

# Efstratios N Pistikopoulos

## List of Publications by Citations

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508  
papers

10,732  
citations

54  
h-index

92  
g-index

548  
ext. papers

12,285  
ext. citations

3.3  
avg, IF

6.85  
L-index

#	Paper	IF	Citations
508	The explicit linear quadratic regulator for constrained systems. <i>Automatica</i> , <b>2002</b> , 38, 3-20	5.7	1994
507	Optimal design of dynamic systems under uncertainty. <i>AIChE Journal</i> , <b>1996</b> , 42, 2251-2272	3.6	216
506	A two-stage stochastic programming model for the optimal design of distributed energy systems. <i>Applied Energy</i> , <b>2013</b> , 103, 135-144	10.7	183
505	Recent advances in optimization-based simultaneous process and control design. <i>Computers and Chemical Engineering</i> , <b>2004</b> , 28, 2069-2086	4	176
504	A multiparametric programming approach for mixed-integer quadratic engineering problems. <i>Computers and Chemical Engineering</i> , <b>2002</b> , 26, 715-733	4	165
503	A rolling horizon optimization framework for the simultaneous energy supply and demand planning in microgrids. <i>Applied Energy</i> , <b>2015</b> , 155, 485-501	10.7	163
502	An Algorithm for the Solution of Multiparametric Mixed Integer Linear Programming Problems. <i>Annals of Operations Research</i> , <b>2000</b> , 99, 123-139	3.2	163
501	An overview of process systems engineering approaches for process intensification: State of the art. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2018</b> , 133, 160-210	3.7	158
500	Generalized modular representation framework for process synthesis. <i>AIChE Journal</i> , <b>1996</b> , 42, 1010-1032	3.6	149
499	Model-based blood glucose control for Type 1 diabetes via parametric programming. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2006</b> , 53, 1478-91	5	140
498	A Multiparametric Programming Approach for Linear Process Engineering Problems under Uncertainty. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1997</b> , 36, 717-728	3.9	134
497	On-line optimization via off-line parametric optimization tools. <i>Computers and Chemical Engineering</i> , <b>2002</b> , 26, 175-185	4	134
496	Flexibility Analysis of Dynamic Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1995</b> , 34, 4451-4462	3.9	126
495	Stochastic optimization based algorithms for process synthesis under uncertainty. <i>Computers and Chemical Engineering</i> , <b>1998</b> , 22, 647-671	4	124
494	Energy production planning of a network of micro combined heat and power generators. <i>Applied Energy</i> , <b>2013</b> , 102, 1522-1534	10.7	122
493	A bilevel programming framework for enterprise-wide process networks under uncertainty. <i>Computers and Chemical Engineering</i> , <b>2004</b> , 28, 1121-1129	4	110
492	A spatial multi-period long-term energy planning model: A case study of the Greek power system. <i>Applied Energy</i> , <b>2014</b> , 115, 456-482	10.7	107

491	Modeling and optimization of polygeneration energy systems. <i>Catalysis Today</i> , <b>2007</b> , 127, 347-359	5.3	105
490	A Case Study in Simultaneous Design and Control Using Rigorous, Mixed-Integer Dynamic Optimization Models. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 760-778	3.9	104
489	PAROC: An integrated framework and software platform for the optimisation and advanced model-based control of process systems. <i>Chemical Engineering Science</i> , <b>2015</b> , 136, 115-138	4.4	100
488	Parametric global optimisation for bilevel programming. <i>Journal of Global Optimization</i> , <b>2007</b> , 38, 609-623	5	96
487	New algorithms for mixed-integer dynamic optimization. <i>Computers and Chemical Engineering</i> , <b>2003</b> , 27, 647-668	4	96
486	Algorithms for the Solution of Multiparametric Mixed-Integer Nonlinear Optimization Problems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 3976-3987	3.9	92
485	Design of robust model-based controllers via parametric programming. <i>Automatica</i> , <b>2004</b> , 40, 189-201	5.7	90
484	Batch Plant Design and Operations under Uncertainty. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1996</b> , 35, 772-787	3.9	86
483	Optimal design of solvent blends for environmental impact minimization. <i>AIChE Journal</i> , <b>1999</b> , 45, 817-848	4.8	83
482	Reactive Scheduling by a Multiparametric Programming Rolling Horizon Framework: A Case of a Network of Combined Heat and Power Units. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 4366-4386	3.9	82
481	A mixed integer optimization formulation for the well scheduling problem on petroleum fields. <i>Computers and Chemical Engineering</i> , <b>2005</b> , 29, 1523-1541	4	78
480	A Parametric MINLP Algorithm for Process Synthesis Problems under Uncertainty. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1996</b> , 35, 147-158	3.9	77
479	A Food-Energy-Water Nexus approach for land use optimization. <i>Science of the Total Environment</i> , <b>2019</b> , 659, 7-19	10.2	77
478	Advances in Energy Systems Engineering. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 4915-4926	5.4	75
477	A multi-objective optimization approach to polygeneration energy systems design. <i>AIChE Journal</i> , <b>2010</b> , 56, 1218-1234	3.6	75
476	The interactions of design control and operability in reactive distillation systems. <i>Computers and Chemical Engineering</i> , <b>2002</b> , 26, 735-746	4	75
475	Hydrogen infrastructure design and optimization: A case study of China. <i>International Journal of Hydrogen Energy</i> , <b>2008</b> , 33, 5275-5286	6.7	71
474	POP [Parametric Optimization Toolbox]. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 8979-8991	3.9	68

473	Synthesis and Retrofit Design of Operable Heat Exchanger Networks. 1. Flexibility and Structural Controllability Aspects. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1994</b> , 33, 1718-1737	3.9	68
472	Towards the integration of process design, control and scheduling: Are we getting closer?. <i>Computers and Chemical Engineering</i> , <b>2016</b> , 91, 85-92	4	66
471	An energy systems engineering approach to the optimal design of energy systems in commercial buildings. <i>Energy Policy</i> , <b>2010</b> , 38, 4224-4231	7.2	66
470	Optimal delivery of chemotherapeutic agents in cancer. <i>Computers and Chemical Engineering</i> , <b>2008</b> , 32, 99-107	4	66
469	Integration and Computational Issues in Stochastic Design and Planning Optimization Problems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 3056-3068	3.9	66
468	Closing the loop in biological systems modeling [From the in silico to the in vitro. <i>Automatica</i> , <b>2011</b> , 47, 1147-1155	5.7	65
467	Parametric Controllers in Simultaneous Process and Control Design Optimization. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 4545-4563	3.9	65
466	Process design and control optimization: A simultaneous approach by multi-parametric programming. <i>AIChE Journal</i> , <b>2017</b> , 63, 4827-4846	3.6	63
465	Optimal solvent design for batch separation based on economic performance. <i>AIChE Journal</i> , <b>2003</b> , 49, 3095-3109	3.6	63
464	Modular synthesis framework for combined separation/reaction systems. <i>AIChE Journal</i> , <b>2001</b> , 47, 629-648	3.4	62
463	Advanced model-based control studies for the induction and maintenance of intravenous anaesthesia. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2015</b> , 62, 832-41	5	61
462	Application of global sensitivity analysis to determine goals for design of experiments: an example study on antibody-producing cell cultures. <i>Biotechnology Progress</i> , <b>2005</b> , 21, 1128-35	2.8	61
461	Design of solvents for optimal reaction rate constants. <i>AIChE Journal</i> , <b>2007</b> , 53, 1240-1256	3.6	60
460	Optimization and Control of Pressure Swing Adsorption Processes Under Uncertainty. <i>AIChE Journal</i> , <b>2013</b> , 59, 120-131	3.6	59
459	Flexibility analysis and design of linear systems by parametric programming. <i>AIChE Journal</i> , <b>2000</b> , 46, 335-354	3.6	58
458	Circular Economy - A challenge and an opportunity for Process Systems Engineering. <i>Computers and Chemical Engineering</i> , <b>2020</b> , 133, 106629	4	58
457	On-line optimization via off-line parametric optimization tools. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 183-188	4	56
456	An energy systems engineering approach for the design and operation of microgrids in residential applications. <i>Chemical Engineering Research and Design</i> , <b>2013</b> , 91, 2054-2069	5.5	54

455	Sustainable ammonia production through process synthesis and global optimization. <i>AIChE Journal</i> , <b>2019</b> , 65, e16498	3.6	54
454	Big Data Approach to Batch Process Monitoring: Simultaneous Fault Detection and Diagnosis Using Nonlinear Support Vector Machine-based Feature Selection. <i>Computers and Chemical Engineering</i> , <b>2018</b> , 115, 46-63	4	53
453	Decomposition Based Stochastic Programming Approach for Polygeneration Energy Systems Design under Uncertainty. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 3295-3305	3.9	53
452	Optimization of Well Oil Rate Allocations in Petroleum Fields. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 3513-3527	3.9	52
451	Optimal Design of Energy Systems Using Constrained Grey-Box Multi-Objective Optimization. <i>Computers and Chemical Engineering</i> , <b>2018</b> , 116, 488-502	4	50
450	Explicit hybrid model-predictive control: The exact solution. <i>Automatica</i> , <b>2015</b> , 58, 152-159	5.7	49
449	Systematic development of predictive mathematical models for animal cell cultures. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 1192-1198	4	49
448	A multi-parametric programming approach for multilevel hierarchical and decentralised optimisation problems. <i>Computational Management Science</i> , <b>2009</b> , 6, 377-397	1	48
447	An algorithm for multiparametric mixed-integer linear programming problems. <i>Operations Research Letters</i> , <b>1999</b> , 24, 139-148	1	48
446	On multi-parametric programming and its applications in process systems engineering. <i>Chemical Engineering Research and Design</i> , <b>2016</b> , 116, 61-82	5.5	47
445	Flexibility analysis and design using a parametric programming framework. <i>AIChE Journal</i> , <b>2002</b> , 48, 2851-2868	3.47	47
444	Advanced control strategies for the multicolumn countercurrent solvent gradient purification process. <i>AIChE Journal</i> , <b>2016</b> , 62, 2341-2357	3.6	44
443	Computer-Aided Solvent Design for Reactions: Maximizing Product Formation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 5190-5202	3.9	43
442	Explicit model predictive control: A connected-graph approach. <i>Automatica</i> , <b>2017</b> , 76, 103-112	5.7	42
441	Dynamic modeling and explicit/multi-parametric MPC control of pressure swing adsorption systems. <i>Journal of Process Control</i> , <b>2011</b> , 21, 151-163	3.9	41
440	Interactions of Maintenance and Production Planning for Multipurpose Process Plants A System Effectiveness Approach. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2001</b> , 40, 3195-3207	3.9	41
439	A Reduced Space Branch and Bound Algorithm for Global optimization. <i>Journal of Global Optimization</i> , <b>1997</b> , 11, 287-311	1.5	40
438	Bioprocess systems engineering: transferring traditional process engineering principles to industrial biotechnology. <i>Computational and Structural Biotechnology Journal</i> , <b>2012</b> , 3, e201210022	6.8	39

437	Proactive Scheduling under Uncertainty: A Parametric Optimization Approach. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 8044-8049	3.9	39
436	A global optimization algorithm for generalized semi-infinite, continuous minimax with coupled constraints and bi-level problems. <i>Journal of Global Optimization</i> , <b>2009</b> , 44, 235-250	1.5	37
435	Smart manufacturing and energy systems. <i>Computers and Chemical Engineering</i> , <b>2018</b> , 114, 130-144	4	37
434	Integrated process design, scheduling, and control using multiparametric programming. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 125, 164-184	4	36
433	Model predictive control of anesthesia under uncertainty. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 71, 699-707	4	36
432	The regulatory logic of m-xylene biodegradation by <i>Pseudomonas putida</i> mt-2 exposed by dynamic modelling of the principal node Ps/Pr of the TOL plasmid. <i>Environmental Microbiology</i> , <b>2010</b> , 12, 1705-18 <sup>5.2</sup>		36
431	Recent advances in multiparametric nonlinear programming. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 707-716	4	36
430	A Nonlinear Support Vector Machine-Based Feature Selection Approach for Fault Detection and Diagnosis: Application to the Tennessee Eastman Process. <i>AIChE Journal</i> , <b>2019</b> , 65, 992-1005	3.6	36
429	Scenario-based strategic supply chain design and analysis for the forest biorefinery using an operational supply chain model. <i>International Journal of Production Economics</i> , <b>2013</b> , 144, 618-634	9.3	35
428	Multiparametric programming based algorithms for pure integer and mixed-integer bilevel programming problems. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 2097-2106	4	33
427	Environmental impact minimization through material substitution: a multi-objective optimization approach. <i>Green Chemistry</i> , <b>2004</b> , 6, 407	10	33
426	Optimization of a network of compressors in parallel: Operational and maintenance planning □The air separation plant case. <i>Applied Energy</i> , <b>2015</b> , 146, 453-470	10.7	32
425	Combined model approximation techniques and multiparametric programming for explicit nonlinear model predictive control. <i>Computers and Chemical Engineering</i> , <b>2012</b> , 42, 277-287	4	32
424	From multi-parametric programming theory to MPC-on-a-chip multi-scale systems applications. <i>Computers and Chemical Engineering</i> , <b>2012</b> , 47, 57-66	4	32
423	Development of a dynamic model of monoclonal antibody production and glycosylation for product quality monitoring. <i>Computers and Chemical Engineering</i> , <b>2007</b> , 31, 392-400	4	31
422	Multi-objective blood glucose control for type 1 diabetes. <i>Medical and Biological Engineering and Computing</i> , <b>2009</b> , 47, 343-52	3.1	30
421	A Hybrid Parametric/Stochastic Programming Approach for Mixed-Integer Linear Problems under Uncertainty. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1997</b> , 36, 2262-2270	3.9	30
420	A novel approach to scheduling of zero-wait batch processes under processing time variations. <i>Computers and Chemical Engineering</i> , <b>2007</b> , 31, 101-106	4	29

4 <sup>19</sup>	A Systematic Framework for the synthesis of operable process intensification systems [Reactive separation systems]. <i>Computers and Chemical Engineering</i> , <b>2020</b> , 134, 106675	4	29
4 <sup>18</sup>	A branch and bound method for the solution of multiparametric mixed integer linear programming problems. <i>Journal of Global Optimization</i> , <b>2014</b> , 59, 527-543	1.5	28
4 <sup>17</sup>	Modular representation synthesis framework for homogeneous azeotropic separation. <i>AIChE Journal</i> , <b>1999</b> , 45, 1701-1720	3.6	28
4 <sup>16</sup>	Synthesis of Operable Process Intensification Systems [Steady-State Design with Safety and Operability Considerations]. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 6049-6068	3.9	28
4 <sup>15</sup>	An Integrated Framework for Robust and Flexible Process Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 133-143	3.9	27
4 <sup>14</sup>	Simultaneous Process Scheduling and Control: A Multiparametric Programming-Based Approach. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 3963-3976	3.9	26
4 <sup>13</sup>	A Hybrid Parametric/Stochastic Programming Approach for Mixed-Integer Nonlinear Problems under Uncertainty. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 67-77	3.9	26
4 <sup>12</sup>	A hierarchical clustering decomposition algorithm for optimizing renewable power systems with storage. <i>Applied Energy</i> , <b>2020</b> , 270, 115190	10.7	25
4 <sup>11</sup>	Decentralized Multiparametric Model Predictive Control for Domestic Combined Heat and Power Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 3313-3326	3.9	25
4 <sup>10</sup>	Towards the Grand Unification of Process Design, Scheduling, and Control [Utopia or Reality?]. <i>Processes</i> , <b>2019</b> , 7, 461	2.9	25
4 <sup>09</sup>	A multi-parametric programming approach for constrained dynamic programming problems. <i>Optimization Letters</i> , <b>2008</b> , 2, 267-280	1.1	25
4 <sup>08</sup>	A multi-objective optimization for the design and operation of a hydrogen network for transportation fuel. <i>Chemical Engineering Research and Design</i> , <b>2018</b> , 131, 279-292	5.5	24
4 <sup>07</sup>	Modeling and analysis of individualized pharmacokinetics and pharmacodynamics for volatile anesthesia. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2014</b> , 61, 25-34	5	24
4 <sup>06</sup>	A Two-Stage Method for the Approximate Solution of General Multiparametric Mixed-Integer Linear Programming Problems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 8095-8107	3.9	24
4 <sup>05</sup>	A mixed-integer programming approach to strategic planning of chemical centres: A case study in the UK. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 1359-1373	4	24
4 <sup>04</sup>	A dynamic programming based approach for explicit model predictive control of hybrid systems. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 72, 126-144	4	23
4 <sup>03</sup>	Design of optimal patient-specific chemotherapy protocols for the treatment of acute myeloid leukemia (AML). <i>Computers and Chemical Engineering</i> , <b>2013</b> , 57, 187-195	4	23
4 <sup>02</sup>	Improving embryonic stem cell expansion through the combination of perfusion and Bioprocess model design. <i>PLoS ONE</i> , <b>2013</b> , 8, e81728	3.7	23

401	On the global solution of multi-parametric mixed integer linear programming problems. <i>Journal of Global Optimization</i> , <b>2013</b> , 57, 51-73	1.5	22
400	Linking genes to microbial growth kinetics: an integrated biochemical systems engineering approach. <i>Metabolic Engineering</i> , <b>2011</b> , 13, 401-13	9.7	22
399	An improved decomposition algorithm for optimization under uncertainty. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 23, 1589-1604	4	22
398	Robustness criteria in process design optimization under uncertainty. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, S459-S462	4	22
397	In Silico Closed-Loop Control Validation Studies for Optimal Insulin Delivery in Type 1 Diabetes. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2015</b> , 62, 2369-78	5	21
396	Modelling the Delta1/Notch1 pathway: in search of the mediator(s) of neural stem cell differentiation. <i>PLoS ONE</i> , <b>2011</b> , 6, e14668	3.7	21
395	A Hierarchical Optimization Approach to Optimal Production Scheduling in an Industrial Continuous Olefin Polymerization Reactor. <i>Macromolecular Reaction Engineering</i> , <b>2009</b> , 3, 36-46	1.5	21
394	Multiperiod Planning of Enterprise-wide Supply Chains Using an Operation Policy. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 8058-8065	3.9	21
393	Robust model-based tracking control using parametric programming. <i>Computers and Chemical Engineering</i> , <b>2004</b> , 28, 195-207	4	21
392	Modelling and control of drug delivery systems. <i>Computers and Chemical Engineering</i> , <b>2005</b> , 29, 2290-2296	4	21
391	Explicit hybrid model predictive control strategies for intravenous anaesthesia. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 106, 814-825	4	20
390	Modeling and solution for steelmaking scheduling with batching decisions and energy constraints. <i>Computers and Chemical Engineering</i> , <b>2018</b> , 116, 368-384	4	20
389	A multi-scale energy systems engineering approach to residential combined heat and power systems. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 102, 128-138	4	20
388	Theoretical and algorithmic advances in multi-parametric programming and control. <i>Computational Management Science</i> , <b>2012</b> , 9, 183-203	1	20
387	A Multi-Parametric optimization approach for bilevel mixed-integer linear and quadratic programming problems. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 125, 98-113	4	19
386	Multi-objective optimization with convex quadratic cost functions: A multi-parametric programming approach. <i>Computers and Chemical Engineering</i> , <b>2016</b> , 85, 36-39	4	19
385	Recent Advances in Explicit Multiparametric Nonlinear Model Predictive Control. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 609-619	3.9	19
384	Generalized modular framework for the synthesis of heat integrated distillation column sequences. <i>Chemical Engineering Science</i> , <b>2005</b> , 60, 4678-4701	4.4	19



383	Synthesis of operable process intensification systems: advances and challenges. <i>Current Opinion in Chemical Engineering</i> , <b>2019</b> , 25, 101-107	5.4	19
382	Towards unravelling the kinetics of an acute myeloid leukaemia model system under oxidative and starvation stress: a comparison between two- and three-dimensional cultures. <i>Bioprocess and Biosystems Engineering</i> , <b>2015</b> , 38, 1589-600	3.7	18
381	A systematic framework for the design, simulation and optimization of personalized healthcare: Making and healing blood. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 81, 80-93	4	18
380	A Multiscale Energy Systems Engineering Approach for Renewable Power Generation and Storage Optimization. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 7706-7721	3.9	18
379	A quadratic approximation-based algorithm for the solution of multiparametric mixed-integer nonlinear programming problems. <i>AIChE Journal</i> , <b>2013</b> , 59, 483-495	3.6	18
378	Moving horizon estimation: Error dynamics and bounding error sets for robust control. <i>Automatica</i> , <b>2013</b> , 49, 943-948	5.7	18
377	Global superstructure optimisation of red blood cell production in a parallelised hollow fibre bioreactor. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 71, 532-553	4	18
376	Process resilience analysis based data-driven maintenance optimization: Application to cooling tower operations. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 121, 27-45	4	18
375	Design optimization of an internal combustion engine powered CHP system for residential scale application. <i>Computational Management Science</i> , <b>2014</b> , 11, 237-266	1	17
374	Linearly Constrained Global Optimization and Stochastic Differential Equations. <i>Journal of Global Optimization</i> , <b>2006</b> , 36, 191-217	1.5	17
373	Intelligent, model-based control towards the intensification of downstream processes. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 105, 173-184	4	16
372	Modeling, estimation and control of the anaesthesia process. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 107, 318-332	4	16
371	Assisting continuous biomanufacturing through advanced control in downstream purification. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 125, 232-248	4	16
370	Design of multi-parametric NCO tracking controllers for linear dynamic systems. <i>Computers and Chemical Engineering</i> , <b>2016</b> , 92, 64-77	4	16
369	Model Use in WEF Nexus Analysis: a Review of Issues. <i>Current Sustainable/Renewable Energy Reports</i> , <b>2017</b> , 4, 144-152	2.8	16
368	Approximate solution of mp-MILP problems using piecewise affine relaxation of bilinear terms. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 61, 136-155	4	16
367	Empowering the Performance of Advanced NMPC by Multiparametric Programming: An Application to a PEM Fuel Cell System. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2013</b> , 52, 4863-4873	3.9	16
366	On the global and efficient solution of stochastic batch plant design problems. <i>Computers and Chemical Engineering</i> , <b>1997</b> , 21, 1411-1431	4	16

365	An optimization framework for the design of reverse osmosis desalination plants under food-energy-water nexus considerations. <i>Desalination</i> , <b>2021</b> , 503, 114937	10.3	16
364	A hierarchical Food-Energy-Water Nexus (FEW-N) decision-making approach for Land Use Optimization. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 44, 1885-1890	0.6	16
363	Advanced model-based control strategies for the intensification of upstream and downstream processing in mAb production. <i>Biotechnology Progress</i> , <b>2017</b> , 33, 966-988	2.8	15
362	Proactive scheduling of batch processes by a combined robust optimization and multiparametric programming approach. <i>AIChE Journal</i> , <b>2013</b> , 59, 4184-4211	3.6	15
361	Hybrid generalized modular/collocation framework for distillation column synthesis. <i>AIChE Journal</i> , <b>2006</b> , 52, 1038-1056	3.6	15
360	An MINLP retrofit approach for improving the flexibility of heat exchanger networks. <i>Annals of Operations Research</i> , <b>1993</b> , 42, 119-168	3.2	15
359	Energy Portfolio Assessment Tool (EPAT): Sustainable energy planning using the WEF nexus approach - Texas case. <i>Science of the Total Environment</i> , <b>2019</b> , 648, 1649-1664	10.2	15
358	A systems engineering framework for the optimization of food supply chains under circular economy considerations. <i>Science of the Total Environment</i> , <b>2021</b> , 794, 148726	10.2	15
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