

Christodoulos A Floudas

List of Publications by Year in descending order

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163
papers

10,677
citations

23500

58
h-index

33814

99
g-index

168
all docs

168
docs citations

168
times ranked

5889
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuous-time versus discrete-time approaches for scheduling of chemical processes: a review. Computers and Chemical Engineering, 2004, 28, 2109-2129.	2.0	555
2	ANTIGONE: Algorithms for coNTInuous / Integer Global Optimization of Nonlinear Equations. Journal of Global Optimization, 2014, 59, 503-526.	1.1	390
3	Handbook of Test Problems in Local and Global Optimization. Nonconvex Optimization and Its Applications, 1999, , .	0.1	379
4	Deterministic Global Optimization. Nonconvex Optimization and Its Applications, 2000, , .	0.1	363
5	A new robust optimization approach for scheduling under uncertainty:. Computers and Chemical Engineering, 2004, 28, 1069-1085.	2.0	317
6	Mixed Integer Linear Programming in Process Scheduling: Modeling, Algorithms, and Applications. Annals of Operations Research, 2005, 139, 131-162.	2.6	276
7	A multi-scale framework for CO ₂ capture, utilization, and sequestration: CCUS and CCU. Computers and Chemical Engineering, 2015, 81, 2-21.	2.0	226
8	A Comparative Theoretical and Computational Study on Robust Counterpart Optimization: I. Robust Linear Optimization and Robust Mixed Integer Linear Optimization. Industrial & Engineering Chemistry Research, 2011, 50, 10567-10603.	1.8	205
9	A new robust optimization approach for scheduling under uncertainty. Computers and Chemical Engineering, 2007, 31, 171-195.	2.0	197
10	Finding all solutions of nonlinearly constrained systems of equations. Journal of Global Optimization, 1995, 7, 143-182.	1.1	190
11	Global optimization in generalized geometric programming. Computers and Chemical Engineering, 1997, 21, 351-369.	2.0	185
12	Planning and Scheduling under Uncertainty: A Review Across Multiple Sectors. Industrial & Engineering Chemistry Research, 2010, 49, 3993-4017.	1.8	175
13	Global Optimization for the Parameter Estimation of Differential-Algebraic Systems. Industrial & Engineering Chemistry Research, 2000, 39, 1291-1310.	1.8	169
14	GloMIQO: Global mixed-integer quadratic optimizer. Journal of Global Optimization, 2013, 57, 3-50.	1.1	162
15	Modeling, Simulation, and Optimization of Postcombustion CO ₂ Capture for Variable Feed Concentration and Flow Rate. 2. Pressure Swing Adsorption and Vacuum Swing Adsorption Processes. Industrial & Engineering Chemistry Research, 2012, 51, 15665-15682.	1.8	161
16	Global optimization advances in Mixed-Integer Nonlinear Programming, MINLP, and Constrained Derivative-Free Optimization, CDFO. European Journal of Operational Research, 2016, 252, 701-727.	3.5	161
17	Analysis and design of metabolic reaction networks via mixed-integer linear optimization. AIChE Journal, 1996, 42, 1277-1292.	1.8	160
18	Global optimization for the phase stability problem. AIChE Journal, 1995, 41, 1798-1814.	1.8	154

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19	GLOPEQ: A new computational tool for the phase and chemical equilibrium problem. Computers and Chemical Engineering, 1997, 21, 1-23.	2.0	154
20	Rigorous convex underestimators for general twice-differentiable problems. Journal of Global Optimization, 1996, 9, 23-40.	1.1	143
21	Enhanced Continuous-Time Unit-Specific Event-Based Formulation for Short-Term Scheduling of Multipurpose Batch Processes: A Resource Constraints and Mixed Storage Policies. Industrial & Engineering Chemistry Research, 2004, 43, 2516-2533.	1.8	143
22	The Robust Capacitated Vehicle Routing Problem Under Demand Uncertainty. Operations Research, 2013, 61, 677-693.	1.2	142
23	Global Optimization in Design under Uncertainty: A Feasibility Test and Flexibility Index Problems. Industrial & Engineering Chemistry Research, 2001, 40, 4267-4282.	1.8	136
24	Production of benzene, toluene, and xylenes from natural gas via methanol: Process synthesis and global optimization. AIChE Journal, 2016, 62, 1531-1556.	1.8	136
25	Deterministic Global Optimization in Nonlinear Optimal Control Problems. Journal of Global Optimization, 2000, 17, 97-126.	1.1	133
26	Toward Novel Hybrid Biomass, Coal, and Natural Gas Processes for Satisfying Current Transportation Fuel Demands, 1: Process Alternatives, Gasification Modeling, Process Simulation, and Economic Analysis. Industrial & Engineering Chemistry Research, 2010, 49, 7343-7370.	1.8	129
27	A global optimization approach for Lennard-Jones microclusters. Journal of Chemical Physics, 1992, 97, 7667-7678.	1.2	128
28	Protein folding and de novo protein design for biotechnological applications. Trends in Biotechnology, 2014, 32, 99-109.	4.9	127
29	Global Optimization of Nonlinear Bilevel Programming Problems. Journal of Global Optimization, 2001, 20, 1-31.	1.1	125
30	Global Optimization of Large-Scale Generalized Pooling Problems: Quadratically Constrained MINLP Models. Industrial & Engineering Chemistry Research, 2010, 49, 5424-5438.	1.8	122
31	Global optimization of a combinatorially complex generalized pooling problem. AIChE Journal, 2006, 52, 1027-1037.	1.8	121
32	Production Scheduling of a Large-Scale Industrial Batch Plant. II. Reactive Scheduling. Industrial & Engineering Chemistry Research, 2006, 45, 8253-8269.	1.8	118
33	Continuous-Time Models for Short-Term Scheduling of Multipurpose Batch Plants: A Comparative Study. Industrial & Engineering Chemistry Research, 2006, 45, 6190-6209.	1.8	102
34	APOGEE: Global optimization of standard, generalized, and extended pooling problems via linear and logarithmic partitioning schemes. Computers and Chemical Engineering, 2011, 35, 876-892.	2.0	101
35	ARGONAUT: Algorithms for Global Optimization of constrained grey-box computational problems. Optimization Letters, 2017, 11, 895-913.	0.9	97
36	A deterministic global optimization approach for molecular structure determination. Journal of Chemical Physics, 1994, 100, 1247-1261.	1.2	95

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37	Continuous-Time Optimization Approach for Medium-Range Production Scheduling of a Multiproduct Batch Plant. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 3884-3906.	1.8	92
38	Toward Novel Hybrid Biomass, Coal, and Natural Gas Processes for Satisfying Current Transportation Fuel Demands, 2: Simultaneous Heat and Power Integration. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 7371-7388.	1.8	91
39	Biomass-Based Production of Benzene, Toluene, and Xylenes via Methanol: Process Synthesis and Deterministic Global Optimization. <i>Energy & Fuels</i> , 2016, 30, 4970-4998.	2.5	91
40	Global Optimization in Parameter Estimation of Nonlinear Algebraic Models via the Error-in-Variables Approach. <i>Industrial & Engineering Chemistry Research</i> , 1998, 37, 1841-1858.	1.8	90
41	Unit-specific event-based continuous-time approach for short-term scheduling of batch plants using RTN framework. <i>Computers and Chemical Engineering</i> , 2008, 32, 260-274.	2.0	85
42	Discovery of novel zeolites for natural gas purification through combined material screening and process optimization. <i>AIChE Journal</i> , 2014, 60, 1767-1785.	1.8	85
43	Trilinear Monomials with Mixed Sign Domains: Facets of the Convex and Concave Envelopes. <i>Journal of Global Optimization</i> , 2004, 29, 125-155.	1.1	84
44	Production Scheduling of a Large-Scale Industrial Batch Plant. I. Short-Term and Medium-Term Scheduling. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 8234-8252.	1.8	84
45	Novel Unified Modeling Approach for Short-Term Scheduling. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 2947-2964.	1.8	82
46	Global optimization of general constrained grey-box models: new method and its application to constrained PDEs for pressure swing adsorption. <i>Journal of Global Optimization</i> , 2017, 67, 3-42.	1.1	82
47	Global optimization of mixed-integer quadratically-constrained quadratic programs (MIQCQP) through piecewise-linear and edge-concave relaxations. <i>Mathematical Programming</i> , 2012, 136, 155-182.	1.6	81
48	Multi-scale systems engineering for energy and the environment: Challenges and opportunities. <i>AIChE Journal</i> , 2016, 62, 602-623.	1.8	78
49	Optimization of regulatory architectures in metabolic reaction networks. , 1996, 52, 485-500.		77
50	A Comparative Theoretical and Computational Study on Robust Counterpart Optimization: II. Probabilistic Guarantees on Constraint Satisfaction. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 6769-6788.	1.8	74
51	Convex envelopes for edge-concave functions. <i>Mathematical Programming</i> , 2005, 103, 207-224.	1.6	73
52	Continuous-time modeling and global optimization approach for scheduling of crude oil operations. <i>AIChE Journal</i> , 2012, 58, 205-226.	1.8	73
53	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> , 2018, 115, 46-63.	2.0	73
54	Improving unit-specific event based continuous-time approaches for batch processes: Integrality gap and task splitting. <i>Computers and Chemical Engineering</i> , 2008, 32, 913-955.	2.0	72

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55	Discovery of functionally selective C5aR2 ligands: novel modulators of C5a signalling. <i>Immunology and Cell Biology</i> , 2016, 94, 787-795.	1.0	68
56	Improved Unit-Specific Event-Based Continuous-Time Model for Short-Term Scheduling of Continuous Processes: A Rigorous Treatment of Storage Requirements. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 1764-1779.	1.8	66
57	Novel Natural Gas to Liquids Processes: Process Synthesis and Global Optimization Strategies. <i>AIChE Journal</i> , 2013, 59, 505-531.	1.8	65
58	Global optimization of grey-box computational systems using surrogate functions and application to highly constrained oil-field operations. <i>Computers and Chemical Engineering</i> , 2018, 114, 99-110.	2.0	65
59	Optimal scenario reduction framework based on distance of uncertainty distribution and output performance: I. Single reduction via mixed integer linear optimization. <i>Computers and Chemical Engineering</i> , 2014, 70, 50-66.	2.0	60
60	Optimal design of energy systems using constrained grey-box multi-objective optimization. <i>Computers and Chemical Engineering</i> , 2018, 116, 488-502.	2.0	60
61	Municipal solid waste to liquid transportation fuels " Part I: Mathematical modeling of a municipal solid waste gasifier. <i>Computers and Chemical Engineering</i> , 2014, 71, 636-647.	2.0	58
62	A New Class of Improved Convex Underestimators for Twice Continuously Differentiable Constrained NLPs. <i>Journal of Global Optimization</i> , 2004, 30, 367-390.	1.1	57
63	Molecular Recognition of CCR5 by an HIV-1 gp120 V3 Loop. <i>PLoS ONE</i> , 2014, 9, e95767.	1.1	56
64	A Decomposition Strategy for Global Optimum Search in the Pooling Problem. <i>ORSA Journal on Computing</i> , 1990, 2, 225-235.	1.7	52
65	Production scheduling of a large-scale industrial continuous plant: Short-term and medium-term scheduling. <i>Computers and Chemical Engineering</i> , 2009, 33, 670-686.	2.0	52
66	Computational Experience with a New Class of Convex Underestimators: Box-constrained NLP Problems. <i>Journal of Global Optimization</i> , 2004, 29, 249-264.	1.1	51
67	Nationwide energy supply chain analysis for hybrid feedstock processes with significant CO ₂ emissions reduction. <i>AIChE Journal</i> , 2012, 58, 2142-2154.	1.8	51
68	Robust optimization and stochastic programming approaches for medium-term production scheduling of a large-scale steelmaking continuous casting process under demand uncertainty. <i>Computers and Chemical Engineering</i> , 2014, 66, 165-185.	2.0	51
69	Data-driven mathematical modeling and global optimization framework for entire petrochemical planning operations. <i>AIChE Journal</i> , 2016, 62, 3020-3040.	1.8	51
70	Operational Planning of Large-Scale Industrial Batch Plants under Demand Due Date and Amount Uncertainty. I. Robust Optimization Framework. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 7214-7231.	1.8	50
71	Global Optimization of Gas Lifting Operations: A Comparative Study of Piecewise Linear Formulations. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 6098-6104.	1.8	48
72	Production Scheduling of a Large-Scale Steelmaking Continuous Casting Process via Unit-Specific Event-Based Continuous-Time Models: Short-Term and Medium-Term Scheduling. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 7300-7319.	1.8	48

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73	An Adaptive Memory Programming Framework for the Robust Capacitated Vehicle Routing Problem. <i>Transportation Science</i> , 2016, 50, 1239-1260.	2.6	48
74	Integrated Operational Planning and Medium-Term Scheduling for Large-Scale Industrial Batch Plants. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 4845-4860.	1.8	47
75	Operational planning framework for multisite production and distribution networks. <i>Computers and Chemical Engineering</i> , 2009, 33, 1036-1050.	2.0	45
76	Operational Planning of Large-Scale Industrial Batch Plants under Demand Due Date and Amount Uncertainty: II. Conditional Value-at-Risk Framework. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 260-275.	1.8	41
77	A Comparative Theoretical and Computational Study on Robust Counterpart Optimization: III. Improving the Quality of Robust Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 13112-13124.	1.8	41
78	Optimal Event Point Determination for Short-Term Scheduling of Multipurpose Batch Plants via Unit-Specific Event-Based Continuous-Time Approaches. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 7446-7469.	1.8	40
79	Scheduling of crude oil operations under demand uncertainty: A robust optimization framework coupled with global optimization. <i>AIChE Journal</i> , 2012, 58, 2373-2396.	1.8	40
80	Research challenges, opportunities and synergism in systems engineering and computational biology. <i>AIChE Journal</i> , 2005, 51, 1872-1884.	1.8	39
81	Elucidating a Key Anti-HIV-1 and Cancer-Associated Axis: The Structure of CCL5 (Rantes) in Complex with CCR5. <i>Scientific Reports</i> , 2014, 4, 5447.	1.6	38
82	A novel clustering approach and prediction of optimal number of clusters: global optimum search with enhanced positioning. <i>Journal of Global Optimization</i> , 2007, 39, 323-346.	1.1	37
83	Dynamically generated cutting planes for mixed-integer quadratically constrained quadratic programs and their incorporation into GloMIQO 2. <i>Optimization Methods and Software</i> , 2015, 30, 215-249.	1.6	36
84	New a priori and a posteriori probabilistic bounds for robust counterpart optimization: I. Unknown probability distributions. <i>Computers and Chemical Engineering</i> , 2016, 84, 568-598.	2.0	36
85	Global optimization for molecular conformation problems. <i>Annals of Operations Research</i> , 1993, 42, 85-117.	2.6	35
86	Tight convex underestimators for \mathcal{C}^2 -continuous problems: II. multivariate functions. <i>Journal of Global Optimization</i> , 2008, 42, 69-89.	1.1	35
87	De Novo Design and Experimental Characterization of Ultrashort Self-Associating Peptides. <i>PLoS Computational Biology</i> , 2014, 10, e1003718.	1.5	35
88	Convex Underestimation of Twice Continuously Differentiable Functions by Piecewise Quadratic Perturbation: Spline Underestimators. <i>Journal of Global Optimization</i> , 2005, 32, 221-258.	1.1	34
89	Coproduction of liquid transportation fuels and C ₆ -C ₈ aromatics from biomass and natural gas. <i>AIChE Journal</i> , 2015, 61, 831-856.	1.8	32
90	An Analysis of Some Unit-Specific Event-Based Models for the Short-Term Scheduling of Noncontinuous Processes. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 633-647.	1.8	31

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91	Nationwide, Regional, and Statewide Energy Supply Chain Optimization for Natural Gas to Liquid Transportation Fuel (GTL) Systems. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 5366-5397.	1.8	31
92	Dimensionality reduction for production optimization using polynomial approximations. <i>Computational Geosciences</i> , 2017, 21, 247-266.	1.2	31
93	Biomass to Liquid Transportation Fuels via Biological and Thermochemical Conversion: Process Synthesis and Global Optimization Strategies. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 3203-3225.	1.8	29
94	A Novel Continuous-Time Modeling and Optimization Framework for Well Platform Planning Problems. <i>Optimization and Engineering</i> , 2003, 4, 65-95.	1.3	28
95	Scheduling of Tanker Lightering via a Novel Continuous-Time Optimization Framework. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 4441-4451.	1.8	28
96	Multisite Planning under Demand and Transportation Time Uncertainty: Robust Optimization and Conditional Value-at-Risk Frameworks. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 4959-4982.	1.8	27
97	Global Optimization with Nonfactorable Constraints. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 6413-6424.	1.8	26
98	Discovery of novel zeolites and multi-zeolite processes for p-xylene separation using simulated moving bed (SMB) chromatography. <i>Chemical Engineering Science</i> , 2017, 159, 3-17.	1.9	26
99	Tight convex underestimators for C^2 -continuous problems: I. univariate functions. <i>Journal of Global Optimization</i> , 2008, 42, 51-67.	1.1	23
100	Highly Accurate Structure-Based Prediction of HIV-1 Coreceptor Usage Suggests Intermolecular Interactions Driving Tropism. <i>PLoS ONE</i> , 2016, 11, e0148974.	1.1	23
101	Locating All Heterogeneous and Reactive Azeotropes in Multicomponent Mixtures. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 1576-1595.	1.8	22
102	Municipal solid waste to liquid transportation fuels, olefins, and aromatics: Process synthesis and deterministic global optimization. <i>Computers and Chemical Engineering</i> , 2017, 102, 169-187.	2.0	22
103	Optimization of black-box problems using Smolyak grids and polynomial approximations. <i>Journal of Global Optimization</i> , 2018, 71, 845-869.	1.1	22
104	Integration of Operational Planning and Medium-Term Scheduling for Large-Scale Industrial Batch Plants under Demand and Processing Time Uncertainty. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 4948-4965.	1.8	21
105	De Novo Peptide Design and Experimental Validation of Histone Methyltransferase Inhibitors. <i>PLoS ONE</i> , 2014, 9, e90095.	1.1	21
106	A Framework for Globally Optimizing Mixed-Integer Signomial Programs. <i>Journal of Optimization Theory and Applications</i> , 2014, 161, 905-932.	0.8	21
107	A framework to predict the price of energy for the end-users with applications to monetary and energy policies. <i>Nature Communications</i> , 2021, 12, 18.	5.8	21
108	COMSAT: Residue contact prediction of transmembrane proteins based on support vector machines and mixed integer linear programming. <i>Proteins: Structure, Function and Bioinformatics</i> , 2016, 84, 332-348.	1.5	20

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109	Convex underestimation for posynomial functions of positive variables. Optimization Letters, 2008, 2, 333-340.	0.9	18
110	Convex relaxation for solving posynomial programs. Journal of Global Optimization, 2010, 46, 147-154.	1.1	18
111	Integrated gasoline blending and order delivery operations: Part I. short-term scheduling and global optimization for single and multi-period operations. AIChE Journal, 2016, 62, 2043-2070.	1.8	18
112	New a priori and a posteriori probabilistic bounds for robust counterpart optimization: II. A priori bounds for known symmetric and asymmetric probability distributions. Computers and Chemical Engineering, 2017, 101, 279-311.	2.0	17
113	Derivation of ligands for the complement C3a receptor from the C-terminus of C5a. European Journal of Pharmacology, 2014, 745, 176-181.	1.7	16
114	Global Solution Approach for a Nonconvex MINLP Problem in Product Portfolio Optimization. Journal of Global Optimization, 2005, 32, 417-431.	1.1	14
115	Balancing mixed-model assembly lines with sequence-dependent tasks via hybrid genetic algorithm. Journal of Global Optimization, 2016, 65, 83-107.	1.1	14
116	Princeton_TIGRESS 2.0: High refinement consistency and net gains through support vector machines and molecular dynamics in double-blind predictions during the CASP11 experiment. Proteins: Structure, Function and Bioinformatics, 2017, 85, 1078-1098.	1.5	14
117	Robust stability analysis of systems with real parametric uncertainty: A global optimization approach. International Journal of Robust and Nonlinear Control, 1995, 5, 699-717.	2.1	13
118	Search Engines for Shape Selectivity. Catalysis Letters, 2009, 133, 234-241.	1.4	13
119	Optimization model for generic rank determination of structural matrices. International Journal of Control, 1989, 49, 1633-1644.	1.2	12
120	Methane Conversion to Ethylene and Acetylene: Optimal Control with Chlorine, Oxygen, and Heat Flux. Industrial & Engineering Chemistry Research, 1996, 35, 683-696.	1.8	12
121	On the functional form of convex underestimators for twice continuously differentiable functions. Optimization Letters, 2007, 1, 187-192.	0.9	12
122	A network flow model for biclustering via optimal re-ordering of data matrices. Journal of Global Optimization, 2010, 47, 343-354.	1.1	12
123	An integrated data-driven modeling & global optimization approach for multi-period nonlinear production planning problems. Computers and Chemical Engineering, 2020, 141, 107007.	2.0	12
124	Multi-level energy integration between units, plants and sites for natural gas industrial parks. Renewable and Sustainable Energy Reviews, 2018, 88, 1-15.	8.2	11
125	Municipal solid waste to liquid transportation fuels – Part III: An optimization-based nationwide supply chain management framework. Computers and Chemical Engineering, 2018, 116, 468-487.	2.0	11
126	Selecting the Optimal Target Company Based on Synergy Calculation for the Vertical Merger in a Petrochemical Complex. Industrial & Engineering Chemistry Research, 2009, 48, 1511-1521.	1.8	10

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127	Generation of networks with prescribed degree-dependent clustering. Optimization Letters, 2011, 5, 435-451.	0.9	10
128	New a priori and a posteriori probabilistic bounds for robust counterpart optimization: III. Exact and near-exact a posteriori expressions for known probability distributions. Computers and Chemical Engineering, 2017, 103, 116-143.	2.0	10
129	Generalized robust counterparts for constraints with bounded and unbounded uncertain parameters. Computers and Chemical Engineering, 2018, 116, 451-467.	2.0	9
130	Synergy in Mergers of Petrochemical Companies within a Complex Considering Purchasing and Selling Advantage with Process Integration. Industrial & Engineering Chemistry Research, 2008, 47, 5556-5567.	1.8	8
131	Operational strategy and planning for raw natural gas refining complexes: Process modeling and global optimization. AIChE Journal, 2017, 63, 652-668.	1.8	8
132	Natural Gas to Liquid Transportation Fuels under Uncertainty Using Robust Optimization. Industrial & Engineering Chemistry Research, 2018, 57, 11112-11129.	1.8	8
133	A decomposition approach for global optimum search in QP, NLP and MINLP problems. Annals of Operations Research, 1990, 25, 119-145.	2.6	7
134	Deterministic Global Optimization and Ab Initio Approaches for the Structure Prediction of Polypeptides, Dynamics of Protein Folding, and Protein-Protein Interactions. Advances in Chemical Physics, 2002, , 265-457.	0.3	7
135	Advances in robust optimization approaches for scheduling under uncertainty. Computer Aided Chemical Engineering, 2005, , 1051-1056.	0.3	7
136	Optimization framework for process scheduling of operation-dependent automobile assembly lines. Optimization Letters, 2012, 6, 797-824.	0.9	7
137	Structural properties of large scale systems. International Journal of Control, 1990, 51, 169-187.	1.2	6
138	Production of Benzene, Toluene, and the Xylenes from Natural Gas via Methanol. Computer Aided Chemical Engineering, 2016, 38, 2349-2354.	0.3	6
139	Rational design of shape selective separations and catalysis: Lattice relaxation and effective aperture size. AIChE Journal, 2010, 56, 611-632.	1.8	5
140	Operational Planning of Large-Scale Continuous Processes: Deterministic Planning Model and Robust Optimization for Demand Amount and Due Date Uncertainty. Industrial & Engineering Chemistry Research, 2012, 51, 4347-4362.	1.8	5
141	Estimation of diffusion anisotropy in microporous crystalline materials and optimization of crystal orientation in membranes. Journal of Chemical Physics, 2013, 139, 124703.	1.2	5
142	Performance of convex underestimators in a branch-and-bound framework. Optimization Letters, 2016, 10, 283-308.	0.9	5
143	Rebuttal to Comments on "Global Optimization for the Parameter Estimation of Differential-Algebraic Systems". Industrial & Engineering Chemistry Research, 2001, 40, 490-491.	1.8	4
144	Mathematical modeling and efficient optimization methods for the distance-dependent rearrangement clustering problem. Journal of Global Optimization, 2009, 45, 111.	1.1	4

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145	Designing networks: A mixed-integer linear optimization approach. <i>Networks</i> , 2016, 68, 283-301.	1.6	4
146	Optimization of polymer synthesis through distributed control of polymerization conditions. <i>Journal of Applied Polymer Science</i> , 2002, 85, 2922-2928.	1.3	3
147	Data-driven modeling and global optimization of industrial-scale petrochemical planning operations. , 2016, , .		3
148	Comments on "New General Continuous-Time State-Task Network Formulation for Short-Term Scheduling of Multipurpose Batch Plants" by Christos T. Maravelias and Ignacio E. Grossmann and on "Enhanced Continuous-Time Unit-Specific Event-Based Formulation for Short-Term Scheduling of Multipurpose Batch Processes: Resource Constraints and Mixed Storage Policies" by Stacy L. Janak, Xiaoxia Lin, and Christodoulos A. Floudas. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 1985-1986.	1.8	2
149	Alpha-helical topology and tertiary structure prediction in globular proteins. , 2007, , .		2
150	An Efficient Unit-Specific Event-Based Continuous-Time MILP Formulation for Short-Term Scheduling of Multistage and Multiproduct Batch Plants. <i>Computer Aided Chemical Engineering</i> , 2012, 30, 772-776.	0.3	2
151	Slot-based vs. global event-based vs. unit-specific event-based models in scheduling of batch plants. <i>Computer Aided Chemical Engineering</i> , 2006, 21, 1923-1928.	0.3	1
152	Production scheduling of a large-scale industrial continuous plant: Short-term and medium-term scheduling. <i>Computer Aided Chemical Engineering</i> , 2007, , 613-618.	0.3	1
153	OPTIMAL METHODS FOR RE-ORDERING DATA MATRICES IN SYSTEMS BIOLOGY AND DRUG DISCOVERY APPLICATIONS. <i>Biophysical Reviews and Letters</i> , 2008, 03, 19-42.	0.9	1
154	Enhancing molecular discovery using descriptor-free rearrangement clustering techniques for sparse data sets. <i>AIChE Journal</i> , 2010, 56, 405-418.	1.8	1
155	Medium-Term Production Scheduling of a Large-Scale Steelmaking Continuous Casting Process under Demand Uncertainty. <i>Computer Aided Chemical Engineering</i> , 2013, 32, 571-576.	0.3	1
156	OPTIMAL METHODS FOR RE-ORDERING DATA MATRICES IN SYSTEMS BIOLOGY AND DRUG DISCOVERY APPLICATIONS. , 2008, , .		1
157	Optimization of Living Radical Polymerization Through Distributed Control of Energy. <i>Macromolecular Chemistry and Physics</i> , 2001, 202, 2797-2801.	1.1	0
158	Comments on: Optimization and data mining in Biomedicine. <i>Top</i> , 2009, 17, 237-238.	1.1	0
159	A Novel Clustering Approach: Global Optimum Search with Enhanced Positioning. , 2009, , 307-332.		0
160	STRUCTURE PREDICTION OF ALPHA-HELICAL PROTEINS. , 2006, , .		0
161	ADVANCES IN DE NOVO PROTEIN DESIGN FOR MONOMERIC, MULTIMERIC, AND CONFORMATIONAL SWITCH PROTEINS. , 2013, , .		0
162	Improving the Decoupling Response Bound in Multivariable Time Delay Systems. , 1991, , .		0

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163	Optimization Models for Structural Analysis and Control Synthesis of Large Scale Systems. , 1989, , .		0