

AlÄ° Äinar

List of Publications by Year in descending order

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243
papers

6,523
citations

76294

40
h-index

79644

73
g-index

254
all docs

254
docs citations

254
times ranked

4022
citing authors

#	ARTICLE	IF	CITATIONS
1	A modular simulation package for fed-batch fermentation: penicillin production. Computers and Chemical Engineering, 2002, 26, 1553-1565.	2.0	512
2	Statistical process monitoring and disturbance diagnosis in multivariable continuous processes. AIChE Journal, 1996, 42, 995-1009.	1.8	281
3	Evaluating 3D-Printed Biomaterials as Scaffolds for Vascularized Bone Tissue Engineering. Advanced Materials, 2015, 27, 138-144.	11.1	241
4	Monitoring, fault diagnosis, fault-tolerant control and optimization: Data driven methods. Computers and Chemical Engineering, 2012, 47, 111-120.	2.0	238
5	Statistical monitoring of multivariable dynamic processes with state-space models. AIChE Journal, 1997, 43, 2002-2020.	1.8	230
6	Statistical monitoring of multistage, multiphase batch processes. IEEE Control Systems, 2002, 22, 40-52.	1.0	228
7	Outcome Measures for Artificial Pancreas Clinical Trials: A Consensus Report. Diabetes Care, 2016, 39, 1175-1179.	4.3	195
8	Online Batch/Fed-Batch Process Performance Monitoring, Quality Prediction, and Variable-Contribution Analysis for Diagnosis. Industrial & Engineering Chemistry Research, 2003, 42, 4645-4658.	1.8	166
9	Multivariable Adaptive Identification and Control for Artificial Pancreas Systems. IEEE Transactions on Biomedical Engineering, 2014, 61, 883-891.	2.5	139
10	Multivariable Adaptive Closed-Loop Control of an Artificial Pancreas Without Meal and Activity Announcement. Diabetes Technology and Therapeutics, 2013, 15, 386-400.	2.4	135
11	Estimation of Future Glucose Concentrations with Subject-Specific Recursive Linear Models. Diabetes Technology and Therapeutics, 2009, 11, 243-253.	2.4	121
12	Three-dimensional modeling of angiogenesis in porous biomaterial scaffolds. Biomaterials, 2013, 34, 2875-2887.	5.7	114
13	Meal Detection in Patients With Type 1 Diabetes: A New Module for the Multivariable Adaptive Artificial Pancreas Control System. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 47-54.	3.9	107
14	Adaptive control strategy for regulation of blood glucose levels in patients with type 1 diabetes. Journal of Process Control, 2009, 19, 1333-1346.	1.7	103
15	An Agent-Based Model for the Investigation of Neovascularization Within Porous Scaffolds. Tissue Engineering - Part A, 2011, 17, 2133-2141.	1.6	101
16	Diagnosis of process disturbances by statistical distance and angle measures. Computers and Chemical Engineering, 1997, 21, 661-673.	2.0	89
17	Multivariable MPC system performance assessment, monitoring, and diagnosis. Journal of Process Control, 2004, 14, 113-129.	1.7	89
18	Hypoglycemia Early Alarm Systems Based on Multivariable Models. Industrial & Engineering Chemistry Research, 2013, 52, 12329-12336.	1.8	87

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19	Exercise and the Development of the Artificial Pancreas. <i>Journal of Diabetes Science and Technology</i> , 2015, 9, 1217-1226.	1.3	79
20	Adaptive system identification for estimating future glucose concentrations and hypoglycemia alarms. <i>Automatica</i> , 2012, 48, 1892-1897.	3.0	77
21	Intelligent real-time performance monitoring and quality prediction for batch/fed-batch cultivations. <i>Journal of Biotechnology</i> , 2004, 108, 61-77.	1.9	74
22	An Integrated Multivariable Artificial Pancreas Control System. <i>Journal of Diabetes Science and Technology</i> , 2014, 8, 498-507.	1.3	74
23	Meal Detection and Carbohydrate Estimation Using Continuous Glucose Sensor Data. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2017, 21, 619-627.	3.9	71
24	Automatic Detection and Estimation of Unannounced Meals for Multivariable Artificial Pancreas System. <i>Diabetes Technology and Therapeutics</i> , 2018, 20, 235-246.	2.4	71
25	Pore Interconnectivity Influences Growth Factor-Mediated Vascularization in Sphere-Templated Hydrogels. <i>Tissue Engineering - Part C: Methods</i> , 2015, 21, 773-785.	1.1	65
26	Intelligent process monitoring by interfacing knowledge-based systems and multivariate statistical monitoring. <i>Journal of Process Control</i> , 2000, 10, 341-350.	1.7	64
27	Hypoglycemia Prediction with Subject-Specific Recursive Time-Series Models. <i>Journal of Diabetes Science and Technology</i> , 2010, 4, 25-33.	1.3	62
28	Vibrational control of an exothermic reaction in a CSTR: Theory and experiments. <i>AIChE Journal</i> , 1987, 33, 353-365.	1.8	57
29	A morphologically structured model for penicillin production. <i>Biotechnology and Bioengineering</i> , 2002, 77, 538-552.	1.7	57
30	The Effects of Basal Insulin Suspension at the Start of Exercise on Blood Glucose Levels During Continuous Versus Circuit-Based Exercise in Individuals with Type 1 Diabetes on Continuous Subcutaneous Insulin Infusion. <i>Diabetes Technology and Therapeutics</i> , 2017, 19, 370-378.	2.4	57
31	Multivariate statistical methods for monitoring continuous processes: assessment of discrimination power of disturbance models and diagnosis of multiple disturbances. <i>Chemometrics and Intelligent Laboratory Systems</i> , 1995, 30, 37-48.	1.8	56
32	A numerical method for determining optimal parameter values in forced periodic operation. <i>Chemical Engineering Science</i> , 1992, 47, 605-613.	1.9	52
33	Adaptive Control of Artificial Pancreas Systems - A Review. <i>Journal of Healthcare Engineering</i> , 2014, 5, 1-22.	1.1	52
34	PLS, balanced, and canonical variate realization techniques for identifying VARMA models in state space. <i>Chemometrics and Intelligent Laboratory Systems</i> , 1997, 38, 209-221.	1.8	51
35	The protective effect of quercetin on cyclophosphamide-induced lung toxicity in rats. <i>Biomedicine and Pharmacotherapy</i> , 2017, 92, 303-307.	2.5	51
36	Multivariable Artificial Pancreas for Various Exercise Types and Intensities. <i>Diabetes Technology and Therapeutics</i> , 2018, 20, 662-671.	2.4	49

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37	Classification of Physical Activity. <i>Journal of Diabetes Science and Technology</i> , 2015, 9, 1200-1207.	1.3	47
38	Plasma Insulin Estimation in People with Type 1 Diabetes Mellitus. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 9846-9857.	1.8	47
39	Real-time insulin bolusing for unannounced meals with artificial pancreas. <i>Control Engineering Practice</i> , 2017, 59, 159-164.	3.2	44
40	Incorporating Unannounced Meals and Exercise in Adaptive Learning of Personalized Models for Multivariable Artificial Pancreas Systems. <i>Journal of Diabetes Science and Technology</i> , 2018, 12, 953-966.	1.3	43
41	Simulation software for assessment of nonlinear and adaptive multivariable control algorithms: Glucose-insulin dynamics in Type 1 diabetes. <i>Computers and Chemical Engineering</i> , 2019, 130, 106565.	2.0	43
42	A model-based object based supervisory expert system for fault tolerant chemical reactor control. <i>Computers and Chemical Engineering</i> , 1990, 14, 551-560.	2.0	41
43	Controller performance assessment by frequency domain techniques. <i>Journal of Process Control</i> , 1997, 7, 181-194.	1.7	41
44	Adaptive personalized multivariable artificial pancreas using plasma insulin estimates. <i>Journal of Process Control</i> , 2019, 80, 26-40.	1.7	40
45	Monitoring of multivariable dynamic processes and sensor auditing. <i>Journal of Process Control</i> , 1998, 8, 375-380.	1.7	39
46	Adaptive and Personalized Plasma Insulin Concentration Estimation for Artificial Pancreas Systems. <i>Journal of Diabetes Science and Technology</i> , 2018, 12, 639-649.	1.3	39
47	Plasma-insulin-cognizant adaptive model predictive control for artificial pancreas systems. <i>Journal of Process Control</i> , 2019, 77, 97-113.	1.7	38
48	Determining Physical Activity Characteristics From Wristband Data for Use in Automated Insulin Delivery Systems. <i>IEEE Sensors Journal</i> , 2020, 20, 12859-12870.	2.4	36
49	Artificial Pancreas Systems: An Introduction to the Special Issue. <i>IEEE Control Systems</i> , 2018, 38, 26-29.	1.0	34
50	Interpreting ECG data by integrating statistical and artificial intelligence tools. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2002, 21, 36-41.	1.1	32
51	An intelligent system for multivariate statistical process monitoring and diagnosis. <i>ISA Transactions</i> , 2002, 41, 255-270.	3.1	32
52	Agent-based control of autocatalytic replicators in networks of reactors. <i>Computers and Chemical Engineering</i> , 2005, 29, 807-815.	2.0	32
53	Multimodule, Multivariable Artificial Pancreas for Patients with Type 1 Diabetes: Regulating Glucose Concentration Under Challenging Conditions. <i>IEEE Control Systems</i> , 2018, 38, 105-124.	1.0	31
54	Control of complex distributed systems with distributed intelligent agents. <i>Journal of Process Control</i> , 2007, 17, 415-427.	1.7	30

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55	Multivariable Adaptive Artificial Pancreas System in Type 1 Diabetes. <i>Current Diabetes Reports</i> , 2017, 17, 88.	1.7	29
56	Physical Activity and Psychological Stress Detection and Assessment of Their Effects on Glucose Concentration Predictions in Diabetes Management. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 2251-2260.	2.5	29
57	Real-time batch process supervision by integrated knowledge-based systems and multivariate statistical methods. <i>Engineering Applications of Artificial Intelligence</i> , 2003, 16, 555-566.	4.3	28
58	Real-Time Model-Based Fault Detection of Continuous Glucose Sensor Measurements. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 1437-1445.	2.5	28
59	Stable recursive canonical variate state space modeling for time-varying processes. <i>Control Engineering Practice</i> , 2015, 36, 113-119.	3.2	27
60	Model-fusion-based online glucose concentration predictions in people with type 1 diabetes. <i>Control Engineering Practice</i> , 2018, 71, 129-141.	3.2	27
61	Statistical Monitoring of Complex Chemical Processes Using Agent-Based Systems. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 5080-5093.	1.8	26
62	Hypoglycemia Detection and Carbohydrate Suggestion in an Artificial Pancreas. <i>Journal of Diabetes Science and Technology</i> , 2016, 10, 1236-1244.	1.3	26
63	Intelligent process control with supervisory knowledge-based systems. <i>IEEE Control Systems</i> , 1994, 14, 37-47.	1.0	25
64	Hypoglycemia Early Alarm Systems Based on Recursive Autoregressive Partial Least Squares Models. <i>Journal of Diabetes Science and Technology</i> , 2013, 7, 206-214.	1.3	24
65	Use of Wearable Sensors and Biometric Variables in an Artificial Pancreas System. <i>Sensors</i> , 2017, 17, 532.	2.1	24
66	Adaptive-learning model predictive control for complex physiological systems: Automated insulin delivery in diabetes. <i>Annual Reviews in Control</i> , 2020, 50, 1-12.	4.4	24
67	Agent-based modeling of porous scaffold degradation and vascularization: Optimal scaffold design based on architecture and degradation dynamics. <i>Acta Biomaterialia</i> , 2015, 27, 167-178.	4.1	23
68	Discrimination of simultaneous psychological and physical stressors using wristband biosignals. <i>Computer Methods and Programs in Biomedicine</i> , 2021, 199, 105898.	2.6	23
69	Automated control of high temperature short time pasteurization. <i>Food Control</i> , 1996, 7, 309-315.	2.8	22
70	Control of grade transitions in distributed chemical reactor networks—An agent-based approach. <i>Computers and Chemical Engineering</i> , 2008, 32, 1984-1994.	2.0	22
71	Online Glucose Prediction Using Computationally Efficient Sparse Kernel Filtering Algorithms in Type-1 Diabetes. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 3-15.	3.2	22
72	Dynamic estimation of temperature and concentration profiles in a packed bed reactor. <i>Chemical Engineering Science</i> , 1989, 44, 2087-2106.	1.9	21

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73	Nonlinear predictive control of periodically forced chemical reactors. <i>AIChE Journal</i> , 1993, 39, 589-598.	1.8	21
74	Improving Glucose Prediction Accuracy in Physically Active Adolescents With Type 1 Diabetes. <i>Journal of Diabetes Science and Technology</i> , 2019, 13, 718-727.	1.3	21
75	Performance Assessment and Modification of an Adaptive Model Predictive Control for Automated Insulin Delivery by a Multivariable Artificial Pancreas. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 11506-11520.	1.8	20
76	Mathematical Models of Cocurrent Spray Drying. <i>Industrial & Engineering Chemistry Research</i> , 1995, 34, 3289-3302.	1.8	19
77	The bifurcation behavior of an autothermal packed bed tubular reactor. <i>Chemical Engineering Science</i> , 1988, 43, 887-898.	1.9	18
78	Adaptive multivariable closed-loop control of blood glucose concentration in patients with Type 1 Diabetes. , 2013, , .		18
79	Multivariable Recursive Subspace Identification with Application to Artificial Pancreas Systems. <i>IFAC-PapersOnLine</i> , 2017, 50, 886-891.	0.5	18
80	A Pilot Study Validating Select Research-Grade and Consumer-Based Wearables Throughout a Range of Dynamic Exercise Intensities in Persons With and Without Type 1 Diabetes: A Novel Approach. <i>Journal of Diabetes Science and Technology</i> , 2018, 12, 569-576.	1.3	18
81	Seasonal Local Models for Glucose Prediction in Type 1 Diabetes. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 2064-2072.	3.9	18
82	Vibrational control of an exothermic CSTR: productivity improvement by multiple input oscillations. <i>IEEE Transactions on Automatic Control</i> , 1989, 34, 193-196.	3.6	17
83	Modeling, monitoring and control strategies for high temperature short time pasteurization systems â€” 1. Empirical model development. <i>Food Control</i> , 1998, 9, 1-15.	2.8	17
84	Modeling, monitoring and control strategies for high temperature short time pasteurization systems â€” 3. Statistical monitoring of product lethality and process sensor reliability. <i>Food Control</i> , 1998, 9, 29-47.	2.8	16
85	HACCP with multivariate process monitoring and fault diagnosis techniques: application to a food pasteurization process. <i>Food Control</i> , 2005, 16, 411-422.	2.8	16
86	An adaptive fault-tolerant control framework with agent-based systems. <i>International Journal of Robust and Nonlinear Control</i> , 2012, 22, 43-67.	2.1	16
87	Social and competition stress detection with wristband physiological signals. , 2017, , .		16
88	Detection and Characterization of Physical Activity and Psychological Stress from Wristband Data. <i>Signals</i> , 2020, 1, 188-208.	1.2	16
89	Incorporating Prior Information in Adaptive Model Predictive Control for Multivariable Artificial Pancreas Systems. <i>Journal of Diabetes Science and Technology</i> , 2022, 16, 19-28.	1.3	16
90	Modeling, monitoring and control strategies for high temperature short time pasteurization systems â€” 2. Lethality-based control. <i>Food Control</i> , 1998, 9, 17-28.	2.8	15

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91	Static and Dynamic Behavior of Autocatalytic Replicators in Reactor Networks. Industrial & Engineering Chemistry Research, 2004, 43, 3972-3993.	1.8	15
92	Adaptive Agent-Based System for Process Fault Diagnosis. Industrial & Engineering Chemistry Research, 2011, 50, 9138-9155.	1.8	15
93	Sleep quality and glycaemic variability in a real-life setting in adults with type 1 diabetes. Diabetologia, 2021, 64, 2159-2169.	2.9	15
94	VIBRATIONAL CONTROL OF CHEMICAL REACTORS: STABILIZATION AND CONVERSION IMPROVEMENT IN AN EXOTHERMIC CSTR. Chemical Engineering Communications, 1987, 59, 299-308.	1.5	14
95	Forced periodic control of an exothermic CSTR with multiple input oscillations. AIChE Journal, 1988, 34, 2041-2051.	1.8	13
96	Measuring Complexity in Reactor Networks with Cubic Autocatalytic Reactions. Industrial & Engineering Chemistry Research, 2005, 44, 2781-2791.	1.8	13
97	Agent-based modeling of osteogenic differentiation of mesenchymal stem cells in porous biomaterials. , 2014, 2014, 2924-7.		13
98	Nonlinear time series models for multivariable dynamic processes. Chemometrics and Intelligent Laboratory Systems, 1995, 30, 147-158.	1.8	12
99	Feedback Control of a Continuous-Flow Stirred Tank Reactor with Competing Autocatalators. Industrial & Engineering Chemistry Research, 2003, 42, 3765-3785.	1.8	12
100	Computational Modeling of Fed-Batch Cell Culture Bioreactor: Hybrid Agent-Based Approach. IFAC-PapersOnLine, 2015, 48, 1252-1257.	0.5	12
101	Design of Polymer Scaffolds for Tissue Engineering Applications. Industrial & Engineering Chemistry Research, 2015, 54, 2317-2328.	1.8	12
102	System identification and distributed control for multi-rate sampled systems. Journal of Process Control, 2015, 34, 1-12.	1.7	12
103	No Disadvantage to Insulin Pump Off vs Pump On During Intermittent High-Intensity Exercise in Adults With Type 1 Diabetes. Canadian Journal of Diabetes, 2020, 44, 162-168.	0.4	12
104	MONITORING OF BATCH PHARMACEUTICAL FERMENTATIONS: DATA SYNCHRONIZATION, LANDMARK ALIGNMENT, AND REAL-TIME MONITORING. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 271-276.	0.4	11
105	PSECMAC Intelligent Insulin Schedule for Diabetic Blood Glucose Management Under Nonmeal Announcement. IEEE Transactions on Neural Networks, 2010, 21, 361-380.	4.8	11
106	Artificial Pancreas Systems: An Integrated Multivariable Adaptive Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 249-254.	0.4	11
107	Artifact Removal from Data Generated by Nonlinear Systems: Heart Rate Estimation from Blood Volume Pulse Signal. Industrial & Engineering Chemistry Research, 2020, 59, 2318-2327.	1.8	11
108	Controller design for a tubular catalytic reactor. Canadian Journal of Chemical Engineering, 1984, 62, 746-754.	0.9	10

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109	Numerical singularity analysis. Chemical Engineering Science, 1991, 46, 1055-1062.	1.9	10
110	Automated Insulin Deliveryâ€”The Light at the End of the Tunnel. Journal of Pediatrics, 2017, 186, 17-28.e9.	0.9	10
111	Multi-level supervision and modification of artificial pancreas control system. Computers and Chemical Engineering, 2018, 112, 57-69.	2.0	10
112	Immobilized RGD concentration and proteolytic degradation synergistically enhance vascular sprouting within hydrogel scaffolds of varying modulus. Journal of Biomaterials Science, Polymer Edition, 2020, 31, 324-349.	1.9	10
113	Prior informed regularization of recursively updated latent-variables-based models with missing observations. Control Engineering Practice, 2021, 116, 104933.	3.2	10
114	Forced periodic operation of tubular reactors. Chemical Engineering Science, 1994, 49, 3409-3419.	1.9	9
115	Dynamical investigation of effects of variable damper settings induced brake pressure oscillations on axle and wheel oscillations during ABS-braking based on experimental study. Meccanica, 2013, 48, 1093-1115.	1.2	9
116	Hybrid Online Sensor Error Detection and Functional Redundancy for Artificial Pancreas Control Systems. IFAC-PapersOnLine, 2016, 49, 753-758.	0.5	9
117	Development of a recursive time series model for fed-batch mammalian cell culture. Computers and Chemical Engineering, 2018, 109, 289-298.	2.0	9
118	Induced Pluripotent Stem Cell-Derived Endothelial Networks Accelerate Vascularization But Not Bone Regeneration. Tissue Engineering - Part A, 2021, 27, 940-961.	1.6	9
119	Vibrational stabilization of a chemical reactor: An experimental study. IEEE Transactions on Automatic Control, 1987, 32, 348-352.	3.6	8
120	Fault-tolerant computer control of a time delay system: sensor failure tolerance by controller reconfiguration. Computers and Chemical Engineering, 1987, 11, 481-488.	2.0	8
121	Glucosim: Educational Software for Virtual Experiments with Patients with Type 1 Diabetes. , 2005, 2006, 845-8.		8
122	Coordination scheme and target tracking for distributed model predictive control. Chemical Engineering Science, 2015, 136, 20-26.	1.9	8
123	Real-Time Insulin Bolusing for Unannounced Meals Using CGM Measurements. IFAC-PapersOnLine, 2015, 48, 219-224.	0.5	8
124	Hybrid online sensor error detection and functional redundancy for systems with time-varying parameters. Journal of Process Control, 2017, 60, 115-127.	1.7	8
125	Advances in Artificial Pancreas Systems. SpringerBriefs in Bioengineering, 2018, , .	0.8	8
126	Integration of multivariate SPM and FDD by parity space technique for a food pasteurization process. Computers and Chemical Engineering, 2001, 25, 473-491.	2.0	7

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127	Experimental design of control strategy based on brake pressure changes on wet and slippery surfaces of rough road for variable damper setting during braking with activated anti-lock brake system. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2012, 226, 1303-1324.	1.1	7
128	Multiple-Input Subject-Specific Modeling of Plasma Glucose Concentration for Feedforward Control. Industrial & Engineering Chemistry Research, 2014, 53, 18216-18225.	1.8	7
129	An Extended Static and Dynamic Feedbackâ€“Feedforward Control Algorithm for Insulin Delivery in the Control of Blood Glucose Level. Industrial & Engineering Chemistry Research, 2015, 54, 6734-6748.	1.8	7
130	Multivariate Statistical Monitoring of Sensor Faults of A Multivariable Artificial Pancreas. IFAC-PapersOnLine, 2017, 50, 10998-11004.	0.5	7
131	Adaptive Model Predictive Control for Nonlinearity in Biomedical Applications. IFAC-PapersOnLine, 2018, 51, 368-373.	0.5	7
132	Hybrid Online Multi-Sensor Error Detection and Functional Redundancy for Artificial Pancreas Control Systems. IFAC-PapersOnLine, 2018, 51, 138-143.	0.5	7
133	Multiâ€“model sensor fault detection and data reconciliation: <scp>A</scp> case study with glucose concentration sensors for diabetes. AIChE Journal, 2019, 65, 629-639.	1.8	7
134	Assessing the Effects of Stress Response on Glucose Variations. , 2019, , .		7
135	An adaptive robust M-estimator for nonparametric nonlinear system identification. Journal of Process Control, 1996, 6, 233-239.	1.7	6
136	Automated Control and Monitoring of Thermal Processing Using High Temperature, Short Time Pasteurization. Journal of Dairy Science, 1997, 80, 2291-2296.	1.4	6
137	BATCH PROCESS MONITORING USING MULTIBLOCK MULTIWAY PRINCIPAL COMPONENT ANALYSIS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 209-214.	0.4	6
138	A multi-agent approach using perceptron-based learning for robust operation of distributed chemical reactor networks. Engineering Applications of Artificial Intelligence, 2011, 24, 1035-1045.	4.3	6
139	Real-time estimation of plasma insulin concentration using continuous subcutaneous glucose measurements in people with type 1 diabetes. , 2017, , .		6
140	Fault Detection in Continuous Glucose Monitoring Sensors for Artificial Pancreas Systems. IFAC-PapersOnLine, 2018, 51, 714-719.	0.5	6
141	Controlling the AP Controller: Controller Performance Assessment and Modification. Journal of Diabetes Science and Technology, 2019, 13, 1091-1104.	1.3	6
142	Automated Insulin Delivery Algorithms. Diabetes Spectrum, 2019, 32, 209-214.	0.4	6
143	A dynamic EFM-based model for antibody producing cell lines and model based evaluation of fed-batch processes. Biochemical Engineering Journal, 2020, 156, 107494.	1.8	6
144	Agent-Based Control of Spatially Distributed Chemical Reactor Networks. Lecture Notes in Computer Science, 2006, , 222-231.	1.0	6

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145	Meal and Physical Activity Detection from Free-Living Data for Discovering Disturbance Patterns of Glucose Levels in People with Diabetes. <i>BioMedInformatics</i> , 2022, 2, 297-317.	1.0	6
146	Stability of tubular and autothermal packed bed reactors using phase plane analysis. <i>Industrial & Engineering Chemistry Research</i> , 1987, 26, 1356-1362.	1.8	5
147	Intelligent Process Monitoring by Interfacing Knowledge-Based Systems and Multivariate SPC Tools. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1997, 30, 43-48.	0.4	5
148	Batch process monitoring and its application to polymerization systems. <i>Macromolecular Symposia</i> , 2004, 206, 121-134.	0.4	5
149	Sensor fusion and distributed platform development for artificial pancreas. , 2015, , .		5
150	Monitoring and fault detection of continuous glucose sensor measurements. , 2015, , .		5
151	In Silico Cell Cycle Predictor for Mammalian Cell Culture Bioreactor Using Agent-Based Modeling Approach. <i>IFAC-PapersOnLine</i> , 2016, 49, 200-205.	0.5	5
152	Active inference for dynamic Bayesian networks with an application to tissue engineering. <i>Knowledge and Information Systems</i> , 2017, 50, 917-943.	2.1	5
153	Ensuring Stability and Fidelity of Recursively Identified Control-Relevant Models. <i>IFAC-PapersOnLine</i> , 2018, 51, 927-932.	0.5	5
154	Integrating Compartment Models with Recursive System Identification. , 2018, , .		5
155	Agent-based modeling of the interaction between CD8+ T cells and Beta cells in type 1 diabetes. <i>PLoS ONE</i> , 2018, 13, e0190349.	1.1	5
156	Analyzing Medical Guideline Dissemination Behaviors Using Culturally Infused Agent Based Modeling Framework. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 2137-2149.	3.9	5
157	Kernel-Regularized Latent-Variable Regression Models for Dynamic Processes. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 5914-5926.	1.8	5
158	Observational Study of Glycemic Impact of Anticipatory and Early-Race Athletic Competition Stress in Type 1 Diabetes. <i>Frontiers in Clinical Diabetes and Healthcare</i> , 2022, 3, .	0.3	5
159	Empirical Modeling of Systems with Output Multiplicities by Multivariate Additive NARX Models. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 1747-1755.	1.8	4
160	Fault Detection and Diagnosis in a Food Pasteurization Process with Hidden Markov Models. <i>Canadian Journal of Chemical Engineering</i> , 2004, 82, 1252-1262.	0.9	4
161	Self-tuning controller for regulation of glucose levels in patients with type 1 diabetes. , 2008, , .		4
162	Agent-Based Modeling of Vascularization in Gradient Tissue Engineering Constructs. <i>IFAC-PapersOnLine</i> , 2015, 48, 1240-1245.	0.5	4

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163	Routine daily physical activity and glucose variations are strongly coupled in adults with T1DM. <i>Physiological Reports</i> , 2015, 3, e12644.	0.7	4
164	Simulating 3-D bone tissue growth using repast HPC: Initial simulation design and performance results. , 2016, , .		4
165	Performance Assessment of Model-Based Artificial Pancreas Control Systems. <i>Lecture Notes in Bioengineering</i> , 2016, , 243-265.	0.3	4
166	Automated closed-loop insulin delivery: system components, performance, and limitations. , 2020, , 293-326.		4
167	Cyber-Physical Platform Development for Multivariable Artificial Pancreas Systems. <i>International Journal of Handheld Computing Research</i> , 2015, 6, 1-16.	0.4	4
168	Application of Neural Networks for Heart Rate Monitoring. <i>IFAC-PapersOnLine</i> , 2020, 53, 16161-16166.	0.5	4
169	Detection of Meals and Physical Activity Events From Free-Living Data of People With Diabetes. <i>Journal of Diabetes Science and Technology</i> , 2023, 17, 1482-1492.	1.3	4
170	Synthesis of modelâ€based controllers for an autothermal reactor. <i>Canadian Journal of Chemical Engineering</i> , 1990, 68, 666-679.	0.9	3
171	A COMPARATIVE STUDY OF TOOLS FOR ASSESSING THE EFFECTS OF FORCED PERIODIC OPERATION OF CATALYTIC REACTORS. <i>Chemical Engineering Communications</i> , 1992, 112, 85-104.	1.5	3
172	Effect of Asymmetric Manipulations in Autocatalytic Networks. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 5044-5052.	1.8	3
173	Dynamical behavior of the activatorâ€repressor circuit model under random fluctuations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2011, 16, 1978-1985.	1.7	3
174	Development of control algorithm for ABSâ€suspension integration to reduce rotational acceleration oscillations of wheel. <i>Transactions of the Institute of Measurement and Control</i> , 2018, 40, 1018-1034.	1.1	3
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