

# Denis Dochain

## List of Publications by Year in descending order

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186  
papers

5,281  
citations

81743

39  
h-index

98622

67  
g-index

191  
all docs

191  
docs citations

191  
times ranked

2333  
citing authors

#	ARTICLE	IF	CITATIONS
1	Author's Reply to "Comment on "A proportional-integral extremum seeking controller design technique" [Automatica 77 (2017) 61-67]". Automatica, 2022, 135, 109944.	3.0	0
2	Noise-to-state exponentially stabilizing (state, input)-disturbed CSTRs with non-vanishing noise. Automatica, 2022, 142, 110387.	3.0	2
3	Consideration of Maintenance in Wine Fermentation Modeling. Foods, 2022, 11, 1682.	1.9	1
4	A sequential convex moving horizon estimator for bioprocesses. Journal of Process Control, 2022, 116, 19-24.	1.7	2
5	On Exponential Bistability of Equilibrium Profiles of Nonisothermal Axial Dispersion Tubular Reactors. IEEE Transactions on Automatic Control, 2021, 66, 3235-3242.	3.6	0
6	On local exponential stability of equilibrium profiles of nonlinear distributed parameter systems. IFAC-PapersOnLine, 2021, 54, 390-396.	0.5	1
7	Generalized parameter estimation-based observers: Application to power systems and chemical/biological reactors. Automatica, 2021, 129, 109635.	3.0	47
8	Local exponential stabilization of nonlinear infinite-dimensional systems. , 2021, , .		0
9	Antiwindup Input-Output Linearization Strategy for the Control of a Multistage Continuous Fermenter With Input Constraints. IEEE Transactions on Control Systems Technology, 2020, 28, 766-775.	3.2	6
10	Analysis of the Existence of Equilibrium Profiles in Nonisothermal Axial Dispersion Tubular Reactors. IEEE Transactions on Automatic Control, 2020, 65, 1525-1536.	3.6	7
11	A Robust Asymptotic Observer for Systems That Converge to Unobservable States "A Batch Reactor Case Study. IEEE Transactions on Automatic Control, 2020, 65, 2693-2699.	3.6	16
12	Exponential stability of nonlinear infinite-dimensional systems: Application to nonisothermal axial dispersion tubular reactors. Automatica, 2020, 121, 109201.	3.0	6
13	Increasing the dilution rate can globally stabilize two-step biological systems. Journal of Process Control, 2020, 95, 67-74.	1.7	3
14	Thermodynamic Analysis and Feedback Stabilization for Irreversible Liquid-Vapor Systems. Industrial & Engineering Chemistry Research, 2020, 59, 2252-2260.	1.8	3
15	Extremum seeking control for a mass structured cell population balance model in a bioreactor. IFAC-PapersOnLine, 2020, 53, 11392-11397.	0.5	1
16	Modelling and control of particulate systems - three industrial(ly based) case studies. IFAC-PapersOnLine, 2020, 53, 11404-11409.	0.5	0
17	Port-Hamiltonian Sliding Mode Observer Design for a Counter-current Heat Exchanger. IFAC-PapersOnLine, 2020, 53, 4910-4915.	0.5	5
18	On Local Stability of Equilibrium Profiles of Nonisothermal Axial Dispersion Tubular Reactors. IFAC-PapersOnLine, 2020, 53, 5315-5321.	0.5	1

#	ARTICLE	IF	CITATIONS
19	Representation of a Continuous Settling Tank by Hybrid Partial Differential Non Linear Equations for Control Design. IFAC-PapersOnLine, 2020, 53, 16834-16839.	0.5	0
20	Constrained global adaptive controller for a plug-flow tubular reactor with partial temperature measurements. IMA Journal of Mathematical Control and Information, 2019, 36, 1089-1104.	1.1	3
21	Model based extremum-seeking controller via modelling-error compensation approach. Journal of Process Control, 2019, 80, 193-201.	1.7	7
22	State observers for reaction systems with improved convergence rates. Journal of Process Control, 2019, 83, 53-62.	1.7	12
23	A non-equilibrium approach to model flash dynamics with interface transport. Journal of Process Control, 2019, 80, 211-222.	1.7	3
24	Management of an integrated network of wastewater treatment plants for improving water quality in a river basin. IFAC-PapersOnLine, 2019, 52, 358-363.	0.5	7
25	Modelling of Tokamak plasmas as open GENERIC systems. IFAC-PapersOnLine, 2019, 52, 7-12.	0.5	0
26	On the Positivity of Entropy Production in Multiphase Thermodynamic Systems. IFAC-PapersOnLine, 2019, 52, 13-18.	0.5	1
27	A comment on thermodynamically consistent feasibility condition of asymptotic observers. Chemical Engineering Science, 2019, 199, 258-274.	1.9	9
28	Lumped portâ€“Hamiltonian burning plasma control model. , 2019, , .		0
29	On-line optimization of biomethane production in continuous AD processes via model-based ESC approach. Water Science and Technology, 2019, 80, 1725-1730.	1.2	2
30	Some Structural Properties of Reaction Systems Useful For Estimation and Control. Industrial & Engineering Chemistry Research, 2019, 58, 13642-13650.	1.8	1
31	Biodiesel production in a continuous packed bed reactor with recycle: A modeling approach for an esterification system. Renewable Energy, 2018, 116, 857-865.	4.3	7
32	Analysis of the multiplicity of steady-state profiles of two tubular reactor models. Computers and Chemical Engineering, 2018, 114, 318-324.	2.0	8
33	Passivity and stability properties of multi-physics systems using the entropy production 1 1This research was supported by the Belgian Network DYSCO, funded by the Inter-university Attraction Poles Program, initiated by the Belgian Science Policy Office. The first author is a FRIA fellow (F.R.S.-FNRS). IFAC-PapersOnLine, 2018, 51, 13-18.	0.5	3
34	Decomposed Threshold ARMAX Models for short- to medium-term wind power forecasting. IFAC-PapersOnLine, 2018, 51, 49-54.	0.5	16
35	An asymptotic observer for batch processes with single biogas measurement. IFAC-PapersOnLine, 2018, 51, 420-424.	0.5	4
36	A simple model of wastewater treatment plants for managing the quality of the Seine River. IFAC-PapersOnLine, 2018, 51, 880-885.	0.5	3

#	ARTICLE	IF	CITATIONS
37	A Non-equilibrium Approach to Model Flash Dynamics with Interface Transport. IFAC-PapersOnLine, 2018, 51, 874-879.	0.5	1
38	Port-Hamiltonian modeling and reduction of a burning plasma system. IFAC-PapersOnLine, 2018, 51, 68-73.	0.5	6
39	Software Sensor for Online Estimation of the VFA's Concentration in Anaerobic Digestion Processes via a High-Order Sliding Mode Observer. Industrial & Engineering Chemistry Research, 2018, 57, 14173-14181.	1.8	5
40	On-line estimation of the VFA concentration in anaerobic digestion processes based on a super-twisting observer. , 2018, , .		3
41	Robust sliding mode-based extremum-seeking controller for reaction systems via uncertainty estimation approach. International Journal of Robust and Nonlinear Control, 2017, 27, 3218-3235.	2.1	9
42	Adaptive local tracking of a temperature profile in tubular reactor with partial measurements. Journal of Process Control, 2017, 50, 29-39.	1.7	9
43	A proportional-integral extremum-seeking controller design technique. Automatica, 2017, 77, 61-67.	3.0	47
44	Generalized Hamiltonian representation of thermo-mechanical systems based on an entropic formulation. Journal of Process Control, 2017, 51, 18-26.	1.7	9
45	Effect of mesoscopic conservative phenomena in the dynamics of chemical reactions at the macroscopic scale. Physica A: Statistical Mechanics and Its Applications, 2017, 486, 79-91.	1.2	9
46	Microrespirometric model calibration applied to wastewater processes. Biochemical Engineering Journal, 2017, 128, 168-177.	1.8	4
47	Dissipative pseudo-Hamiltonian realization of chemical systems using irreversible thermodynamics. Mathematical and Computer Modelling of Dynamical Systems, 2017, 23, 135-155.	1.4	11
48	Reaction flux versus reaction force: easy to stabilize?. IFAC-PapersOnLine, 2017, 50, 558-563.	0.5	1
49	Control design for thermodynamic systems on contact manifolds. IFAC-PapersOnLine, 2017, 50, 588-593.	0.5	4
50	Burning magneto-hydrodynamics plasmas model: A port-based modelling approach. IFAC-PapersOnLine, 2017, 50, 13038-13043.	0.5	6
51	A Non-equilibrium Approach to Model Dynamic Composite Systems with Interface Transport**The research presented in this paper was supported by the Institute of Information and Communication Technologies, Electronics and Applied Mathematics (ICTEAM) at Universit catholique de Louvain, the Belgian Interuniversity Attraction Poles "Dynamical systems, control and optimization" (DYSCO) and the Metis Consortium for Computational Technology (COMET). IFAC-PapersOnLine, 2016, 49, 76-81.	0.5	0
52	Analysis of the multiplicity of equilibrium profiles in tubular reactor models**This paper presents research results of the Belgian Network DYSCO (Dynamical Systems, Control, and Optimization), funded by the Interuniversity Attraction Poles Programme, initiated by the Belgian State, Science Policy Office. The scientific responsibility rests with its authors.. IFAC-PapersOnLine, 2016, 49, 903-908.	0.5	10
53	Conservative and dissipative phenomena in thermodynamical systems stability. IFAC-PapersOnLine, 2016, 49, 28-33.	0.5	7
54	Metric Thermodynamic Phase Space and Stability Problems. IFAC-PapersOnLine, 2016, 49, 52-57.	0.5	2

#	ARTICLE	IF	CITATIONS
55	Stability of perturbed thermodynamic systems. IFAC-PapersOnLine, 2016, 49, 58-63.	0.5	0
56	Linking Models and Experiments. Industrial & Engineering Chemistry Research, 2016, 55, 6891-6903.	1.8	62
57	Nutritive value of three tropical forage legumes and their influence on growth performance, carcass traits and organ weights of pigs. Tropical Animal Health and Production, 2016, 48, 1165-1173.	0.5	3
58	Monitoring of a biodiesel production process via reset observer. Journal of Process Control, 2016, 42, 104-113.	1.7	7
59	Hybrid observer for parameters estimation in ethylene polymerization reactor: A simulation study. Applied Soft Computing Journal, 2016, 49, 687-698.	4.1	5
60	Plant Growth Modelling: From Experimental Design to Modelling-The Arabidopsis Experiment** This paper presents research results of the Belgian Network DYSCO (Dynamical Systems, Control, and Optimization) supported by the Belgian Interuniversity Attraction Poles Phase VII/19 (2014-2017) and the Belgian State, Science Policy Office. The scientific responsibility rests with its authors.. IFAC-PapersOnLine, 2016, 49, 236-241.	0.5	0
61	On the equivalence of storage functions in controlled thermodynamic systems. IFAC-PapersOnLine, 2016, 49, 579-584.	0.5	6
62	On-line estimation of VFA concentration in anaerobic digestion via methane outflow rate measurements. Computers and Chemical Engineering, 2016, 94, 250-256.	2.0	26
63	Stability analysis and passivity properties of a class of thermodynamic processes: An internal entropy production approach. Chemical Engineering Science, 2016, 139, 261-272.	1.9	28
64	Representation of irreversible systems in a metric thermodynamic phase space—The research presented in this paper was supported by the Belgian Interuniversity Attraction Poles Phase VII/19 (2014-2017) and the Belgian Fonds National de la Recherche Scientifique (FNRS).. IFAC-PapersOnLine, 2015, 48, 1070-1074.	0.5	2
65	Global Adaptive Tracking of a Temperature Profile in Tubular Reactor. ESAIM Proceedings and Surveys, 2015, 49, 11-22.	0.5	3
66	On the relaxing dissipation of dissipative pseudo Hamiltonian models. IFAC-PapersOnLine, 2015, 48, 1051-1056.	0.5	2
67	Dissipative and conservative structures for thermo-mechanical systems. IFAC-PapersOnLine, 2015, 48, 1057-1064.	0.5	4
68	Potential-based analysis of closed reacting systems—The research presented in this paper was supported by the Belgian Interuniversity Attraction Poles Phase VII/19 (2014-2017) and the Belgian Fonds National de la Recherche Scientifique (FNRS). The third author gratefully acknowledges the financial support of the Viet Nam National Foundation for Science and Technology Development (NAFOSTED) through project code 104.99-2014.74.. IFAC-PapersOnLine, 2015, 48, 141-143.	0.5	4
69	Supported by the Belgian Interuniversity Attraction Poles Phase VII/19 (2014-2017) and the Belgian Fonds National de la Recherche Scientifique (FNRS). The second author gratefully acknowledges the financial support of the Viet Nam National Foundation for Science and Technology Development (NAFOSTED) through project code 104.99-2014.74.. IFAC-PapersOnLine, 2015, 48, 141-143.	0.5	2
70	Identification of simple mass balance models for plant growth - evolving yields and incorporating developmental stages. , 2015, , .		1
71	Cascade Nonlinear Control for a Class of Cascade Systems—Financial support from project CONACyT CB-2014-I0017-242125.. IFAC-PapersOnLine, 2015, 48, 819-826.	0.5	4
72	Review and classification of recent observers applied in chemical process systems. Computers and Chemical Engineering, 2015, 76, 27-41.	2.0	187

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73	A time-varying extremum-seeking control approach. <i>Automatica</i> , 2015, 51, 356-363.	3.0	83
74	A constrained extremum-seeking control approach. <i>International Journal of Robust and Nonlinear Control</i> , 2015, 25, 3132-3153.	2.1	43
75	A multi-objective extremum-seeking controller design technique. <i>International Journal of Control</i> , 2015, 88, 38-53.	1.2	13
76	An extremum seeking approach via variable-structure control for fed-batch bioreactors with uncertain growth rate. <i>Journal of Process Control</i> , 2014, 24, 663-671.	1.7	30
77	Model identification and reduction for the control of an ice cream crystallization process. <i>Chemical Engineering Science</i> , 2014, 119, 274-287.	1.9	11
78	A Minmax Extremum-Seeking Controller Design Technique. <i>IEEE Transactions on Automatic Control</i> , 2014, 59, 1874-1886.	3.6	19
79	Nitrogen-backed modeling of wine-making in standard and nitrogen-added fermentations. <i>Bioprocess and Biosystems Engineering</i> , 2014, 37, 5-16.	1.7	12
80	A proportional integral extremum-seeking control approach. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014, 47, 377-382.	0.4	8
81	Passivity and Passive Feedback Stabilization for a Class of Mixed Potential Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014, 47, 9105-9110.	0.4	1
82	A thermodynamic approach towards Lyapunov based control of reaction rate. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014, 47, 9117-9122.	0.4	11
83	Partial inventory control of the CSTR via reaction-dependent generalized inventories. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014, 47, 9123-9128.	0.4	4
84	Advanced methods for the control of food processes: the case of bioconversion in a fed-batch reactor. , 2013, , 226-264.		1
85	On an evolution criterion of homogeneous multi-component mixtures with chemical transformation. <i>Systems and Control Letters</i> , 2013, 62, 170-177.	1.3	27
86	A time-varying extremum-seeking control approach. , 2013, , .		24
87	Stability and feedback stabilization for a class of mixed potential systems. , 2013, , .		2
88	Feedback Stabilization of Metriplectic Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 12-17.	0.4	3
89	Entropy-based stabilizing feedback law under input constraints of a CSTR. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 27-32.	0.4	4
90	A thermodynamic approach to the passive boundary control of tubular reactors. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 383-388.	0.4	8

#	ARTICLE	IF	CITATIONS
91	Thermodynamics based stabilization of CSTR networks. , 2012, , .		7
92	A Simple Mass Balance Model for Lettuce - The Water Balance. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1442-1447.	0.4	1
93	Steady-state and stability analysis of a population balance based nonlinear ice cream crystallization model. , 2012, , .		3
94	A model development approach to ensure identifiability of a simple mass balance model for photosynthesis and respiration in a plant growth chamber. Ecological Modelling, 2012, 246, 105-118.	1.2	5
95	Periodic trajectories of distributed parameter biochemical systems with time delay. Applied Mathematics and Computation, 2012, 218, 7395-7405.	1.4	5
96	Minimal Time Control of Fed-Batch Processes With Growth Functions Having Several Maxima. IEEE Transactions on Automatic Control, 2011, 56, 2671-2676.	3.6	23
97	Extremum seeking control and its application to process and reaction systems: A survey. Mathematics and Computers in Simulation, 2011, 82, 369-380.	2.4	98
98	Modeling of the aromatic profile in wine-making fermentation: the backbone equations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10597-10602.	0.4	6
99	From Brayton-Moser formulation to Port Hamiltonian representation: the CSTR case study. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1628-1633.	0.4	10
100	On-line optimization of fedbatch bioreactors by adaptive extremum seeking control. Journal of Process Control, 2011, 21, 1526-1532.	1.7	53
101	Power-shaping control: Writing the system dynamics into the Brayton-Moser form. Systems and Control Letters, 2011, 60, 618-624.	1.3	32
102	Towards power-shaping control of the CSTR: from thermodynamics to the Brayton-Moser formulation of the dynamics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 709-714.	0.4	2
103	Dynamical modeling of alcoholic fermentation and its link with nitrogen consumption. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 496-501.	0.4	15
104	An entropy-based formulation of irreversible processes based on contact structures. Chemical Engineering Science, 2010, 65, 5204-5216.	1.9	61
105	Input constrained adaptive tracking for a nonlinear distributed parameter tubular reactor. International Journal of Adaptive Control and Signal Processing, 2010, 24, 249-260.	2.3	9
106	Power-shaping control of reaction systems: The CSTR case. Automatica, 2010, 46, 1877-1883.	3.0	65
107	Two modelling approaches of winemaking: first principle and metabolic engineering. Mathematical and Computer Modelling of Dynamical Systems, 2010, 16, 535-553.	1.4	10
108	Modélisation d'un procédé de compostage en pile statique. Journal European Des Systemes Automatisés, 2010, 44, 409-422.	0.3	0

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109	Analysis and control of the exothermic continuous stirred tank reactor: the power-shaping approach. , 2009, , .		11
110	Thermodynamics and chemical systems stability: The CSTR case study revisited. Journal of Process Control, 2009, 19, 371-379.	1.7	81
111	A multivariable control scheme in a two-stage anaerobic digestion system described by partial differential equations. Journal of Process Control, 2009, 19, 1324-1332.	1.7	27
112	Long run coexistence in the chemostat with multiple species. Journal of Theoretical Biology, 2009, 257, 252-259.	0.8	13
113	Some Properties of Conservative Port Contact Systems. IEEE Transactions on Automatic Control, 2009, 54, 2341-2351.	3.6	38
114	Enthalpy based modelling and design of asymptotic observers for chemical reactors. International Journal of Control, 2009, 82, 1389-1403.	1.2	30
115	Extremum-seeking control of retention for a microparticulate system. Canadian Journal of Chemical Engineering, 2008, 86, 815-827.	0.9	9
116	Microbial ecology and bioprocess control: Opportunities and challenges. Journal of Process Control, 2008, 18, 865-875.	1.7	22
117	Adaptive extremum-seeking control of convection-reaction distributed reactor with limited actuation. Computers and Chemical Engineering, 2008, 32, 2994-3001.	2.0	34
118	Dynamical modelling, identification and software sensors for SBRs. Mathematical and Computer Modelling of Dynamical Systems, 2008, 14, 17-26.	1.4	7
119	Optimal LQ-feedback control for a class of first-order hyperbolic distributed parameter systems. ESAIM - Control, Optimisation and Calculus of Variations, 2008, 14, 897-908.	0.7	29
120	Asymptotic Behavior and Stability for Solutions of a Biochemical Reactor Distributed Parameter Model. IEEE Transactions on Automatic Control, 2008, 53, 412-416.	3.6	17
121	Global observability and detectability analysis of uncertain reaction systems and observer design. International Journal of Control, 2008, 81, 1062-1070.	1.2	43
122	State estimation for a class of exothermic fed-batch processes. International Journal of Modelling, Identification and Control, 2008, 4, 89.	0.2	2
123	Flatness-Based Extremum-Seeking Control Over Periodic Orbits. IEEE Transactions on Automatic Control, 2007, 52, 2005-2012.	3.6	35
124	Optimal LQ-Feedback Regulation of a Nonisothermal Plug Flow Reactor Model by Spectral Factorization. IEEE Transactions on Automatic Control, 2007, 52, 1179-1193.	3.6	71
125	Contact structures: application to interconnected thermodynamical systems. , 2007, , .		6
126	Asymptotic stability of infinite-dimensional semilinear systems: Application to a nonisothermal reactor. Systems and Control Letters, 2007, 56, 122-132.	1.3	31

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127	Oxygen control for an industrial pilot-scale fed-batch filamentous fungal fermentation. <i>Journal of Process Control</i> , 2007, 17, 595-606.	1.7	53
128	Monitoring and control of process and power systems: Towards new paradigms. <i>Annual Reviews in Control</i> , 2006, 30, 69-79.	4.4	11
129	Real-time optimization of a tubular reactor with distributed feed. <i>AIChE Journal</i> , 2006, 52, 2120-2128.	1.8	19
130	LQ-Optimal Control of a Class of First-Order Hyperbolic PDE's Systems. , 2006, , .		1
131	Adaptive extremum-seeking control of nonisothermal continuous stirred tank reactors. <i>Chemical Engineering Science</i> , 2005, 60, 3671-3681.	1.9	57
132	Adaptive extremum seeking control of a non-isothermal tubular reactor with unknown kinetics. <i>Computers and Chemical Engineering</i> , 2005, 29, 839-849.	2.0	15
133	The optimal design of two interconnected (bio)chemical reactors revisited. <i>Computers and Chemical Engineering</i> , 2005, 30, 70-82.	2.0	26
134	Interval observers for biochemical processes with uncertain kinetics and inputs. <i>Mathematical Biosciences</i> , 2005, 193, 235-253.	0.9	83
135	Stability analysis of an infinite-dimensional linearized plug flow reactor model. , 2004, , .		14
136	Adaptive extremum-seeking control of a continuous stirred tank bioreactor with Haldane's Kinetics. <i>Journal of Process Control</i> , 2004, 14, 317-328.	1.7	56
137	Observability analysis of nonlinear tubular (bio)reactor models: a case study. <i>Journal of Process Control</i> , 2004, 14, 661-669.	1.7	23
138	Output feedback adaptive extremum seeking control of a continuous stirred tank bioreactor with Monod's kinetics. <i>Journal of Process Control</i> , 2004, 14, 807-818.	1.7	27
139	Identification and control of an industrial polymerisation reactor. <i>Control Engineering Practice</i> , 2004, 12, 909-915.	3.2	2
140	Adaptive extremum seeking control of continuous stirred tank bioreactors with unknown growth kinetics. <i>Automatica</i> , 2004, 40, 881-888.	3.0	144
141	Estimation of the Hydrodynamic and Biokinetic Models of Soil Bioremediation Processes. <i>Chemical Engineering Research and Design</i> , 2003, 81, 1279-1288.	2.7	4
142	Real-Time Optimization of Fed-Batch Bioreactors via Adaptive Extremum-Seeking Control. <i>Chemical Engineering Research and Design</i> , 2003, 81, 1289-1295.	2.7	12
143	Adaptive extremum seeking control of continuous stirred-tank bioreactors. <i>AIChE Journal</i> , 2003, 49, 113-123.	1.8	41
144	Solution of the convectionâ€“dispersionâ€“reaction equation by a sequencing method. <i>Computers and Chemical Engineering</i> , 2003, 27, 615-629.	2.0	17

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145	State and parameter estimation in chemical and biochemical processes: a tutorial. <i>Journal of Process Control</i> , 2003, 13, 801-818.	1.7	404
146	Adaptive Extremum Seeking Control of Fed-Batch Bioreactors. <i>European Journal of Control</i> , 2003, 9, 618-631.	1.6	42
147	State observers for processes with uncertain kinetics. <i>International Journal of Control</i> , 2003, 76, 1483-1492.	1.2	25
148	A simplified method to assess structurally identifiable parameters in Monod-based activated sludge models. <i>Water Research</i> , 2003, 37, 2893-2904.	5.3	45
149	IEEE Transactions on control systems technology special issue on control of industrial spatially distributed processes. <i>IEEE Transactions on Control Systems Technology</i> , 2003, 11, 609-611.	3.2	9
150	A state observer for (bio)processes with uncertain kinetics. , 2002, , .		4
151	Discontinuous feedback stabilization of minimum-phase semilinear infinite-dimensional systems with application to chemical tubular reactor. <i>IEEE Transactions on Automatic Control</i> , 2002, 47, 1293-1304.	3.6	93
152	Optimal temperature control of a steady-state exothermic plug-flow reactor. <i>AIChE Journal</i> , 2002, 48, 279-286.	1.8	53
153	Modeling aerobic carbon source degradation processes using titrimetric data and combined respirometric-titrimetric data: Structural and practical identifiability. <i>Biotechnology and Bioengineering</i> , 2002, 79, 754-767.	1.7	30
154	Trajectory analysis of nonisothermal tubular reactor nonlinear models. <i>Systems and Control Letters</i> , 2001, 42, 169-184.	1.3	75
155	Dynamical model development and parameter identification for an anaerobic wastewater treatment process. <i>Biotechnology and Bioengineering</i> , 2001, 75, 424-438.	1.7	485
156	State observation and adaptive linearizing control for distributed parameter (bio)chemical reactors. <i>International Journal of Adaptive Control and Signal Processing</i> , 2001, 15, 633-653.	2.3	32
157	State Observers for Processes with Uncertain Kinetics. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000, 33, 171-176.	0.4	1
158	Dynamical analysis of distributed parameter tubular reactors. <i>Automatica</i> , 2000, 36, 349-361.	3.0	141
159	Optimal selection of orthogonal polynomials applied to the integration of chemical reactor equations by collocation methods. <i>Computers and Chemical Engineering</i> , 2000, 24, 2571-2588.	2.0	48
160	Modelling, identification and control of a denitrifying biofilter. <i>Journal of Process Control</i> , 2000, 10, 73-91.	1.7	22
161	State observers for tubular reactors with unknown kinetics. <i>Journal of Process Control</i> , 2000, 10, 259-268.	1.7	47
162	Tuning of observer-based estimators: theory and application to the on-line estimation of kinetic parameters. <i>Control Engineering Practice</i> , 2000, 8, 377-388.	3.2	85

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163	Software sensors to monitor the dynamics of microbial communities: application to anaerobic digestion. <i>Acta Biotheoretica</i> , 2000, 48, 197-205.	0.7	22
164	Stability Analysis of Two Linear Distributed Parameter Bioprocess Models. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2000, 6, 267-281.	1.4	4
165	On the use of observability measures for sensor location in tubular reactor. <i>Journal of Process Control</i> , 1998, 8, 497-505.	1.7	91
166	On modelling, monitoring and control of fixed bed bioreactors. <i>Computers and Chemical Engineering</i> , 1997, 21, 1255-1266.	2.0	64
167	Application of an Adaptive Linearizing Inferential Controller to a PHB Process. <i>Biotechnology and Biotechnological Equipment</i> , 1995, 9, 96-102.	0.5	5
168	Structural identifiability of biokinetic models of activated sludge respiration. <i>Water Research</i> , 1995, 29, 2571-2578.	5.3	114
169	Approximation of the dynamical model of fixed bed reactors via a singular perturbation approach. <i>Mathematics and Computers in Simulation</i> , 1994, 37, 165-172.	2.4	7
170	Design of adaptive linearizing controllers for non-isothermal reactors. <i>International Journal of Control</i> , 1994, 59, 689-710.	1.2	11
171	Evaluation of control strategies for anaerobic digestion processes. <i>International Journal of Adaptive Control and Signal Processing</i> , 1993, 7, 309-321.	2.3	59
172	Modelling of an autonomous power system at variable speed for transient simulation using Lagrange's laws. <i>Canadian Journal of Electrical and Computer Engineering</i> , 1993, 18, 127-131.	1.5	1
173	Adaptive control algorithms for nonminimum phase nonlinear bioreactors. <i>Computers and Chemical Engineering</i> , 1992, 16, 449-462.	2.0	25
174	Local observability and controllability of stirred tank reactors. <i>Journal of Process Control</i> , 1992, 2, 139-144.	1.7	25
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