariate statistical process monitoring methods with applications to the Eastman challenge problem. Computers and Chemical Engineering, 2002, 26, 161-174.	2.0	173
8	Inferential control system of distillation compositions using dynamic partial least squares regression. Journal of Process Control, 2000, 10, 157-166.	1.7	158
9	Virtual Sensing Technology in Process Industries: Trends and Challenges Revealed by Recent Industrial Applications. Journal of Chemical Engineering of Japan, 2013, 46, 1-17.	0.3	158
10	CFD-based optimal design of manifold in plate-fin microdevices. Chemical Engineering Journal, 2004, 101, 397-402.	6.6	157
11	Statistical process monitoring based on dissimilarity of process data. AICHE Journal, 2002, 48, 1231-1240.	1.8	139
12	Heart Rate Variability-Based Driver Drowsiness Detection and Its Validation With EEG. IEEE Transactions on Biomedical Engineering, 2019, 66, 1769-1778.	2.5	138
13	Estimation of active pharmaceutical ingredients content using locally weighted partial least squares and statistical wavelength selection. International Journal of Pharmaceutics, 2011, 421, 269-274.	2.6	131
14	Evolution of multivariate statistical process control: application of independent component analysis and external analysis. Computers and Chemical Engineering, 2004, 28, 1157-1166.	2.0	123
15	Epileptic Seizure Prediction Based on Multivariate Statistical Process Control of Heart Rate Variability Features. IEEE Transactions on Biomedical Engineering, 2016, 63, 1321-1332.	2.5	119
16	Development of soft-sensor using locally weighted PLS with adaptive similarity measure. Chemometrics and Intelligent Laboratory Systems, 2013, 124, 43-49.	1.8	85
17	Adaptive Virtual Metrology Design for Semiconductor Dry Etching Process Through Locally Weighted Partial Least Squares. IEEE Transactions on Semiconductor Manufacturing, 2015, 28, 137-144.	1.4	80
18	Long-Term Industrial Applications of Inferential Control Based on Just-In-Time Soft-Sensors: Economical Impact and Challenges. Industrial & Engineering Chemistry Research, 2013, 52, 12346-12356.	1.8	77

#	ARTICLE	IF	CITATIONS
19	Comparison of statistical process monitoring methods: application to the Eastman challenge problem. Computers and Chemical Engineering, 2000, 24, 175-181.	2.0	72
20	Covariance-based locally weighted partial least squares for high-performance adaptive modeling. Chemometrics and Intelligent Laboratory Systems, 2015, 146, 55-62.	1.8	70
21	Optimum quality design system for steel products through locally weighted regression model. Journal of Process Control, 2011, 21, 293-301.	1.7	61
22	A comparative study of deep and shallow predictive techniques for hot metal temperature prediction in blast furnace ironmaking. Computers and Chemical Engineering, 2019, 130, 106575.	2.0	56
23	Evaluation of Infrared-Reflection Absorption Spectroscopy Measurement and Locally Weighted Partial Least-Squares for Rapid Analysis of Residual Drug Substances in Cleaning Processes. Analytical Chemistry, 2012, 84, 3820-3826.	3.2	50
24	Locally weighted kernel partial least squares regression based on sparse nonlinear features for virtual sensing of nonlinear time-varying processes. Computers and Chemical Engineering, 2017, 104, 164-171.	2.0	49
25	Inferential control of distillation compositions: selection of model and control configuration. Control Engineering Practice, 2003, 11, 927-933.	3.2	47
26	Direct PID Tuning from Closed-Loop Data and Its Application to Unstable Processes. Transactions of the Institute of Systems Control and Information Engineers, 2009, 22, 137-144.	0.1	47
27	Product Quality Estimation and Operating Condition Monitoring for Industrial Ethylene Fractionator. Journal of Chemical Engineering of Japan, 2004, 37, 422-428.	0.3	44
28	Input variable selection for PLS modeling using nearest correlation spectral clustering. Chemometrics and Intelligent Laboratory Systems, 2012, 118, 109-119.	1.8	40
29	Gray-box modeling for prediction and control of molten steel temperature in tundish. Journal of Process Control, 2014, 24, 375-382.	1.7	40
30	Development of correlation-based clustering method and its application to software sensing. Chemometrics and Intelligent Laboratory Systems, 2010, 101, 130-138.	1.8	37
31	Quality Prediction in Complex Batch Processes with Just-in-Time Learning Model Based on Non-Gaussian Dissimilarity Measure. Industrial & Engineering Chemistry Research, 2015, 54, 7694-7705.	1.8	36
32	Ensemble pattern trees for predicting hot metal temperature in blast furnace. Computers and Chemical Engineering, 2019, 121, 442-449.	2.0	36
33	Over- and Under-sampling Approach for Extremely Imbalanced and Small Minority Data Problem in Health Record Analysis. Frontiers in Public Health, 2020, 8, 178.	1.3	35
34	Development of correlation-based pattern recognition algorithm and adaptive soft-sensor design. Control Engineering Practice, 2012, 20, 371-378.	3.2	34
35	Wearable Epileptic Seizure Prediction System with Machine-Learning-Based Anomaly Detection of Heart Rate Variability. Sensors, 2020, 20, 3987.	2.1	33
36	Prediction and causal analysis of defects in steel products: Handling nonnegative and highly overdispersed count data. Control Engineering Practice, 2020, 95, 104258.	3.2	31

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37	Development of Drowsiness Detection Method by Integrating Heart Rate Variability Analysis and Multivariate Statistical Process Control. SICE Journal of Control Measurement and System Integration, 2016, 9, 10-17.	0.4	29
38	Gray-box Soft Sensors in Process Industry: Current Practice, and Future Prospects in Era of Big Data. Processes, 2020, 8, 243.	1.3	28
39	Dynamics and Control of Heat Integrated Distillation Column (HIDiC). Journal of Chemical Engineering of Japan, 2006, 39, 1096-1103.	0.3	27
40	Data-based and model-based blockage diagnosis for stacked microchemical processes. Chemical Engineering Science, 2007, 62, 1073-1080.	1.9	27
41	A first-principle model of 300 mm Czochralski single-crystal Si production process for predicting crystal radius and crystal growth rate. Journal of Crystal Growth, 2018, 492, 105-113.	0.7	27
42	Operation policy for micro chemical plants with external numbering-up structure. Chemical Engineering Journal, 2008, 135, S131-S137.	6.6	26
43	New Synthesis Procedure To Find the Optimal Distillation Sequence with Internal and External Heat Integrations. Industrial & Engineering Chemistry Research, 2013, 52, 4851-4862.	1.8	26
44	External analysis-based regression model for robust soft sensing of multimode chemical processes. AICHE Journal, 2014, 60, 136-147.	1.8	24
45	Technological Progress in Biodiesel Production: An Overview on Different Types of Reactors. Energy Procedia, 2019, 156, 452-457.	1.8	24
46	Verification of model development technique for NIR-based real-time monitoring of ingredient concentration during blending. International Journal of Pharmaceutics, 2014, 471, 264-275.	2.6	23
47	Plantwide control system design of the benchmark vinyl acetate monomer production plant. Computers and Chemical Engineering, 2010, 34, 1282-1295.	2.0	22
48	Correlation-based spectral clustering for flexible process monitoring. Journal of Process Control, 2011, 21, 1438-1448.	1.7	22
49	Real-time monitoring of lubrication properties of magnesium stearate using NIR spectrometer and thermal effusivity sensor. International Journal of Pharmaceutics, 2013, 441, 402-413.	2.6	20
50	Vinyl Acetate Monomer (VAM) Plant Model: A New Benchmark Problem for Control and Operation Study. IFAC-PapersOnLine, 2016, 49, 533-538.	0.5	20
51	An Artificial Intelligence Method for Energy Efficient Operation of Crude Distillation Units under Uncertain Feed Composition. Energies, 2018, 11, 2993.	1.6	20
52	Obstructive sleep apnea screening by heart rate variability-based apnea/normal respiration discriminant model. Physiological Measurement, 2019, 40, 125001.	1.2	20
53	Application of the method of characteristics to crystallizer simulation and comparison with finite difference for controller performance evaluation. Journal of Process Control, 2000, 10, 203-208.	1.7	19
54	Two-stage subspace identification for softsensor design and disturbance estimation. Journal of Process Control, 2009, 19, 179-186.	1.7	19

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55	A Statistical Model for Predicting the Liquid Steel Temperature in Ladle and Tundish by Bootstrap Filter. ISIJ International, 2012, 52, 1086-1091.	0.6	19
56	Ischemic Stroke Detection by Analyzing Heart Rate Variability in Rat Middle Cerebral Artery Occlusion Model. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1152-1160.	2.7	19
57	Transient model-based operation guidance on blast furnace. Control Engineering Practice, 2019, 82, 130-141.	3.2	19
58	Sleep Spindle Detection Using RUSBoost and Synchrosqueezed Wavelet Transform. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 390-398.	2.7	19
59	Screening of sleep apnea based on heart rate variability and long short-term memory. Sleep and Breathing, 2021, 25, 1821-1829.	0.9	19
60	The State of the Art in Advanced Chemical Process Control in Japan. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 10-25.	0.4	18
61	Visualisation of the T cell differentiation programme by Canonical Correspondence Analysis of transcriptomes. BMC Genomics, 2014, 15, 1028.	1.2	18
62	Real-time heart rate variability monitoring employing a wearable telemeter and a smartphone. , 2014, , .		16
63	Efficient input variable selection for soft-senor design based on nearest correlation spectral clustering and group Lasso. ISA Transactions, 2015, 58, 367-379.	3.1	16
64	Dissimilarity of Process Data for Statistical Process Monitoring. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 231-236.	0.4	15
65	Development and Validation of Kinematical Blast Furnace Model with Long-term Operation Data. ISIJ International, 2018, 58, 2210-2218.	0.6	15
66	Optimal Weighting Distance-Based Similarity for Locally Weighted PLS Modeling. Industrial & Engineering Chemistry Research, 2020, 59, 11552-11558.	1.8	15
67	Multiobjective Optimization for Synthesizing Compressor-Aided Distillation Sequences with Heat Integration. Industrial & Engineering Chemistry Research, 2012, 51, 5911-5921.	1.8	14
68	High-Performance Prediction of Molten Steel Temperature in Tundish through Gray-Box Model. ISIJ International, 2013, 53, 76-80.	0.6	14
69	Data-driven generalized minimum variance regulatory control. , 2014, , .		13
70	Prediction of Molten Steel Temperature in Steel Making Process with Uncertainty by Integrating Gray-Box Model and Bootstrap Filter. Journal of Chemical Engineering of Japan, 2014, 47, 827-834.	0.3	13
71	Sparse Sample Regression Based Just-In-Time Modeling (SSR-JIT): Beyond Locally Weighted Approach**This study was supported by JSPS KAKENHI 15K06554.. IFAC-PapersOnLine, 2016, 49, 502-507.	0.5	13
72	Dimensions and Analysis of Uncertainty in Industrial Modeling Process. Journal of Chemical Engineering of Japan, 2018, 51, 533-543.	0.3	13

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73	Principal Polynomial Analysis for Fault Detection and Diagnosis of Industrial Processes. IEEE Access, 2018, 6, 52298-52307.	2.6	13
74	Quality-relevant independent component regression model for virtual sensing application. Computers and Chemical Engineering, 2018, 115, 141-149.	2.0	13
75	Correlation-based Just-In-Time Modeling for Softsensor Design. Transactions of the Society of Instrument and Control Engineers, 2008, 44, 317-324.	0.1	13
76	A fictitious reference iterative tuning method with simultaneous delay parameter tuning of the reference model. , 2009, , .		12
77	Development of drowsy driving accident prediction by heart rate variability analysis. , 2014, , .		12
78	Practical Operation Guidance on Thermal Control of Blast Furnace. ISIJ International, 2019, 59, 1573-1581.	0.6	12
79	Visualising the Cross-Level Relationships between Pathological and Physiological Processes and Gene Expression: Analyses of Haematological Diseases. PLoS ONE, 2013, 8, e53544.	1.1	12
80	Combined Multivariate Statistical Process Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 281-286.	0.4	11
81	Practice and Challenges in Chemical Process Control Applications in Japan. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 10608-10613.	0.4	11
82	Setting the process parameters for the coating process in order to assure tablet appearance based on multivariate analysis of prior data. International Journal of Pharmaceutics, 2016, 511, 341-350.	2.6	11
83	The oldest Asian hesperornithiform from the Upper Cretaceous of Japan, and the phylogenetic reassessment of Hesperornithiformes. Journal of Systematic Palaeontology, 2018, 16, 689-709.	0.6	11
84	Shape Optimization of Microchannels Using CFD and Adjoint Method. Computer Aided Chemical Engineering, 2010, , 37-42.	0.3	10
85	Heart rate variability features for epilepsy seizure prediction. , 2013, , .		10
86	Spectral fluctuation dividing for efficient wavenumber selection: Application to estimation of water and drug content in granules using near infrared spectroscopy. International Journal of Pharmaceutics, 2014, 475, 504-513.	2.6	10
87	Fictitious reference iterative tuning based on variance evaluation for disturbance attenuation in non-minimum phase plants. , 2015, , .		10
88	Real-Time Estimation of Molten Steel Flow in Continuous Casting Mold. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 581-588.	1.0	10
89	Machine Learning Applications in Biofuels' Life Cycle: Soil, Feedstock, Production, Consumption, and Emissions. Energies, 2021, 14, 5072.	1.6	10
90	Modeling and Detection of Stiction in Pneumatic Control Valve. Transactions of the Society of Instrument and Control Engineers, 2004, 40, 825-833.	0.1	9

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91	Practical direct PID/I-PD controller tuning and its application to chemical processes. , 2010, , .		9
92	Computational fluid dynamics based model development and exergy analysis of naphtha reforming reactors. International Journal of Exergy, 2017, 24, 344.	0.2	9
93	Online Prediction of Hot Metal Temperature Using Transient Model and Moving Horizon Estimation. ISIJ International, 2019, 59, 1534-1544.	0.6	9
94	Gray-box modeling of 300Âmm diameter Czochralski single-crystal Si production process. Journal of Crystal Growth, 2021, 553, 125929.	0.7	9
95	Data-Driven Communication Efficient Distributed Monitoring for Multiunit Industrial Plant-Wide Processes. IEEE Transactions on Automation Science and Engineering, 2022, 19, 1913-1923.	3.4	9
96	Real-driving-implementable drowsy driving detection method using heart rate variability based on long short-term memory and autoencoder. IFAC-PapersOnLine, 2021, 54, 526-531.	0.5	9
97	Optimal operation of a continuous DTB crystallizer. Journal of Process Control, 2000, 10, 441-448.	1.7	8
98	Data-driven generalized minimum variance regulatory control for model-free PID gain tuning. , 2015, , .		8
99	Data-Based Sensing and Stochastic Analysis of Biodiesel Production Process. Energies, 2019, 12, 63.	1.6	8
100	Data-Based Ground Fault Diagnosis of Power Cable Systems. SICE Journal of Control Measurement and System Integration, 2013, 6, 290-297.	0.4	8
101	Design of Flow Averaging Level Control System Using IP Controller with Gap.. Kagaku Kogaku Ronbunshu, 1998, 24, 259-265.	0.1	7
102	Process Monitoring Based on Dissimilarity of Time Series Data.. Kagaku Kogaku Ronbunshu, 1999, 25, 1004-1009.	0.1	7
103	Fault detection and identification based on dissimilarity of process data. , 2001, , .		7
104	Softsensor Development through Two-Stage Subspace Identification. , 2006, , .		7
105	Development of a wearable HRV telemetry system to be operated by non-experts in daily life. , 2013, , .		7
106	Simultaneous update of model and controller using fictitious reference iterative tuning for disturbance attenuation based on variance evaluation. , 2014, , .		7
107	Missing RRI Interpolation Algorithm based on Locally Weighted Partial Least Squares for Precise Heart Rate Variability Analysis. Sensors, 2018, 18, 3870.	2.1	7
108	Model Development and Exergy Analysis of a Microreactor for the Steam Methane Reforming Process in a CFD Environment. Entropy, 2019, 21, 399.	1.1	7

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109	Resting Heart Rate Variability Is Associated With Subsequent Orthostatic Hypotension: Comparison Between Healthy Older People and Patients With Rapid Eye Movement Sleep Behavior Disorder. Frontiers in Neurology, 2020, 11, 567984.	1.1	7
110	Regression and independence based variable importance measure. Computers and Chemical Engineering, 2020, 135, 106757.	2.0	7
111	Control strategy and methods for continuous direct compression processes. Asian Journal of Pharmaceutical Sciences, 2021, 16, 253-262.	4.3	7
112	Work Habit-Related Sleep Debt; Insights From Factor Identification Analysis of Actigraphy Data. Frontiers in Public Health, 2021, 9, 630640.	1.3	7
113	Improvement of Distillation Composition Control by Using Predictive Inferential Control Technique.. Journal of Chemical Engineering of Japan, 2001, 34, 1026-1032.	0.3	7
114	Data-Driven Quality Improvement: Handling Qualitative Variables. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 565-570.	0.4	6
115	Recent developments and industrial applications of data-based process monitoring and process control. Computer Aided Chemical Engineering, 2006, 21, 57-62.	0.3	6
116	Data-Based Fault Diagnosis of Power Cable System: Comparative Study of k-NN, ANN, Random Forest, and CART. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12880-12885.	0.4	6
117	Environmental and economic optimization of distillation structures to produce anhydrous ethanol. Computer Aided Chemical Engineering, 2012, 30, 712-716.	0.3	6
118	Heart rate monitoring by a pulse sensor embedded game controller. , 2015, , .		6
119	Development of sleep apnea syndrome screening algorithm by using heart rate variability analysis and support vector machine. , 2015, 2015, 8165-8.		6
120	Analysis of VNS Effect on EEG Connectivity with Granger Causality and Graph Theory. , 2018, , .		6
121	Exergy analysis and optimisation of naphtha reforming process with uncertainty. International Journal of Exergy, 2018, 26, 247.	0.2	6
122	Epileptic Seizure Suppression by Focal Brain Cooling With Recirculating Coolant Cooling System: Modeling and Simulation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 162-171.	2.7	6
123	Multiple Steady-States in a Heat Integrated Distillation Column (HIDiC). Journal of Chemical Engineering of Japan, 2007, 40, 824-831.	0.3	6
124	Influence of the incomplete dissolution of fines in the fines dissolver on the optimal operation of industrial continuous DTB crystallizers. Powder Technology, 2001, 121, 93-98.	2.1	5
125	Application of Statistical Process Monitoring with External Analysis to an Industrial Monomer Plant. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 379-384.	0.4	5
126	PRODUCT QUALITY IMPROVEMENT USING MULTIVARIATE DATA ANALYSIS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 175-180.	0.4	5

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127	Prediction of Multiple Steady States in Distillation through Simple Mass and Heat Balance Analysis. Industrial & Engineering Chemistry Research, 2011, 50, 1346-1351.	1.8	5
128	Comparative Study of State Estimation of Tubular Microreactors using UKF and EKF. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 513-518.	0.4	5
129	Input variable scaling for statistical modeling. Computers and Chemical Engineering, 2015, 74, 59-65.	2.0	5
130	Design of focal brain cooling system for suppressing epileptic seizures. , 2017, 2017, 283-286.		5
131	Hurdle Modeling for Defect Data with Excess Zeros in Steel Manufacturing Process. IFAC-PapersOnLine, 2018, 51, 375-380.	0.5	5
132	Database Management Method Based on Strength of Nonlinearity for Locally Weighted Linear Regression. Journal of Chemical Engineering of Japan, 2019, 52, 554-561.	0.3	5
133	Autoencoder-Based Extrasystole Detection and Modification of RRI Data for Precise Heart Rate Variability Analysis. Sensors, 2021, 21, 3235.	2.1	5
134	A New Strategy of Locality Enhancement for Justin-Time Learning Method. Computer Aided Chemical Engineering, 2012, 31, 1662-1666.	0.3	5
135	R-R interval-based sleep apnea screening by a recurrent neural network in a large clinical polysomnography dataset. Clinical Neurophysiology, 2022, 139, 80-89.	0.7	5
136	Inferential Control of Distillation Composition Using Partial Least Squares Regression.. Kagaku Kogaku Ronbunshu, 1998, 24, 425-430.	0.1	4
137	Stabilizing Control of Continuous DTB Crystallizer. Influence of Undissolved Fine Crystals in External Heater.. Kagaku Kogaku Ronbunshu, 1999, 25, 51-58.	0.1	4
138	Rigorous Dynamic Simulator for Control Study of the Large-scale Benchmark Chemical Plant. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 49-54.	0.4	4
139	Gray-Box Model to Control Molten Steel Temperature in Tundish. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 268-269.	0.4	4
140	Design of Inner and Outer Gray-Box Models to Predict Molten Steel Temperature in Tundish. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 744-749.	0.4	4
141	Epileptic Seizure Monitoring by Using Multivariate Statistical Process Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 249-254.	0.4	4
142	Application of locally weighted partial least squares to design of semiconductor virtual metrology. , 2014, , .		4
143	Process Parameter Optimization based on LW-PLS in Pharmaceutical Granulation Processâˆ’âˆ’This work was partially supported by Japan Society for the Promotion of Science (JSPS), Grant-in-Aid for Scientific Research (C) 24560940.. IFAC-PapersOnLine, 2015, 48, 303-308.	0.5	4
144	The Last Surviving Ammonoid at the end of the Cretaceous in the North Pacific Region. Paleontological Research, 2016, 20, 116-120.	0.5	4

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145	Pattern trees modeling for prediction and control of hot metal temperature in blast furnace ironmaking. , 2017, , .		4
146	Deniosing Autoencoder-based Modification of RRI data with Premature Ventricular Contraction for Precise Heart Rate Variability Analysis. , 2018, 2018, 5018-5021.		4
147	Defect Data Modeling and Analysis for Improving Product Quality and Productivity in Steel Industry. Computer Aided Chemical Engineering, 2018, 44, 2233-2238.	0.3	4
148	Quality Control for Steel Products through Locally-weighted Regression. Transactions of the Society of Instrument and Control Engineers, 2008, 44, 325-332.	0.1	4
149	Closed-loop identification of plant and disturbance models based on data-driven generalized minimum variance regulatory control. Journal of Process Control, 2022, 115, 197-208.	1.7	4
150	Selection of Inferential Models for Controlling Product Compositions in a Distillation Column.. Kagaku Kogaku Ronbunshu, 2000, 26, 94-99.	0.1	3
151	Just-In-Time Statistical Process Control: Adaptive Monitoring of Vinyl Acetate Monomer Process. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13157-13162.	0.4	3
152	Accuracy comparison between two microcontroller-embedded R-wave detection methods for heart-rate variability analysis. , 2015, , .		3
153	Closed-loop identification of plant and disturbance models based on generalized minimum variance evaluation. , 2015, , .		3
154	Efficient wavenumber selection based on spectral fluctuation dividing and correlation-based clustering for calibration modeling. Chemometrics and Intelligent Laboratory Systems, 2015, 148, 85-94.	1.8	3
155	Missing RRI interpolation for HRV analysis using locally-weighted partial least squares regression. , 2016, 2016, 2386-2389.		3
156	A new infarction detection method based on heart rate variability in rat middle cerebral artery occlusion model. , 2017, 2017, 3061-3064.		3
157	Design of false heart rate feedback system for improving game experience. , 2018, , .		3
158	Data-Based Prediction and Stochastic Analysis of Entrained Flow Coal Gasification under Uncertainty. Sensors, 2019, 19, 1626.	2.1	3
159	Quantitative analysis of product quality of naphtha reforming process under uncertain process conditions. Chemical Engineering Communications, 2020, 207, 1092-1102.	1.5	3
160	Approach to Establishment of Control Strategy for Oral Solid Dosage Forms Using Continuous Manufacturing. Chemical and Pharmaceutical Bulletin, 2021, 69, 211-217.	0.6	3
161	Gray-box model-based predictive control of Czochralski process. Journal of Crystal Growth, 2021, 573, 126299.	0.7	3
162	Practical Use of Operation Data in the Process Industry. IEEJ Transactions on Electronics, Information and Systems, 2011, 131, 710-717.	0.1	3

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163	Scale-Free Soft Sensor for Monitoring of Water Content in Fluid Bed Granulation Process. Chemical and Pharmaceutical Bulletin, 2020, 68, 855-863.	0.6	3
164	Optimal Operation and Control of a Continuous DTB Crystallizer. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 7113-7118.	0.4	2
165	Inferential control of distillation compositions: Selection of model and control configuration. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 347-352.	0.4	2
166	Systematic procedure for designing a microreactor with slit-type mixing structure. Computer Aided Chemical Engineering, 2006, 21, 823-828.	0.3	2
167	Effect of Multiple Steady-States on Operation Strategy and Control Structure for a Heat Integrated Distillation Column (HIDiC). Computer Aided Chemical Engineering, 2009, 26, 447-451.	0.3	2
168	Sensor Location for Effective Fault Diagnosis in Micro Chemical Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 309-314.	0.4	2
169	Correlation-Based Pattern Recognition and Its Application to Adaptive Soft-Sensor Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 661-666.	0.4	2
170	Sensitivity Analysis for Controlling Molten Steel Temperature in Tundish* *This study has been partially supported by the grant from ISIJ as an activity of research group, â€œHigh Precision Process Control via Large Scale Database and Simulation Models''.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 270-271.	0.4	2
171	Domain of attraction for optimization of data-based H$<$inf$>$2$<$/inf$>$ control performance criterion. , 2014, , .		2
172	Epileptic seizure monitoring by One-Class Support Vector Machine. , 2014, , .		2
173	Nearest Correlation Louvain Method for Fast and Good Selection of Input Variables of Statistical Modelâ€”â€”This study is partially supported by Japan Society for the Promotion of Science (JSPS), Grant-in-Aid for Scientific Research (C) 24560940.. IFAC-PapersOnLine, 2015, 48, 123-128.	0.5	2
174	Variable Elimination-Based Contribution for Accurate Fault Identification**This study was supported by JSPS KAKENHI 15K06554.. IFAC-PapersOnLine, 2016, 49, 383-388.	0.5	2
175	Nearest Correlation-Based Input Variable Weighting for Soft-Sensor Design. Frontiers in Chemistry, 2018, 6, 171.	1.8	2
176	Development of Data-Based Hierarchical Quality Improvement System (HiQIS). Transactions of the Society of Instrument and Control Engineers, 2006, 42, 909-915.	0.1	2
177	Model-Based Quality, Exergy, and Economic Analysis of Fluidized Bed Membrane Reactors. Membranes, 2021, 11, 765.	1.4	2
178	Plan View Pattern Control for Steel Plates through Constrained Locally Weighted Regression. Transactions of the Society of Instrument and Control Engineers, 2010, 46, 472-479.	0.1	2
179	Development of a Recipe Design Method Incorporating Uncertainty and Its Application to Resin Compound Product Design. Kagaku Kogaku Ronbunshu, 2010, 36, 405-412.	0.1	2
180	Medical checkup data analysis method based on LiNGAM and its application to nonalcoholic fatty liver disease. Artificial Intelligence in Medicine, 2022, 128, 102310.	3.8	2

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181	Process Systems Engineering. Application of On-Line Inference System Based on Physical and PLS models to Tube-Wall Temperature Estimation of an Olefin Pyrolysis Plant.. Kagaku Kogaku Ronbunshu, 1996, 22, 1130-1137.	0.1	1
182	Stabilizing Control of Crystal Size Distribution in Continuous Crystallization Processes.. Kagaku Kogaku Ronbunshu, 1998, 24, 318-323.	0.1	1
183	Process Monitoring Using Moving Principal Component Analysis.. Kagaku Kogaku Ronbunshu, 1999, 25, 998-1003.	0.1	1
184	Integration of Product Quality Estimation and Operating Condition Monitoring for Efficient Operation of Industrial Ethylene Fractionator. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 899-904.	0.4	1
185	Operation Profile Optimization for Batch Process through Wavelet Analysis and Multivariate Analysis. , 2006, , .		1
186	Quality improvement of steel products by using multivariate data analysis. , 2007, , .		1
187	IMPROVING ESTIMATION PERFORMANCE OF SOFTSENSORS THROUGH TWO-STAGE SUBSPACE IDENTIFICATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 185-190.	0.4	1
188	Softsensor Development and Disturbance Estimation through Two-Stage Subspace Identification. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	1
189	Correlation-based Just-In-Time modeling for soft-sensor design. Computer Aided Chemical Engineering, 2008, , 471-476.	0.3	1
190	Design of T-Shaped Microreactors by Reduced-Order Approach. Computer Aided Chemical Engineering, 2009, , 891-896.	0.3	1
191	How to Estimate True Effect of Changing Operating Condition on Product Quality: ICA-Based Approach. Computer Aided Chemical Engineering, 2009, 26, 1015-1019.	0.3	1
192	Plant-model Mismatch Detection for Model Predictive Control System. Transactions of the Society of Instrument and Control Engineers, 2010, 46, 607-614.	0.1	1
193	Optimization of nonlinear multi-stage process with characteristic changes through locally-weighted partial least squares. , 2015, , .		1
194	Development of Photoplethysmogram sensor-embedded video game controller. , 2016, , .		1
195	Soft-sensor reliability evaluation and y-analyzer fault identification with applications to vinyl acetate monomer (VAM) benchmark process. , 2017, , .		1
196	CFD-Based Design of Focal Brain Cooling System for Suppressing Epileptic Seizures. Computer Aided Chemical Engineering, 2018, 44, 2089-2094.	0.3	1
197	Root cause analysis of estimation error of a soft-sensor. Computer Aided Chemical Engineering, 2018, , 2257-2262.	0.3	1
198	Poisson mixture model for defects prediction in steelmaking. , 2019, , .		1

#	Article	IF	Citations
199	Development of a Sleep Apnea Detection Algorithm Using Long Short-Term Memory and Heart Rate Variability. , 2019, 2019, 3964-3967.		1
200	Prediction Performance and Economic Efficiency of Soft Sensors for in-Line Water Content Monitoring in Fluidized Bed Granulation: PP-Based Model <i>vs.</i> NIRS-Based Model. Chemical and Pharmaceutical Bulletin, 2021, 69, 548-556.	0.6	1
201	Shape-based Stiction Detection. Advances in Industrial Control, 2010, , 103-113.	0.4	1
202	Quantification of Qualitative Quality Information for Data-Driven Quality Improvement. Transactions of the Society of Instrument and Control Engineers, 2006, 42, 902-908.	0.1	1
203	Operation Profile Optimization for Batch Process by Using Wavelet Analysis. Transactions of the Society of Instrument and Control Engineers, 2006, 42, 1143-1149.	0.1	1
204	Design of Type 2 Model Predictive Control System. Transactions of the Society of Instrument and Control Engineers, 1999, 35, 1575-1582.	0.1	1
205	Gray-box Soft Sensor for Water Content Monitoring in Fluidized Bed Granulation. Chemical and Pharmaceutical Bulletin, 2022, 70, 74-81.	0.6	1
206	Multirate Multivariable Model Predictive Control Design.. Kagaku Kogaku Ronbunshu, 1994, 20, 240-247.	0.1	0
207	Extension of Model Predictive Control for Solving Servo and Regulator Problems.. Kagaku Kogaku Ronbunshu, 1997, 23, 421-427.	0.1	0
208	Comparison of the Method of Characteristics with a Finite Difference Scheme for Crystallization Process Simulation.. Kagaku Kogaku Ronbunshu, 1998, 24, 665-669.	0.1	0
209	Optimal Shape Design of Pressure-Driven Microchannels Using Adjoint Variable Method. , 2007, , 427.		0
210	MODELING AND OPTIMIZATION OF BATCH PROCESS THROUGH WAVELET ANALYSIS AND MULTIVARIATE ANALYSIS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 99-104.	0.4	0
211	Process Monitoring of Tubular Microreactors using Particle Filter. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 427-432.	0.4	0
212	Correlation-based Spectral Clustering for Flexible Soft-Sensor Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 703-708.	0.4	0
213	Efficient input variable selection for calibration model design. , 2013, , .		0
214	Efficient wavenumber selection based on nearest correlation Louvain method for NIR calibration modeling. , 2015, , .		0
215	Calibration model design based on weighted nearest correlation spectral clustering. , 2015, , .		0
216	Development of stroke detection method by heart rate variability analysis and support vector machine. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
217	Modified joint-Y PLS model for integrated use of data from similar plants. , 2017, , .		0
218	Development of correlation-based process characteristics visualization method and its application to fault detection. , 2017, , .		0
219	Causal analysis based on non-time-series kernel Granger causality in a steelmaking process. , 2017, , .		0
220	Fault identification with modified reconstruction-based contribution based on kernel principal component analysis. , 2017, , .		0
221	Sensitivity-based variable importance and its application to steel making process. , 2018, , .		0
222	Sensitivity Analysis of Generalized Gaussian Process Models for Variable Importance Measure. , 2019, , .		0
223	Optimal Design of Neuroprotective Focal Brain Cooling Device Using Surrogate Model Approach. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 681-691.	2.1	0
224	Identifying Causal Factors by Mean-value Replacement Contribution. Transactions of the Society of Instrument and Control Engineers, 2021, 57, 86-91.	0.1	0
225	Application of Novel Statistical Process Control Methods to a Chemical Process. Transactions of the Society of Instrument and Control Engineers, 2001, 37, 160-167.	0.1	0
226	Softsensor Design through Two-stage Subspace Identification Method. Transactions of the Society of Instrument and Control Engineers, 2007, 43, 869-876.	0.1	0
227	CFD-based Shape Optimization of Pressure-driven Microchannels. , 2009, , 785-793.		0
228	Stiction Modelling. Advances in Industrial Control, 2010, , 21-35.	0.4	0
229	Effect of Operation Strategy and Control Structure on Multiple Steady-States of Heat Integrated Distillation Column (HIDiC). Journal of Chemical Engineering of Japan, 2010, 43, 857-864.	0.3	0
230	Computational fluid dynamics based model development and exergy analysis of naphtha reforming reactors. International Journal of Exergy, 2017, 24, 344.	0.2	0
231	Correction of the figure in the paper â€œOnline Prediction of Hot Metal Temperature Using Transient Model and Moving Horizon Estimationâ€•[ISIJ International, 59 (2019), No. 9, pp. 1534â€"1544]. ISIJ International, 2019, 59, 1932-1932.	0.6	0
232	Gray-Box Model-Based Predictive Control of Czochralski Process with Successive Model Update. Journal of Chemical Engineering of Japan, 2022, 55, 154-161.	0.3	0