AlÄº Ãıïnar

List of Publications by Year
in descending order

243 papers	6,523 citations	87401 40 h-index	90395 73 g-index
254 all docs	254 docs citations	254 times ranked	4493 citing authors

#	Article	IF	Citations
1	Detection of Meals and Physical Activity Events From Free-Living Data of People With Diabetes. Journal of Diabetes Science and Technology, 2023, 17, 1482-1492.	1.3	4
2	Incorporating Prior Information in Adaptive Model Predictive Control for Multivariable Artificial Pancreas Systems. Journal of Diabetes Science and Technology, 2022, 16, 19-28.	1.3	16
3	Kernel-Regularized Latent-Variable Regression Models for Dynamic Processes. Industrial & Engineering Chemistry Research, 2022, 61, 5914-5926.	1.8	5
4	Observational Study of Glycemic Impact of Anticipatory and Early-Race Athletic Competition Stress in Type 1 Diabetes. Frontiers in Clinical Diabetes and Healthcare, 2022, 3, .	0.3	5
5	Meal and Physical Activity Detection from Free-Living Data for Discovering Disturbance Patterns of Glucose Levels in People with Diabetes. BioMedInformatics, 2022, 2, 297-317.	1.0	6
6	Induced Pluripotent Stem Cell-Derived Endothelial Networks Accelerate Vascularization But Not Bone Regeneration. Tissue Engineering - Part A, 2021, 27, 940-961.	1.6	9
7	Automated insulin delivery systems for people with type 1 diabetes. , 2021, , 181-198.		1
8	Discrimination of simultaneous psychological and physical stressors using wristband biosignals. Computer Methods and Programs in Biomedicine, 2021, 199, 105898.	2.6	23
9	Latent Variables Model Based MPC for People with Type 1 Diabetes. IFAC-PapersOnLine, 2021, 54, 294-299.	0.5	1
10	Critical Quality Predictive Control of Fed-Batch Mammalian Cell Bioreactors. IFAC-PapersOnLine, 2021, 54, 330-335.	0.5	0
11	Sleep quality and glycaemic variability in a real-life setting in adults with type 1 diabetes. Diabetologia, 2021, 64, 2159-2169.	2.9	15
12	Analyzing Medical Guideline Dissemination Behaviors Using Culturally Infused Agent Based Modeling Framework. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2137-2149.	3.9	5
13	Event-Triggered Decision Support and Automatic Control Systems for Type 1 Diabetes. , 2021, , .		0
14	Physical Activity and Psychological Stress Detection and Assessment of Their Effects on Glucose Concentration Predictions in Diabetes Management. IEEE Transactions on Biomedical Engineering, 2021, 68, 2251-2260.	2.5	29
15	Abbreviated Dietary Self-monitoring for Type 2 Diabetes Management: Mixed Methods Feasibility Study. JMIR Diabetes, 2021, 6, e28930.	0.9	1
16	Prior informed regularization of recursively updated latent-variables-based models with missing observations. Control Engineering Practice, 2021, 116, 104933.	3.2	10
17	Online Glucose Prediction Using Computationally Efficient Sparse Kernel Filtering Algorithms in Type-1 Diabetes. IEEE Transactions on Control Systems Technology, 2020, 28, 3-15.	3.2	22
18	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

#	Article	IF	Citations
19	Seasonal Local Models for Glucose Prediction in Type 1 Diabetes. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 2064-2072.	3.9	18
20	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
21	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
22	Adaptive control of artificial pancreas systems for treatment of type 1 diabetes. , 2020, , 63-81.		0
23	Adaptive-learning model predictive control for complex physiological systems: Automated insulin delivery in diabetes. Annual Reviews in Control, 2020, 50, 1-12.	4.4	24
24	Performance Monitoring, Assessment and Modification of an Adaptive MPC: Automated Insulin Delivery in Diabetes *. , 2020, , .		0
25	Detection and Characterization of Physical Activity and Psychological Stress from Wristband Data. Signals, 2020, 1, 188-208.	1.2	16
26	Determining Physical Activity Characteristics From Wristband Data for Use in Automated Insulin Delivery Systems. IEEE Sensors Journal, 2020, 20, 12859-12870.	2.4	36
27	Automated closed-loop insulin delivery: system components, performance, and limitations. , 2020, , 293-326.		4
28	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
29	48-LB: The Effect of Acute Psychosocial Stress in Adults with Type 1 Diabetes. Diabetes, 2020, 69, 48-LB.	0.3	1
30	690-P: Use of Physiological and Psychological States to Enhance Glucose Concentration Estimation. Diabetes, 2020, 69, 690-P.	0.3	0
31	704-P: Influence of Acute Stress on Heart Rate and Glycemia during Exercise. Diabetes, 2020, 69, .	0.3	0
32	776-P: Characteristics of Overnight Blood Glucose Levels Are Related to Sleep Quality in People with Type 1 Diabetes. Diabetes, 2020, 69, 776-P.	0.3	0
33	1007-P: Clinical Evaluation of Multivariable Automated Insulin Delivery. Diabetes, 2020, 69, 1007-P.	0.3	1
34	Virtual Patients: An Enabling Technology for Multivariable Control of Biomedical Systems. IFAC-PapersOnLine, 2020, 53, 16233-16238.	0.5	2
35	Integrating MPC with Learning-Based and Adaptive Methods to Enhance Safety, Performance and Reliability in Automated Insulin Delivery. IFAC-PapersOnLine, 2020, 53, 16149-16154.	0.5	1
36	Application of Neural Networks for Heart Rate Monitoring. IFAC-PapersOnLine, 2020, 53, 16161-16166.	0.5	4

#	Article	IF	Citations
37	Leveraging Plasma Insulin Estimates and Wearable Technologies to Develop an Automated Insulin Delivery System in Type 1 Diabetes. , 2020, , 185-198.		0
38	43-LB: Glycemic Control Affects Heart-Rate Variability in Adults with Type 1 Diabetes. Diabetes, 2020, 69, .	0.3	1
39	The Necessity of Interdisciplinary Software Development for Building Viable Research Platforms. , 2020, , .		0
40	Multi€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
41	Assessing the Effects of Stress Response on Glucose Variations. , 2019, , .		7
42	Simulation software for assessment of nonlinear and adaptive multivariable control algorithms: Glucose–insulin dynamics in Type 1 diabetes. Computers and Chemical Engineering, 2019, 130, 106565.	2.0	43
43	Controlling the AP Controller: Controller Performance Assessment and Modification. Journal of Diabetes Science and Technology, 2019, 13, 1091-1104.	1.3	6
44	Improving Glucose Prediction Accuracy in Physically Active Adolescents With Type 1 Diabetes. Journal of Diabetes Science and Technology, 2019, 13, 718-727.	1.3	21
45	Adaptive personalized multivariable artificial pancreas using plasma insulin estimates. Journal of Process Control, 2019, 80, 26-40.	1.7	40
46	0109 Slow Wave Sleep and REM Sleep Differentially Affect Nocturnal Glucose Levels. Sleep, 2019, 42, A45-A45.	0.6	3
47	Plasma-insulin-cognizant adaptive model predictive control for artificial pancreas systems. Journal of Process Control, 2019, 77, 97-113.	1.7	38
48	Multivariable AP with adaptive control. , 2019, , 59-77.		0
49	Performance Assessment and Modification of an Adaptive Model Predictive Control for Automated Insulin Delivery by a Multivariable Artificial Pancreas. Industrial & Engineering Chemistry Research, 2019, 58, 11506-11520.	1.8	20
50	Automated Insulin Delivery Algorithms. Diabetes Spectrum, 2019, 32, 209-214.	0.4	6
51	Spatio-Temporal Prediction of Ionospheric Total Electron Content Using an Adaptive Data Fusion Technique. Geomagnetism and Aeronomy, 2019, 59, 971-979.	0.2	3
52	Modeling Blood Volume Pulse Signal Using Exercise Intensity. , 2019, , .		0
53	From Design to Implementation - Algorithm Conversion and Transition to a Mobile Platform for an Artificial Pancreas. , 2019, , .		0
54	Disciplinary Learning From an Authentic Engineering Context. Journal of Pre-College Engineering Education Research, 2019, 9, .	0.3	2

#	ARTICLE	IF	CITATIONS
55	Advances in Artificial Pancreas Systems. SpringerBriefs in Bioengineering, 2018, , .	0.8	8
56	Multi-level supervision and modification of artificial pancreas control system. Computers and Chemical Engineering, 2018, 112, 57-69.	2.0	10
57	Multimodule, Multivariable Artificial Pancreas for Patients with Type 1 Diabetes: Regulating Glucose Concentration Under Challenging Conditions. IEEE Control Systems, 2018, 38, 105-124.	1.0	31
58	Automatic Detection and Estimation of Unannounced Meals for Multivariable Artificial Pancreas System. Diabetes Technology and Therapeutics, 2018, 20, 235-246.	2.4	71
59	Artificial Pancreas Systems: An Introduction to the Special Issue. IEEE Control Systems, 2018, 38, 26-29.	1.0	34
60	Model-fusion-based online glucose concentration predictions in people with type 1 diabetes. Control Engineering Practice, 2018, 71, 129-141.	3.2	27
61	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. Journal of Diabetes Science and Technology, 2018, 12, 569-576.	1.3	18
62	Adaptive and Personalized Plasma Insulin Concentration Estimation for Artificial Pancreas Systems. Journal of Diabetes Science and Technology, 2018, 12, 639-649.	1.3	39
63	Development of control algorithm for ABS–suspension integration to reduce rotational acceleration oscillations of wheel. Transactions of the Institute of Measurement and Control, 2018, 40, 1018-1034.	1.1	3
64	Development of a recursive time series model for fed-batch mammalian cell culture. Computers and Chemical Engineering, 2018, 109, 289-298.	2.0	9
65	Predictive Control with Variable Delays in Plasma Insulin Action for Artificial Pancreas. , 2018, , .		1
66	Agent-Based Modeling of Immune Response to Study the Effects of Regulatory T Cells in Type 1 Diabetes. Processes, 2018, 6, 141.	1.3	2
67	Ensuring Stability and Fidelity of Recursively Identified Control-Relevant Models. IFAC-PapersOnLine, 2018, 51, 927-932.	0.5	5
68	Fault Detection in Continuous Glucose Monitoring Sensors for Artificial Pancreas Systems. IFAC-PapersOnLine, 2018, 51, 714-719.	0.5	6
69	Adaptive Model Predictive Control for Nonlinearity in Biomedical Applications. IFAC-PapersOnLine, 2018, 51, 368-373.	0.5	7
70	Hybrid Online Multi-Sensor Error Detection and Functional Redundancy for Artificial Pancreas Control Systems. IFAC-PapersOnLine, 2018, 51, 138-143.	0.5	7
71	Considering Plasma Insulin Concentrations in Adaptive Model Predictive Control for Artificial Pancreas Systems. , 2018, 2018, 4452-4455.		2
72	Multivariable Artificial Pancreas for Various Exercise Types and Intensities. Diabetes Technology and Therapeutics, 2018, 20, 662-671.	2.4	49

#	Article	IF	Citations
73	Incorporating Unannounced Meals and Exercise in Adaptive Learning of Personalized Models for Multivariable Artificial Pancreas Systems. Journal of Diabetes Science and Technology, 2018, 12, 953-966.	1.3	43
74	High Performance Agent-Based Modeling to Simulate Mammalian Cell Culture Bioreactor. Computer Aided Chemical Engineering, 2018, 44, 1453-1458.	0.3	3
75	Plasma Insulin Cognizant Predictive Control for Artificial Pancreas. , 2018, , .		2
76	Integrating Compartment Models with Recursive System Identification. , 2018, , .		5
77	Agent-based modeling of the interaction between CD8+ T cells and Beta cells in type 1 diabetes. PLoS ONE, 2018, 13, e0190349.	1.1	5
78	Modeling Glucose and Insulin Concentration Dynamics. SpringerBriefs in Bioengineering, 2018, , 33-50.	0.8	1
79	Fault Detection and Data Reconciliation. SpringerBriefs in Bioengineering, 2018, , 89-95.	0.8	0
80	Alarm Systems. SpringerBriefs in Bioengineering, 2018, , 51-54.	0.8	0
81	Dual-Hormone (Insulin and Glucagon) APÂSystems. SpringerBriefs in Bioengineering, 2018, , 83-87.	0.8	1
82	Multivariable Control of Glucose Concentration. SpringerBriefs in Bioengineering, 2018, , 65-82.	0.8	2
83	Factors Affecting Blood Glucose Concentration and Challenges to AP Systems. SpringerBriefs in Bioengineering, 2018, , 23-31.	0.8	0
84	Components of an Artificial Pancreas System. SpringerBriefs in Bioengineering, 2018, , 9-21.	0.8	0
85	Adaptive Modeling of Glucose Measurements with Unannounced Meals and Exercise. Diabetes, 2018, 67, 937-P.	0.3	0
86	Real-Time Model-Based Fault Detection of Continuous Glucose Sensor Measurements. IEEE Transactions on Biomedical Engineering, 2017, 64, 1437-1445.	2.5	28
87	Meal Detection and Carbohydrate Estimation Using Continuous Glucose Sensor Data. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 619-627.	3.9	71
88	Automated Insulin Deliveryâ€"The Light at the End of the Tunnel. Journal of Pediatrics, 2017, 186, 17-28.e9.	0.9	10
89	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. Diabetes Technology and Therapeutics, 2017, 19, 370-378.	2.4	57
90	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

#	Article	IF	Citations
91	The protective effect of quercetin on cyclophosphamide-Induced lung toxicity in rats. Biomedicine and Pharmacotherapy, 2017, 92, 303-307.	2.5	51
92	Social and competition stress detection with wristband physiological signals. , 2017, , .		16
93	Active inference for dynamic Bayesian networks with an application to tissue engineering. Knowledge and Information Systems, 2017, 50, 917-943.	2.1	5
94	Multivariable Recursive Subspace Identification with Application to Artificial Pancreas Systems. IFAC-PapersOnLine, 2017, 50, 886-891.	0.5	18
95	Multivariable Adaptive Artificial Pancreas System in Type 1 Diabetes. Current Diabetes Reports, 2017, 17, 88.	1.7	29
96	Plasma Insulin Estimation in People with Type 1 Diabetes Mellitus. Industrial & Engineering Chemistry Research, 2017, 56, 9846-9857.	1.8	47
97	Real-time estimation of plasma insulin concentration using continuous subcutaneous glucose measurements in people with type 1 diabetes. , 2017, , .		6
98	Real-time insulin bolusing for unannounced meals with artificial pancreas. Control Engineering Practice, 2017, 59, 159-164.	3.2	44
99	Real-Time Knowledge-Based Systems. , 2017, , 759-784.		0
100	Multivariate Statistical Monitoring of Sensor Faults of A Multivariable Artificial Pancreas. IFAC-PapersOnLine, 2017, 50, 10998-11004.	0.5	7
101	Security challenges and solutions for closed-loop artificial pancreas systems. , 2017, , .		2
102	Use of Wearable Sensors and Biometric Variables in an Artificial Pancreas System. Sensors, 2017, 17, 532.	2.1	24
103	Hardware and Software Implementation of an Artificial Pancreas System on a Mobile Device. International Journal of Handheld Computing Research, 2017, 8, 14-28.	0.4	0
104	Outcome Measures for Artificial Pancreas Clinical Trials: A Consensus Report. Diabetes Care, 2016, 39, 1175-1179.	4.3	195
105	Computational Model-Based Analysis of Strategies to Enhance Scaffold Vascularization. BioResearch Open Access, 2016, 5, 342-355.	2.6	1
106	Communication challenges in a multi-sensor closed-loop artificial pancreas system. , 2016, , .		1
107	Simulating 3-D bone tissue growth using repast HPC: Initial simulation design and performance results. , 2016, , .		4
108	In Silico Cell Cycle Predictor for Mammalian Cell Culture Bioreactor Using Agent-Based Modeling Approach. IFAC-PapersOnLine, 2016, 49, 200-205.	0.5	5

#	Article	IF	Citations
109	Hybrid Online Sensor Error Detection and Functional Redundancy for Artificial Pancreas Control Systems. IFAC-PapersOnLine, 2016, 49, 753-758.	0.5	9
110	Implementation of an artificial pancreas system on a mobile device. , 2016, , .		2
111	Hypoglycemia Detection and Carbohydrate Suggestion in an Artificial Pancreas. Journal of Diabetes Science and Technology, 2016, 10, 1236-1244.	1.3	26
112	Performance Assessment of Model-Based Artificial Pancreas Control Systems. Lecture Notes in Bioengineering, 2016, , 243-265.	0.3	4
113	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
114	Agent-Based Modeling of Vascularization in Gradient Tissue Engineering Constructs. IFAC-PapersOnLine, 2015, 48, 1240-1245.	0.5	4
115	Angiogenesis in Prevascularized Biomaterials: an in silico study. IFAC-PapersOnLine, 2015, 48, 395-400.	0.5	0
116	Classification of Physical Activity. Journal of Diabetes Science and Technology, 2015, 9, 1200-1207.	1.3	47
117	Exercise and the Development of the Artificial Pancreas. Journal of Diabetes Science and Technology, 2015, 9, 1217-1226.	1.3	79
118	Coordination scheme and target tracking for distributed model predictive control. Chemical Engineering Science, 2015, 136, 20-26.	1.9	8
119	Computational Modeling of Fed-Batch Cell Culture Bioreactor: Hybrid Agent-Based Approach. IFAC-PapersOnLine, 2015, 48, 1252-1257.	0.5	12
120	Routine daily physical activity and glucose variations are strongly coupled in adults with T1DM. Physiological Reports, 2015, 3, e12644.	0.7	4
121	Real-Time Insulin Bolusing for Unannounced Meals Using CGM Measurements. IFAC-PapersOnLine, 2015, 48, 219-224.	0.5	8
122	Design of Polymer Scaffolds for Tissue Engineering Applications. Industrial & Engineering Chemistry Research, 2015, 54, 2317-2328.	1.8	12
123	Stable recursive canonical variate state space modeling for time-varying processes. Control Engineering Practice, 2015, 36, 113-119.	3.2	27
124	System identification and distributed control for multi-rate sampled systems. Journal of Process Control, 2015, 34, 1-12.	1.7	12
125	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
126	Pore Interconnectivity Influences Growth Factor-Mediated Vascularization in Sphere-Templated Hydrogels. Tissue Engineering - Part C: Methods, 2015, 21, 773-785.	1.1	65

#	Article	IF	Citations
127	Sensor fusion and distributed platform development for artificial pancreas. , 2015, , .		5
128	Agent-based modeling of porous scaffold degradation and vascularization: Optimal scaffold design based on architecture and degradation dynamics. Acta Biomaterialia, 2015, 27, 167-178.	4.1	23
129	Monitoring and fault detection of continuous glucose sensor measurements. , 2015, , .		5
130	Evaluating 3Dâ€Printed Biomaterials as Scaffolds for Vascularized Bone Tissue Engineering. Advanced Materials, 2015, 27, 138-144.	11.1	241
131	Cyber-Physical Platform Development for Multivariable Artificial Pancreas Systems. International Journal of Handheld Computing Research, 2015, 6, 1-16.	0.4	4
132	Adaptive Control of Artificial Pancreas Systems - A Review. Journal of Healthcare Engineering, 2014, 5, 1-22.	1.1	52
133	An Integrated Multivariable Artificial Pancreas Control System. Journal of Diabetes Science and Technology, 2014, 8, 498-507.	1.3	74
134	Agent-based modeling of osteogenic differentiation of mesenchymal stem cells in porous biomaterials. , 2014, 2014, 2924-7.		13
135	Multiple-Input Subject-Specific Modeling of Plasma Glucose Concentration for Feedforward Control. Industrial & Engineering Chemistry Research, 2014, 53, 18216-18225.	1.8	7
136	Multivariable Adaptive Identification and Control for Artificial Pancreas Systems. IEEE Transactions on Biomedical Engineering, 2014, 61, 883-891.	2.5	139
137	Artificial Pancreas Systems: An Integrated Multivariable Adaptive Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 249-254.	0.4	11
138	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
139	Guaranteed stability of recursive multi-input-single-output time series models. , 2013, , .		2
140	Three-dimensional modeling of angiogenesis in porous biomaterial scaffolds. Biomaterials, 2013, 34, 2875-2887.	5.7	114
141	Hypoglycemia Early Alarm Systems Based on Multivariable Models. Industrial & Engineering Chemistry Research, 2013, 52, 12329-12336.	1.8	87
142	Adaptive multivariable closed-loop control of blood glucose concentration in patients with Type 1 Diabetes. , 2013, , .		18
143	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
144	An Experimental Study on Impact of Hard Damper Setting on ABS-Braking Performance Through Brake Pressure Changes Under Rough Road Conditions#. Mechanics Based Design of Structures and Machines, 2013, 41, 40-59.	3.4	1

#	ARTICLE	IF	CITATIONS
145	Hypoglycemia Early Alarm Systems Based on Recursive Autoregressive Partial Least Squares Models. Journal of Diabetes Science and Technology, 2013, 7, 206-214.	1.3	24
146	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
147	Monitoring, fault diagnosis, fault-tolerant control and optimization: Data driven methods. Computers and Chemical Engineering, 2012, 47, 111-120.	2.0	238
148	Adaptive system identification for estimating future glucose concentrations and hypoglycemia alarms. Automatica, 2012, 48, 1892-1897.	3.0	77
149	An adaptive fault-tolerant control framework with agent-based systems. International Journal of Robust and Nonlinear Control, 2012, 22, 43-67.	2.1	16
150	An Agent-Based Model for the Investigation of Neovascularization Within Porous Scaffolds. Tissue Engineering - Part A, 2011, 17, 2133-2141.	1.6	101
151	Adaptive Agent-Based System for Process Fault Diagnosis. Industrial & Engineering Chemistry Research, 2011, 50, 9138-9155.	1.8	15
152	Design and Evolution of an Agent Based System Applied to an Autocatalytic Network. Procedia Computer Science, 2011, 6, 297-302.	1.2	0
153	Dynamical behavior of the activator–repressor circuit model under random fluctuations. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 1978-1985.	1.7	3
154	A gaussian model for substrates of entangled cross-linked poly(ethylene glycol) in biomedical applications. Biotechnology and Bioengineering, 2011, 108, 435-445.	1.7	2
155	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
156	Multi-Agent Systems for Biomedical Simulation: Modeling Vascularization of Porous Scaffolds. Lecture Notes in Computer Science, 2011, , 113-128.	1.0	3
157	Hypoglycemia Prediction with Subject-Specific Recursive Time-Series Models. Journal of Diabetes Science and Technology, 2010, 4, 25-33.	1.3	62
158	PSECMAC Intelligent Insulin Schedule for Diabetic Blood Glucose Management Under Nonmeal Announcement. IEEE Transactions on Neural Networks, 2010, 21, 361-380.	4.8	11
159	Effect of Asymmetric Manipulations in Autocatalytic Networks. Industrial & Engineering Chemistry Research, 2010, 49, 5044-5052.	1.8	3
160	Statistical Monitoring of Complex Chemical Processes Using Agent-Based Systems. Industrial & Engineering Chemistry Research, 2010, 49, 5080-5093.	1.8	26
161	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
162	Estimation of Future Glucose Concentrations with Subject-Specific Recursive Linear Models. Diabetes Technology and Therapeutics, 2009, 11, 243-253.	2.4	121

#	Article	IF	Citations
163	Control of grade transitions in distributed chemical reactor networks—An agent-based approach. Computers and Chemical Engineering, 2008, 32, 1984-1994.	2.0	22
164	Reconfiguration of chemical reactor networks using a hierarchical agent-based system. , 2008, , .		0
165	Self-tuning controller for regulation of glucose levels in patients with type 1 diabetes. , 2008, , .		4
166	AGENT-BASED MONITORING, FAULT DETECTION, DIAGNOSIS AND CONTROL OF SPATIALLY DISTRIBUTED PROCESSES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 285-290.	0.4	2
167	SELF-ORGANIZING AGENT-BASED GRADE TRANSITION IN DISTRIBUTED CHEMICAL REACTOR NETWORKS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 179-184.	0.4	2
168	Control of complex distributed systems with distributed intelligent agents. Journal of Process Control, 2007, 17, 415-427.	1.7	30
169	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
170	ADAPTIVE AGENT-BASED CONTROL OF PRODUCT GRADE TRANSITIONS IN REACTOR NETWORKS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 373-378.	0.4	0
171	Agent-Based Control of Spatially Distributed Chemical Reactor Networks. Lecture Notes in Computer Science, 2006, , 222-231.	1.0	6
172	AGENT-BASED CONTROL OF DISCRETE SPATIALLY DISTRIBUTED SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 549-554.	0.4	0
173	Agent-based control of autocatalytic replicators in networks of reactors. Computers and Chemical Engineering, 2005, 29, 807-815.	2.0	32
174	Glucosim: Educational Software for Virtual Experiments with Patients with Type 1 Diabetes. , 2005, 2006, 845-8.		8
175	Measuring Complexity in Reactor Networks with Cubic Autocatalytic Reactions. Industrial & Engineering Chemistry Research, 2005, 44, 2781-2791.	1.8	13
176	HACCP with multivariate process monitoring and fault diagnosis techniques: application to a food pasteurization process. Food Control, 2005, 16, 411-422.	2.8	16
177	Multivariable MPC system performance assessment, monitoring, and diagnosis. Journal of Process Control, 2004, 14, 113-129.	1.7	89
178	Static and Dynamic Behavior of Autocatalytic Replicators in Reactor Networks. Industrial & Engineering Chemistry Research, 2004, 43, 3972-3993.	1.8	15
179	Intelligent real-time performance monitoring and quality prediction for batch/fed-batch cultivations. Journal of Biotechnology, 2004, 108, 61-77.	1.9	74
180	Batch process monitoring and its application to polymerization systems. Macromolecular Symposia, 2004, 206, 121-134.	0.4	5

#	Article	IF	Citations
181	Nonlinear Subspace Model Identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 517-522.	0.4	0
182	An Agent-Based Framework for Control of Reactor Networks with Autocatalytic Replicators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 425-430.	0.4	0
183	Fault Detection and Diagnosis in a Food Pasteurization Process with Hidden Markov Models. Canadian Journal of Chemical Engineering, 2004, 82, 1252-1262.	0.9	4
184	Real-time batch process supervision by integrated knowledge-based systems and multivariate statistical methods. Engineering Applications of Artificial Intelligence, 2003, 16, 555-566.	4.3	28
185	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
186	Feedback Control of a Continuous-Flow Stirred Tank Reactor with Competing Autocatalators. Industrial & Engineering Chemistry Research, 2003, 42, 3765-3785.	1.8	12
187	Statistical monitoring of multistage, multiphase batch processes. IEEE Control Systems, 2002, 22, 40-52.	1.0	228
188	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
189	Interpreting ECG data by integrating statistical and artificial intelligence tools. IEEE Engineering in Medicine and Biology Magazine, 2002, 21, 36-41.	1.1	32
190	A morphologically structured model for penicillin production. Biotechnology and Bioengineering, 2002, 77, 538-552.	1.7	57
191	A modular simulation package for fed-batch fermentation: penicillin production. Computers and Chemical Engineering, 2002, 26, 1553-1565.	2.0	512
192	An intelligent system for multivariate statistical process monitoring and diagnosis. ISA Transactions, 2002, 41, 255-270.	3.1	32
193	Physiological Phase Detection of Batch Bioprocesses with Unequal Run Lengths. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 155-160.	0.4	0
194	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
195	On-Line Real Time Monitoring of Penicillin Fermentation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 243-247.	0.4	2
196	Additive Nonlinear ARX Modeling for Systems with Output Multiplicities. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 821-826.	0.4	0
197	Intelligent process monitoring by interfacing knowledge-based systems and multivariate statistical monitoring. Journal of Process Control, 2000, 10, 341-350.	1.7	64
198	Empirical Modeling of Systems with Output Multiplicities by Multivariate Additive NARX Models. Industrial & Engineering Chemistry Research, 2000, 39, 1747-1755.	1.8	4

#	Article	IF	Citations
199	Monitoring of multivariable dynamic processes and sensor auditing. Journal of Process Control, 1998, 8, 375-380.	1.7	39
200	Modeling, monitoring and control strategies for high temperature short time pasteurization systems â€" 1. Empirical model development. Food Control, 1998, 9, 1-15.	2.8	17
201	Modeling, monitoring and control strategies for high temperature short time pasteurization systems â€" 2. Lethality-based control. Food Control, 1998, 9, 17-28.	2.8	15
202	Modeling, monitoring and control strategies for high temperature short time pasteurization systems â€" 3. Statistical monitoring of product lethality and process sensor reliability. Food Control, 1998, 9, 29-47.	2.8	16
203	Acquisition, Storage, and Review of Safety Data from a Commercial System for High Temperature, Short Time Pasteurization. Journal of Dairy Science, 1998, 81, 25-30.	1.4	1
204	Monitoring and fault diagnosis of a polymerization reactor by interfacing knowledge-based and multivariate SPM tools. , 1998, , .		2
205	Intelligent Monitoring by Interfacing Multivariate Statistical Monitoring and Knowledge-Based Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 81-86.	0.4	1
206	Intelligent Process Monitoring by Interfacing Knowledge-Based Systems and Multivariate SPC Tools. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 43-48.	0.4	5
207	State Variable Based Statistical Methods for Auditing Sensors of Multivariable Dynamic Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 185-190.	0.4	1
208	Automated Control and Monitoring of Thermal Processing Using High Temperature, Short Time Pasteurization. Journal of Dairy Science, 1997, 80, 2291-2296.	1.4	6
209	Controller performance assessment by frequency domain techniques. Journal of Process Control, 1997, 7, 181-194.	1.7	41
210	PLS, balanced, and canonical variate realization techniques for identifying VARMA models in state space. Chemometrics and Intelligent Laboratory Systems, 1997, 38, 209-221.	1.8	51
211	Diagnosis of process disturbances by statistical distance and angle measures. Computers and Chemical Engineering, 1997, 21, 661-673.	2.0	89
212	Statistical monitoring of multivariable dynamic processes with state-space models. AICHE Journal, 1997, 43, 2002-2020.	1.8	230
213	Automated control of high temperature short time pasteurization. Food Control, 1996, 7, 309-315.	2.8	22
214	Statistical process monitoring and disturbance diagnosis in multivariable continuous processes. AICHE Journal, 1996, 42, 995-1009.	1.8	281
215	An adaptive robust M-estimator for nonparametric nonlinear system identification. Journal of Process Control, 1996, 6, 233-239.	1.7	6
216	Multivariate statistical methods for monitoring continuous processes: assessment of discrimination power of disturbance models and diagnosis of multiple disturbances. Chemometrics and Intelligent Laboratory Systems, 1995, 30, 37-48.	1.8	56

#	Article	IF	Citations
217	Nonlinear time series models for multivariable dynamic processes. Chemometrics and Intelligent Laboratory Systems, 1995, 30, 147-158.	1.8	12
218	Mathematical Models of Cocurrent Spray Drying. Industrial & Engineering Chemistry Research, 1995, 34, 3289-3302.	1.8	19
219	Forced periodic operation of tubular reactors. Chemical Engineering Science, 1994, 49, 3409-3419.	1.9	9
220	Intelligent process control with supervisory knowledge-based systems. IEEE Control Systems, 1994, 14, 37-47.	1.0	25
221	Nonlinear predictive control of periodically forced chemical reactors. AICHE Journal, 1993, 39, 589-598.	1.8	21
222	A COMPARATIVE STUDY OF TOOLS FOR ASSESSING THE EFFECTS OF FORCED PERIODIC OPERATION OF CATALYTIC REACTORS. Chemical Engineering Communications, 1992, 112, 85-104.	1.5	3
223	A numerical method for determining optimal parameter values in forced periodic operation. Chemical Engineering Science, 1992, 47, 605-613.	1.9	52
224	A Knowledge-based System For Development Of Nonlinear Input-Output Models. , 1992, , .		0
225	Periodic Feedback Control Systems: Closed-Loop Dynamic Behavior. , 1991, , .		0
226	DYNAMIC BEHAVIOR OF PERIODIC FEEDBACK CONTROL SYSTEMS. Chemical Engineering Communications, 1991, 110, 31-51.	1.5	1
227	Numerical singularity analysis. Chemical Engineering Science, 1991, 46, 1055-1062.	1.9	10
228	Reliable Process Control by 4-Parameter Controllers. , 1991, , .		2
229	Synthesis of modelâ€bed controllers for an autothermal reactor. Canadian Journal of Chemical Engineering, 1990, 68, 666-679.	0.9	3
230	A modelâ€"object based supervisory expert system for fault tolerant chemical reactor control. Computers and Chemical Engineering, 1990, 14, 551-560.	2.0	41
231	Design of resilient controllable chemical processes: an autothermal reactor case study. Industrial & Engineering Chemistry Research, 1990, 29, 1218-1226.	1.8	2
232	Dynamic estimation of temperature and concentration profiles in a packed bed reactor. Chemical Engineering Science, 1989, 44, 2087-2106.	1.9	21
233	Vibrational control of an exothermic CSTR: productivity improvement by multiple input oscillations. IEEE Transactions on Automatic Control, 1989, 34, 193-196.	3.6	17
234	Forced periodic control of an exothermic CSTR with multiple input oscillations. AICHE Journal, 1988, 34, 2041-2051.	1.8	13

#	Article	IF	Citations
235	The bifurcation behavior of an autothermal packed bed tubular reactor. Chemical Engineering Science, 1988, 43, 887-898.	1.9	18
236	Numerical Singularity Analysis of Feedback-Controlled Chemical Reactors. , 1988, , .		0
237	VIBRATIONAL CONTROL OF CHEMICAL REACTORS: STABILIZATION AND CONVERSION IMPROVEMENT IN AN EXOTHERMIC CSTR. Chemical Engineering Communications, 1987, 59, 299-308.	1.5	14
238	Vibrational stabilization of a chemical reactor: An experimental study. IEEE Transactions on Automatic Control, 1987, 32, 348-352.	3.6	8
239	Stability of tubular and autothermal packed bed reactors using phase plane analysis. Industrial & Engineering Chemistry Research, 1987, 26, 1356-1362.	1.8	5
240	Vibrational control of an exothermic reaction in a CSTR: Theory and experiments. AICHE Journal, 1987, 33, 353-365.	1.8	57
241	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
242	Controller design for a tubular catalytic reactor. Canadian Journal of Chemical Engineering, 1984, 62, 746-754.	0.9	10
243	In Vitro and in Vivo Evaluation of Vascular Networks Generated from iPSC-Derived Endothelial Cells. SSRN Electronic Journal, 0, , .	0.4	0