Jan Van Impe

List of Publications by Year
in descending order

412 papers	9,461 citations	50276 46 h-index	69250 77 g-index
417 all docs	417 docs citations	417 times ranked	8667 citing authors

#	Article	IF	Citations
1	Anaerobic digestion in global bio-energy production: Potential and research challenges. Renewable and Sustainable Energy Reviews, 2011, 15, 4295-4301.	16.4	685
2	Influence of low temperature thermal pre-treatment on sludge solubilisation, heavy metal release and anaerobic digestion. Bioresource Technology, 2010, 101, 5743-5748.	9.6	346
3	Peracetic acid oxidation as an alternative pre-treatment for the anaerobic digestion of waste activated sludge. Bioresource Technology, 2011, 102, 4124-4130.	9.6	160
4	Concentration of carbon dioxide in the water-phase as a parameter to model the effect of a modified atmosphere on microorganisms. International Journal of Food Microbiology, 1998, 43, 105-113.	4.7	157
5	Mathematical modelling of anaerobic digestion of biomass and waste: Power and limitations. Progress in Energy and Combustion Science, 2013, 39, 383-402.	31.2	152
6	Influence of microwave pre-treatment on sludge solubilization and pilot scale semi-continuous anaerobic digestion. Bioresource Technology, 2013, 128, 598-603.	9.6	143
7	Optimal adaptive control of (bio)chemical reactors: past, present and future. Journal of Process Control, 2004, 14, 795-805.	3.3	138
8	Perspectives from CO+RE: How COVID-19 changed our food systems and food security paradigms. Current Research in Food Science, 2020, 3, 166-172.	5.8	134
9	Study of the optimal control problem formulation for modulating air-to-water heat pumps connected to a residential floor heating system. Energy and Buildings, 2012, 45, 43-53.	6.7	122
10	Growth of Listeria monocytogenes in modified atmosphere packed cooked meat products: a predictive model. Food Microbiology, 2001, 18, 53-66.	4.2	118
11	Pulsed white light in combination with UV-C and heat to reduce storage rot of strawberry. Postharvest Biology and Technology, 2003, 28, 455-461.	6.0	113
12	Nonlinear and Adaptive Control in Biotechnology: A Tutorial. European Journal of Control, 1995, 1, 37-53.	2.6	105
13	Improving microbiological safety and quality characteristics of wheat and barley by high voltage atmospheric cold plasma closed processing. Food Research International, 2018, 106, 509-521.	6.2	104
14	Fast Pareto set generation for nonlinear optimal control problems with multiple objectives. Structural and Multidisciplinary Optimization, 2010, 42, 591-603.	3.5	99
15	Effect of dissolved carbon dioxide and temperature on the growth of Lactobacillus sake in modified atmospheres. International Journal of Food Microbiology, 1998, 41, 231-238.	4.7	98
16	Growth and indole-3-acetic acid biosynthesis ofAzospirillum brasilenseSp245 is environmentally controlled. FEMS Microbiology Letters, 2005, 246, 125-132.	1.8	98
17	State of the art of nonthermal and thermal processing for inactivation of micro-organisms. Journal of Applied Microbiology, 2018, 125, 16-35.	3.1	98
18	Monte Carlo analysis as a tool to incorporate variation on experimental data in predictive microbiology. Food Microbiology, 2003, 20, 285-295.	4.2	93

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19	Recombinant protein production and streptomycetes. Journal of Biotechnology, 2012, 158, 159-167.	3.8	93
20	A comprehensive physico-chemical characterization of superhydrophilic loose nanofiltration membranes. Journal of Membrane Science, 2016, 501, 1-14.	8.2	93
21	Isolation and screening of bacterial isolates from wastewater treatment plants to decolorize azo dyes. Journal of Bioscience and Bioengineering, 2018, 125, 448-456.	2.2	93
22	Robust multi-objective optimal control of uncertain (bio)chemical processes. Chemical Engineering Science, 2011, 66, 4670-4682.	3.8	83
23	Analysis of smearing-out in contribution plot based fault isolation for Statistical Process Control. Chemical Engineering Science, 2013, 104, 285-293.	3.8	83
24	Linearization of the activated sludge model ASM1 for fast and reliable predictions. Water Research, 2003, 37, 1831-1851.	11.3	77
25	Efficient deterministic multiple objective optimal control of (bio)chemical processes. Chemical Engineering Science, 2009, 64, 2527-2538.	3.8	73
26	Protein secretion biotechnology in Gram-positive bacteria with special emphasis on Streptomyces lividans. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 1750-1761.	4.1	73
27	Microbial dynamics versus mathematical model dynamics: The case of microbial heat resistance induction. Innovative Food Science and Emerging Technologies, 2006, 7, 80-87.	5.6	70
28	Transcriptional Analysis of the Azospirillum brasilense Indole-3-Pyruvate Decarboxylase Gene and Identification of a cis-Acting Sequence Involved in Auxin Responsive Expression. Molecular Plant-Microbe Interactions, 2005, 18, 311-323.	2.6	67
29	Optimal experiment design for dynamic bioprocesses: A multi-objective approach. Chemical Engineering Science, 2012, 78, 82-97.	3.8	65
30	Robust optimization of nonlinear dynamic systems with application to a jacketed tubular reactor. Journal of Process Control, 2012, 22, 1152-1160.	3.3	63
31	Practical Identification of Unstructured Growth Kinetics by Application of Optimal Experimental Design. Biotechnology Progress, 1997, 13, 524-531.	2.6	62
32	On the design of optimal dynamic experiments for parameter estimation of a Ratkowsky-type growth kinetics at suboptimal temperatures. International Journal of Food Microbiology, 2000, 54, 27-38.	4.7	62
33	Computation of Optimal Identification Experiments for Nonlinear Dynamic Process Models:â€‰a Stochastic Global Optimization Approach. Industrial & Engineering Chemistry Research, 2002, 41, 2425-2430.	3.7	62
34	Optimal temperature input design for estimation of the Square Root model parameters: parameter accuracy and model validity restrictions. International Journal of Food Microbiology, 2002, 73, 145-157.	4.7	62
35	Introducing optimal experimental design in predictive modeling: A motivating example. International Journal of Food Microbiology, 1999, 51, 39-51.	4.7	60
36	Activated sludge characteristics affecting sludge filterability in municipal and industrial MBRs: Unraveling correlations using multi-component regression analysis. Journal of Membrane Science, 2011, 378, 330-338.	8.2	60

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37	Inactivation of naturally occurring microorganisms in liquid whole egg using high pressure carbon dioxide processing as an alternative to heat pasteurization. Journal of Supercritical Fluids, 2009, 51, 74-82.	3.2	58
38	Predictive Modeling of Mixed Microbial Populations in Food Products: Evaluation of Two-species Models. Journal of Theoretical Biology, 2000, 205, 53-72.	1.7	57
39	Determination of the efficacy of ultrasound combined with essential oils on the decontamination of Salmonella inoculated lettuce leaves. LWT - Food Science and Technology, 2016, 73, 80-87.	5.2	57
40	Tuning of NMPC controllers via multi-objective optimisation. Computers and Chemical Engineering, 2014, 61, 38-50.	3.8	55
41	Predictive microbiology in a dynamic environment: a system theory approach. International Journal of Food Microbiology, 1995, 25, 227-249.	4.7	53
42	Optimal temperature control of a steady-state exothermic plug-flow reactor. AICHE Journal, 2002, 48, 279-286.	3.6	53
43	Multi-objective optimal control of chemical processes using ACADO toolkit. Computers and Chemical Engineering, 2012, 37, 191-199.	3.8	50
44	Approximate robust optimization of nonlinear systems under parametric uncertainty and process noise. Journal of Process Control, 2015, 33, 140-154.	3.3	50
45	Kinetic modeling of firmness breakdown in â€˜Braeburnâ€™ apples stored under different controlled atmosphere conditions. Postharvest Biology and Technology, 2012, 67, 68-74.	6.0	48
46	Kinetics for Isobaric-Isothermal Inactivation of Bacillus subtilis Î±-Amylase. Biotechnology Progress, 1997, 13, 532-538.	2.6	47
47	Bioproduction of the Recombinant Sweet Protein Thaumatin: Current State of the Art and Perspectives. Frontiers in Microbiology, 2019, 10, 695.	3.5	47
48	Field performance assessment of onsite individual wastewater treatment systems. Water Science and Technology, 2008, 58, 1-6.	2.5	46
49	Decolorization of reactive azo dyes using a sequential chemical and activated sludge treatment. Journal of Bioscience and Bioengineering, 2017, 124, 668-673.	2.2	46
50	Application of tailor-made membranes in a multi-stage process for the purification of sweeteners from Stevia rebaudiana. Journal of Food Engineering, 2011, 103, 285-293.	5.2	45
51	Towards Online Model Predictive Control on a Programmable Logic Controller: Practical Considerations. Mathematical Problems in Engineering, 2012, 2012, 1-20.	1.1	45
52	Effect of cell immobilization on heat-induced sublethal injury of Escherichia coli, Salmonella Typhimurium and Listeria innocua. Food Microbiology, 2013, 36, 355-364.	4.2	45
53	An interactive decision-support system for multi-objective optimization of nonlinear dynamic processes with uncertainty. Expert Systems With Applications, 2015, 42, 7710-7731.	7.6	45
54	Assessing the composition of microbial communities in textile wastewater treatment plants in comparison with municipal wastewater treatment plants. MicrobiologyOpen, 2017, 6, e00413.	3.0	45

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55	Occurrence, distribution and contamination levels of heat-resistant moulds throughout the processing of pasteurized high-acid fruit products. International Journal of Food Microbiology, 2018, 281, 72-81.	4.7	45
56	Quantitative description of Listeria monocytogenes inactivation kinetics with temperature and water activity as the influencing factors; model prediction and methodological validation on dynamic data. Journal of Food Engineering, 2006, 76, 79-88.	5.2	43
57	Growth/no growth models describing the influence of pH, lactic and acetic acid on lactic acid bacteria developed to determine the stability of acidified sauces. International Journal of Food Microbiology, 2007, 119, 258-269.	4.7	43
58	Modeling Biowaste Biorefineries: A Review. Frontiers in Sustainable Food Systems, 2020, 4, .	3.9	43
59	Dynamic optimization of biological networks under parametric uncertainty. BMC Systems Biology, 2016, 10, 86.	3.0	42
60	Influence of a gel microstructure as modified by gelatin concentration on Listeria innocua growth. Innovative Food Science and Emerging Technologies, 2006, 7, 124-131.	5.6	41
61	Decontamination of alfalfa and mung bean sprouts by ultrasound and aqueous chlorine dioxide. LWT - Food Science and Technology, 2017, 78, 90-96.	5.2	41
62	Inactivation of Single Strains of Listeria monocytogenes and Salmonella Typhimurium Planktonic Cells Biofilms With Plasma Activated Liquids. Frontiers in Microbiology, 2019, 10, 1539.	3.5	41
63	Amino acid uptake profiling of wild type and recombinant Streptomyces lividans TK24 batch fermentations. Journal of Biotechnology, 2011, 152, 132-143.	3.8	40
64	Genome-scale metabolic flux analysis of Streptomyces lividans growing on a complex medium. Journal of Biotechnology, 2012, 161, 1-13.	3.8	40
65	Robust multi-objective dynamic optimization of chemical processes using the Sigma Point method. Chemical Engineering Science, 2016, 140, 201-216.	3.8	40
66	The ntrB and ntrC Genes Are Involved in the Regulation of Poly-3-Hydroxybutyrate Biosynthesis by Ammonia in Azospirillum brasilense Sp7. Applied and Environmental Microbiology, 2000, 66, 113-117.	3.1	38
67	Parameter Identification and Modeling of the Biochemical Methane Potential of Waste Activated Sludge. Environmental Science & Technology, 2011, 45, 4173-4178.	10.0	38
68	Dynamic model-based fault diagnosis for (bio)chemical batch processes. Computers and Chemical Engineering, 2012, 40, 12-21.	3.8	38
69	Online model predictive control of industrial processes using low level control hardware: A pilot-scale distillation column case study. Control Engineering Practice, 2014, 28, 34-48.	5.5	38
70	Influence of plasma characteristics on the efficacy of Cold Atmospheric Plasma (CAP) for inactivation of Listeria monocytogenes and Salmonella Typhimurium biofilms. Innovative Food Science and Emerging Technologies, 2019, 52, 376-386.	5.6	38
71	Antimicrobial efficacy of cold atmospheric plasma for different intrinsic and extrinsic parameters. Plasma Processes and Polymers, 2018, 15, 1700048.	3.0	37
72	Dynamic modeling of filamentous bulking in lab-scale activated sludge processes. Journal of Process Control, 2006, 16, 313-319.	3.3	36

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73	Predictive modelling and validation of Pseudomonas fluorescens growth at superatmospheric oxygen and carbon dioxide concentrations. Food Microbiology, 2005, 22, 149-158.	4.2	35
74	Optimal design of an autothermal membrane reactor coupling the dehydrogenation of ethylbenzene to styrene with the hydrogenation of nitrobenzene to aniline. Chemical Engineering Science, 2010, 65, 3113-3127.	3.8	35
75	Design and Test of a Low-Cost RGB Sensor for Online Measurement of Microalgae Concentration within a Photo-Bioreactor. Sensors, 2015, 15, 4766-4780.	3.8	35
76	Feedback Stabilization of Fed-Batch Bioreactors: Non-Monotonic Growth Kinetics. Biotechnology Progress, 2002, 18, 1116-1125.	2.6	34
77	Towards flexible management of postharvest variation in fruit firmness of three apple cultivars. Postharvest Biology and Technology, 2013, 85, 18-29.	6.0	34
78	Analysis and practical implementation of a model for combined growth and metabolite production of lactic acid bacteria. International Journal of Food Microbiology, 2002, 73, 239-250.	4.7	33
79	Concepts and Tools for Predictive Modeling of Microbial Dynamics. Journal of Food Protection, 2004, 67, 2041-2052.	1.7	33
80	Tuning of Predictive Controllers for Drinking Water Networked Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14507-14512.	0.4	33
81	Efficient multiple objective optimal control of dynamic systems with integer controls. Journal of Process Control, 2010, 20, 810-822.	3.3	32
82	Effect of chyme viscosity and nutrient feedback mechanism on gastric emptying. Chemical Engineering Science, 2017, 171, 318-330.	3.8	32
83	Predictive food microbiology: A probabilistic approach. Mathematics and Computers in Simulation, 1996, 42, 287-292.	4.4	31
84	A model for lactic acid-induced inhibition of Yersinia enterocolitica in mono- and coculture with Lactobacillus sakei. Food Microbiology, 2003, 20, 701-713.	4.2	31
85	Sensitivity analysis of microbial growth parameter distributions with respect to data quality and quantity by using Monte Carlo analysis. Mathematics and Computers in Simulation, 2004, 65, 231-243.	4.4	31
86	Modeling the effect of pH, water activity, and ethanol concentration on biofilm formation of Staphylococcus aureus. Food Microbiology, 2018, 76, 287-295.	4.2	31
87	Optimal experimental design for practical identification of unstructured growth models. Mathematics and Computers in Simulation, 1998, 46, 621-629.	4.4	30
88	Modeling the competition between floc-forming and filamentous bacteria in activated sludge waste water treatment systemsÃ¢Â€Â”II. A prototype mathematical model based on kinetic selection and filamentous backbone theory. Water Research, 2000, 34, 2535-2541.	11.3	30
89	Model based process design of the combined high pressure and mild heat treatment ensuring safety and quality of a carrot simulant system. Journal of Food Engineering, 2007, 78, 1010-1021.	5.2	30
90	Robustifying optimal experiment design for nonlinear, dynamic (bio)chemical systems. Computers and Chemical Engineering, 2014, 71, 415-425.	3.8	30

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91	Influence of incubation conditions on the formation of model biofilms byListeria monocytogenesandSalmonellaTyphimurium on abiotic surfaces. Journal of Applied Microbiology, 2018, 125, 1890-1900.	3.1	30
92	Model-based temperature control in ovens. Journal of Food Engineering, 1999, 39, 47-58.	5.2	29
93	Novel insights for multi-objective optimisation in engineering using Normal Boundary Intersection and (Enhanced) Normalised Normal Constraint. Structural and Multidisciplinary Optimization, 2012, 45, 417-431.	3.5	29
94	An extensive reference dataset for fault detection and identification in batch processes. Chemometrics and Intelligent Laboratory Systems, 2015, 148, 20-31.	3.5	29
95	Influence of food intrinsic complexity on Listeria monocytogenes growth in/on vacuum-packed model systems at suboptimal temperatures. International Journal of Food Microbiology, 2016, 235, 17-27.	4.7	29
96	Optimal control theory: A generic tool for identification and control of (bio-)chemical reactors. Annual Reviews in Control, 2002, 26, 57-73.	7.9	28
97	Effects of ultrasonic pre-treatment on sludge characteristics and anaerobic digestion. Water Science and Technology, 2012, 66, 2284-2290.	2.5	28
98	A Combined Electromagnetic and Heat Transfer Model for Heating of Foods in Microwave Combination Ovens. Journal of Microwave Power and Electromagnetic Energy, 2002, 37, 97-111.	0.8	27
99	Optimization of the temperature sensor position in a hot wire probe set up for estimation of the thermal properties of foods using optimal experimental design. Journal of Food Engineering, 2003, 57, 103-110.	5.2	27
100	Performance of a Growthâ€“No Growth Model for Listeria monocytogenes Developed for Mayonnaise-Based Salads: Influence of Strain Variability, Food Matrix, Inoculation Level, and Presence of Sorbic and Benzoic Acid. Journal of Food Protection, 2007, 70, 2118-2126.	1.7	27
101	Influence of food intrinsic factors on the inactivation efficacy of cold atmospheric plasma: Impact of osmotic stress, suboptimal pH and food structure. Innovative Food Science and Emerging Technologies, 2016, 38, 393-406.	5.6	27
102	Sensitivity function-based model reduction: A bacterial gene expression case study. Biotechnology and Bioengineering, 2002, 80, 195-200.	3.3	26
103	Assessing the optimal experiment setup for first order kinetic studies by Monte Carlo analysis. Food Control, 2005, 16, 873-882.	5.5	26
104	Does a change in reactor loading rate affect activated sludge bioflocculation?. Process Biochemistry, 2012, 47, 2227-2233.	3.7	26
105	Multi-objective optimal control of an air-to-water heat pump for residential heating. Building Simulation, 2012, 5, 281-291.	5.6	26
106	A modified unstructured mathemathical model for the penicillin G fed-batch fermentation. Biotechnology Letters, 1991, 13, 489-494.	2.2	25
107	Derivation of generic optimal reference temperature profiles for steady-state exothermic jacketed tubular reactors. Journal of Process Control, 2008, 18, 92-104.	3.3	25
108	Using a Shear Test-Based Lab Protocol to Map the Sticky Phase of Activated Sludge. Environmental Engineering Science, 2011, 28, 81-85.	1.6	25

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109	Hybrid Derivative Dynamic Time Warping for Online Industrial Batch-End Quality Estimation. Industrial & Engineering Chemistry Research, 2012, 51, 6071-6084.	3.7	25
110	Optimal experiment design under process noise using Riccati differential equations. Journal of Process Control, 2013, 23, 613-629.	3.3	25
111	Dual-Species Model Biofilm Consisting of Listeria monocytogenes and Salmonella Typhimurium: Development and Inactivation With Cold Atmospheric Plasma (CAP). Frontiers in Microbiology, 2019, 10, 2524.	3.5	25
112	Combined Effect of Cold Atmospheric Plasma and Hydrogen Peroxide Treatment on Mature Listeria monocytogenes and Salmonella Typhimurium Biofilms. Frontiers in Microbiology, 2019, 10, 2674.	3.5	25
113	The (potential) impact of seasonality and climate change on the physicochemical and microbial properties of dairy waste and its management. Trends in Food Science and Technology, 2021, 116, 1-10.	15.1	25
114	Effect of Immobilization and Salt Concentration on the Growth Dynamics of Escherichia coli K12 and Salmonella Typhimurium. Journal of Food Science, 2013, 78, M567-74.	3.1	24
115	The effect of colony formation on the heat inactivation dynamics of Escherichia coli K12 and Salmonella typhimurium. Food Research International, 2013, 54, 1746-1752.	6.2	24
116	Resistance of L. monocytogenes and S. Typhimurium towards Cold Atmospheric Plasma as Function of Biofilm Age. Applied Sciences (Switzerland), 2018, 8, 2702.	2.5	24
117	Multi-objective optimal control of dynamic bioprocesses using ACADO Toolkit. Bioprocess and Biosystems Engineering, 2013, 36, 151-164.	3.4	23
118	Effect of cell immobilization on the growth dynamics of Salmonella Typhimurium and Escherichia coli at suboptimal temperatures. International Journal of Food Microbiology, 2015, 208, 75-83.	4.7	23
119	Introducing a novel interaction model structure for the combined effect of temperature and pH on the microbial growth rate. International Journal of Food Microbiology, 2017, 240, 85-96.	4.7	23
120	Modelling the unexpected effect of acetic and lactic acid in combination with pH and aw on the growth/no growth interface of Zygosaccharomyces bailii. International Journal of Food Microbiology, 2008, 124, 79-90.	4.7	22
121	Effect of food microstructure on growth dynamics of Listeria monocytogenes in fish-based model systems. International Journal of Food Microbiology, 2018, 283, 7-13.	4.7	22
122	A tutorial on uncertainty propagation techniques for predictive microbiology models: A critical analysis of state-of-the-art techniques. International Journal of Food Microbiology, 2018, 282, 1-8.	4.7	22
123	Simulation of (bio)chemical processes with distributed parameters using MatlabÂ®. Chemical Engineering Journal, 2009, 155, 603-616.	12.7	21
124	Assessment of activated sludge stability in lab-scale experiments. Journal of Biotechnology, 2009, 141, 147-154.	3.8	21
125	Assessing bacterial recovery and efficacy of cold atmospheric plasma treatments. Food and Bioproducts Processing, 2015, 96, 154-160.	3.6	21
126	A novel algorithm for fast representation of a Pareto front with adaptive resolution: Application to multi-objective optimization of a chemical reactor. Computers and Chemical Engineering, 2017, 106, 544-558.	3.8	21

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127	A Methodology for the Design of RTC Strategies for Combined Sewer Networks. Water (Switzerland), 2018, 10, 1675.	2.7	21
128	Visible Light as an Antimicrobial Strategy for Inactivation of Pseudomonas fluorescens and Staphylococcus epidermidis Biofilms. Antibiotics, 2020, 9, 171.	3.7	21
129	Protective role of indigenous Leuconostoc carnosum against Listeria monocytogenes on vacuum packed Frankfurter sausages at suboptimal temperatures. Food Research International, 2014, 66, 197-206.	6.2	20
130	Heterogeneous modeling of an autothermal membrane reactor coupling dehydrogenation of ethylbenzene to styrene with hydrogenation of nitrobenzene to aniline: Fickian diffusion model. Chemical Engineering and Processing: Process Intensification, 2014, 77, 50-65.	3.6	20
131	Recent trends in non-invasive in situ techniques to monitor bacterial colonies in solid (model) food. Frontiers in Microbiology, 2015, 6, 148.	3.5	20
132	An economic objective for the optimal experiment design of nonlinear dynamic processes. Automatica, 2015, 51, 98-103.	5.0	20
133	Finding the optimal time resolution for batch-end quality prediction: MRQP â€“ A framework for multi-resolution quality prediction. Chemometrics and Intelligent Laboratory Systems, 2018, 172, 150-158.	3.5	20
134	Effect of microstructure and initial cell conditions on thermal inactivation kinetics and sublethal injury of Listeria monocytogenes in fish-based food model systems. Food Microbiology, 2019, 84, 103267.	4.2	20
135	The impact of food model system structure on the inactivation of Listeria innocua by cold atmospheric plasma and nisin combined treatments. International Journal of Food Microbiology, 2021, 337, 108948.	4.7	20
136	The effect of ultrasound treatment in combination with nisin on the inactivation of Listeria innocua and Escherichia coli. Ultrasonics Sonochemistry, 2021, 79, 105776.	8.2	20
137	OPTIMAL CONTROL OF THE PENICILLIN G FED-BATCH FERMENTATION: AN ANALYSIS OF A MODIFIED UNSTRUCTURED MODEL. Chemical Engineering Communications, 1992, 117, 337-353.	2.6	19
138	Power and limitations of model based bioprocess optimization. Mathematics and Computers in Simulation, 1996, 42, 159-169.	4.4	19
139	Optimal design of dispersive tubular reactors at steady-state using optimal control theory. Journal of Process Control, 2009, 19, 1191-1198.	3.3	19
140	Toward a next generation of predictive models: A systems biology primer. Food Control, 2013, 29, 336-342.	5.5	19
141	Dynamic estimation of specific fluxes in metabolic networks using non-linear dynamic optimization. BMC Systems Biology, 2014, 8, 132.	3.0	19
142	Symmetric algorithmic differentiation based exact Hessian SQP method and software for Economic MPC. , 2014, , .		19
143	Optimal experiment design for nonlinear dynamic (bio)chemical systems using sequential semidefinite programming. AIChE Journal, 2014, 60, 1728-1739.	3.6	19
144	Food Microstructure and Fat Content Affect Growth Morphology, Growth Kinetics, and Preferred Phase for Cell Growth of Listeria monocytogenes in Fish-Based Model Systems. Applied and Environmental Microbiology, 2019, 85, .	3.1	19

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145	Crystal Growth Kinetics of an Industrial Active Pharmaceutical Ingredient: Implications of Different Representations of Supersaturation and Simultaneous Growth Mechanisms. Crystal Growth and Design, 2021, 21, 5403-5420.	3.0	19
146	Predictive modelling of surface growth of lactic acid bacteria in vacuum-packed meat. Food Microbiology, 1993, 10, 229-238.	4.2	18
147	Optimal control of the penicillin G fedâ€batch fermentation: An analysis of the model of heijnen et al.. Optimal Control Applications and Methods, 1994, 15, 13-34.	2.1	18
148	Optimal heating strategies for a convection oven. Journal of Food Engineering, 2001, 48, 335-344.	5.2	18
149	Involvement of glnB, glnZ , and glnD Genes in the Regulation of Poly-3-Hydroxybutyrate Biosynthesis by Ammonia in Azospirillum brasilense Sp7. Applied and Environmental Microbiology, 2002, 68, 985-988.	3.1	18
150	The optimal MBR configuration: Hybrid versus stand-alone â€" Comparison between three full-scale MBRs treating municipal wastewater. Desalination, 2012, 284, 341-348.	8.2	18
151	Influence of composition and processing of Frankfurter sausages on the growth dynamics of Listeria monocytogenes under vacuum. Food Research International, 2015, 70, 94-100.	6.2	18
152	Influence of the growth morphology on the behavior of Salmonella Typhimurium and Listeria monocytogenes under osmotic stress. Food Research International, 2015, 77, 515-526.	6.2	18
153	A study of integrated experiment design for NMPC applied to the Droop model. Chemical Engineering Science, 2017, 160, 370-383.	3.8	18
154	Salmonella Typhimurium and Staphylococcus aureus dynamics in/on variable (micro)structures of fish-based model systems at suboptimal temperatures. International Journal of Food Microbiology, 2017, 240, 32-39.	4.7	18
155	Mechanistic modelling of the inhibitory effect of pH on microbial growth. Food Microbiology, 2018, 72, 214-219.	4.2	18
156	Modelling the microbial dynamics and antimicrobial resistance development of Listeria in viscoelastic food model systems of various structural complexities. International Journal of Food Microbiology, 2018, 286, 15-30.	4.7	18
157	Identification of novel genes involved in high hydrostatic pressure resistance of Escherichia coli. Food Microbiology, 2019, 78, 171-178.	4.2	18
158	Optimal adaptive control of a bioprocess with yieldâ€"productivity conflict. Journal of Biotechnology, 1998, 65, 61-68.	3.8	17
159	A variance propagation algorithm for stochastic heat and mass transfer problems in food processes. International Journal for Numerical Methods in Engineering, 2001, 51, 961-983.	2.8	17
160	The tuning of a model-based estimator for the specific growth rate of Candida utilis. Bioprocess and Biosystems Engineering, 2002, 25, 1-12.	3.4	17
161	Sensitivity Analysis of a Twoâ€Dimensional Quantitative Microbiological Risk Assessment: Keeping Variability and Uncertainty Separated. Risk Analysis, 2011, 31, 1295-1307.	2.7	17
162	Contribution plots for Statistical Process Control: Analysis of the smearing-out effect. , 2013, , .		17

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163	Multi-objective experimental design for 13 C-based metabolic flux analysis. Mathematical Biosciences, 2015, 268, 22-30.	1.9	17
164	A rapid HPLC method for the determination of lactoferrin in milk of various species. Journal of Dairy Research, 2019, 86, 238-241.	1.4	17
165	The Complex Effect of Food Matrix Fat Content on Thermal Inactivation of Listeria monocytogenes: Case Study in Emulsion and Gelled Emulsion Model Systems. Frontiers in Microbiology, 2019, 10, 3149.	3.5	17
166	FEED RATE OPTIMIZATION FOR FED-BATCH BIOREACTORS: FROM OPTIMAL PROCESS PERFORMANCE TO OPTIMAL PARAMETER ESTIMATION. Chemical Engineering Communications, 1999, 172, 107-124.	2.6	16
167	Modeling the competition between floc-forming and filamentous bacteria in activated sludge waste water treatment systemsâ€"I. Evaluation of mathematical models based on kinetic selection theory. Water Research, 2000, 34, 2525-2534.	11.3	16
168	A novel method for high-throughput data collection in predictive microbiology: Optical density monitoring of colony growth as a function of time. Food Microbiology, 2012, 32, 196-201.	4.2	16
169	A process simulator interface for multiobjective optimization of chemical processes. Computers and Chemical Engineering, 2018, 109, 119-137.	3.8	16
170	Combined effect of cold atmospheric plasma, intrinsic and extrinsic factors on the microbial behavior in/on (food) model systems during storage. Innovative Food Science and Emerging Technologies, 2019, 53, 3-17.	5.6	16
171	Modeling the kinetics of isobaric-isothermal inactivation of Bacillus subtilis Î±-amylase with artificial neural networks. Journal of Food Engineering, 1998, 36, 263-279.	5.2	15
172	Data-driven approaches to the modelling of bioprocesses. Transactions of the Institute of Measurement and Control, 2004, 26, 349-372.	1.7	15
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