Christodoulos A Floudas

List of Publications by Year
in descending order

163 papers	10,677 citations

23567

58
h-index

33894

99
g-index

168 all docs	168 docs citations

168
times ranked

5889
citing authors

#	Article	IF	Citations
1	A framework to predict the price of energy for the end-users with applications to monetary and energy policies. Nature Communications, 2021, 12, 18.	12.8	21
2	An integrated data-driven modeling & global optimization approach for multi-period nonlinear production planning problems. Computers and Chemical Engineering, 2020, 141, 107007.	3.8	12
3	Optimal design of energy systems using constrained grey-box multi-objective optimization. Computers and Chemical Engineering, 2018, 116, 488-502.	3.8	60
4	Big data approach to batch process monitoring: Simultaneous fault detection and diagnosis using nonlinear support vector machine-based feature selection. Computers and Chemical Engineering, 2018, 115, 46-63.	3.8	73
5	Global optimization of grey-box computational systems using surrogate functions and application to highly constrained oil-field operations. Computers and Chemical Engineering, 2018, 114, 99-110.	3.8	65
6	Multi-level energy integration between units, plants and sites for natural gas industrial parks. Renewable and Sustainable Energy Reviews, 2018, 88, 1-15.	16.4	11
7	Generalized robust counterparts for constraints with bounded and unbounded uncertain parameters. Computers and Chemical Engineering, 2018, 116, 451-467.	3.8	9
8	Municipal solid waste to liquid transportation fuels â€" Part III: An optimization-based nationwide supply chain management framework. Computers and Chemical Engineering, 2018, 116, 468-487.	3.8	11
9	Natural Gas to Liquid Transportation Fuels under Uncertainty Using Robust Optimization. Industrial & Engineering Chemistry Research, 2018, 57, 11112-11129.	3.7	8
10	Optimization of black-box problems using Smolyak grids and polynomial approximations. Journal of Global Optimization, 2018, 71, 845-869.	1.8	22
11	Global optimization of general constrained grey-box models: new method and its application to constrained PDEs for pressure swing adsorption. Journal of Global Optimization, 2017, 67, 3-42.	1.8	82
12	ARGONAUT: AlgoRithms for Global Optimization of coNstrAined grey-box compUTational problems. Optimization Letters, 2017, 11, 895-913.	1.6	97
13	Dimensionality reduction for production optimization using polynomial approximations. Computational Geosciences, 2017, 21, 247-266.	2.4	31
14	Princeton_<scp>TIGRESS</scp> 2.0: High refinement consistency and net gains through support vector machines and molecular dynamics in doubleâ€blind predictions during the <scp>CASP</scp>11 experiment. Proteins: Structure, Function and Bioinformatics, 2017, 85, 1078-1098.	2.6	14
15	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.	3.8	10
16	Discovery of novel zeolites and multi-zeolite processes for p-xylene separation using simulated moving bed (SMB) chromatography. Chemical Engineering Science, 2017, 159, 3-17.	3.8	26
17	Municipal solid waste to liquid transportation fuels, olefins, and aromatics: Process synthesis and deterministic global optimization. Computers and Chemical Engineering, 2017, 102, 169-187.	3.8	22
18	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.	3.8	17

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19	Operational strategy and planning for raw natural gas refining complexes: Process modeling and global optimization. AICHE Journal, 2017, 63, 652-668.	3.6	8
20	Production of Benzene, Toluene, and the Xylenes from Natural Gas via Methanol. Computer Aided Chemical Engineering, 2016, 38, 2349-2354.	0.5	6
21	Production of benzene, toluene, and xylenes from natural gas via methanol: Process synthesis and global optimization. AICHE Journal, 2016, 62, 1531-1556.	3.6	136
22	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.	3.6	18
23	Discovery of functionally selective C5aR2 ligands: novel modulators of C5a signalling. Immunology and Cell Biology, 2016, 94, 787-795.	2.3	68
24	Data-driven modeling and global optimization of industrial-scale petrochemical planning operations. , 2016, , .		3
25	Designing networks: A mixed-integer linear optimization approach. Networks, 2016, 68, 283-301.	2.7	4
26	COMSAT: Residue contact prediction of transmembrane proteins based on support vector machines and mixed integer linear programming. Proteins: Structure, Function and Bioinformatics, 2016, 84, 332-348.	2.6	20
27	Data-driven mathematical modeling and global optimization framework for entire petrochemical planning operations. AICHE Journal, 2016, 62, 3020-3040.	3.6	51
28	Biomass-Based Production of Benzene, Toluene, and Xylenes via Methanol: Process Synthesis and Deterministic Global Optimization. Energy & Fuels, 2016, 30, 4970-4998.	5.1	91
29	Multi-scale systems engineering for energy and the environment: Challenges and opportunities. AICHE Journal, 2016, 62, 602-623.	3.6	78
30	Performance of convex underestimators in a branch-and-bound framework. Optimization Letters, 2016, 10, 283-308.	1.6	5
31	An Adaptive Memory Programming Framework for the Robust Capacitated Vehicle Routing Problem. Transportation Science, 2016, 50, 1239-1260.	4.4	48
32	Global optimization advances in Mixed-Integer Nonlinear Programming, MINLP, and Constrained Derivative-Free Optimization, CDFO. European Journal of Operational Research, 2016, 252, 701-727.	5.7	161
33	Biomass to Liquid Transportation Fuels via Biological and Thermochemical Conversion: Process Synthesis and Global Optimization Strategies. Industrial & Engineering Chemistry Research, 2016, 55, 3203-3225.	3.7	29
34	Balancing mixed-model assembly lines with sequence-dependent tasks via hybrid genetic algorithm. Journal of Global Optimization, 2016, 65, 83-107.	1.8	14
35	New a priori and a posteriori probabilistic bounds for robust counterpart optimization: I. Unknown probability distributions. Computers and Chemical Engineering, 2016, 84, 568-598.	3.8	36
36	Highly Accurate Structure-Based Prediction of HIV-1 Coreceptor Usage Suggests Intermolecular Interactions Driving Tropism. PLoS ONE, 2016, 11, e0148974.	2.5	23

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37	Dynamically generated cutting planes for mixed-integer quadratically constrained quadratic programs and their incorporation into GloMIQO 2. Optimization Methods and Software, 2015, 30, 215-249.	2.4	36
38	Coproduction of liquid transportation fuels and C_6_C_8 aromatics from biomass and natural gas. AICHE Journal, 2015, 61, 831-856.	3.6	32
39	A multi-scale framework for $CO2$ capture, utilization, and sequestration: CCUS and CCU. Computers and Chemical Engineering, 2015, 81, 2-21.	3.8	226
40	De Novo Peptide Design and Experimental Validation of Histone Methyltransferase Inhibitors. PLoS ONE, 2014, 9, e90095.	2.5	21
41	De Novo Design and Experimental Characterization of Ultrashort Self-Associating Peptides. PLoS Computational Biology, 2014, 10, e1003718.	3.2	35
42	Derivation of ligands for the complement C3a receptor from the C-terminus of C5a. European Journal of Pharmacology, 2014, 745, 176-181.	3.5	16
43	Molecular Recognition of CCR5 by an HIV-1 gp120 V3 Loop. PLoS ONE, 2014, 9, e95767.	2.5	56
44	Nationwide, Regional, and Statewide Energy Supply Chain Optimization for Natural Gas to Liquid Transportation Fuel (GTL) Systems. Industrial & Engineering Chemistry Research, 2014, 53, 5366-5397.	3.7	31
45	Robust optimization and stochastic programming approaches for medium-term production scheduling of a large-scale steelmaking continuous casting process under demand uncertainty. Computers and Chemical Engineering, 2014, 66, 165-185.	3.8	51
46	A Framework for Globally Optimizing Mixed-Integer Signomial Programs. Journal of Optimization Theory and Applications, 2014, 161, 905-932.	1.5	21
47	Discovery of novel zeolites for natural gas purification through combined material screening and process optimization. AICHE Journal, 2014, 60, 1767-1785.	3.6	85
48	Municipal solid waste to liquid transportation fuels â€" Part I: Mathematical modeling of a municipal solid waste gasifier. Computers and Chemical Engineering, 2014, 71, 636-647.	3.8	58
49	Protein folding and de novo protein design for biotechnological applications. Trends in Biotechnology, 2014, 32, 99-109.	9.3	127
50	A Comparative Theoretical and Computational Study on Robust Counterpart Optimization: III. Improving the Quality of Robust Solutions. Industrial & Engineering Chemistry Research, 2014, 53, 13112-13124.	3.7	41
51	ANTIGONE: Algorithms for coNTinuous / Integer Global Optimization of Nonlinear Equations. Journal of Global Optimization, 2014, 59, 503-526.	1.8	390
52	Optimal scenario reduction framework based on distance of uncertainty distribution and output performance: I. Single reduction via mixed integer linear optimization. Computers and Chemical Engineering, 2014, 70, 50-66.	3.8	60
53	Elucidating a Key Anti-HIV-1 and Cancer-Associated Axis: The Structure of CCL5 (Rantes) in Complex with CCR5. Scientific Reports, 2014, 4, 5447.	3.3	38
54	GloMIQO: Global mixed-integer quadratic optimizer. Journal of Global Optimization, 2013, 57, 3-50.	1.8	162

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55	Novel Natural Gas to Liquids Processes: Process Synthesis and Global Optimization Strategies. AICHE Journal, 2013, 59, 505-531.	3.6	65
56	The Robust Capacitated Vehicle Routing Problem Under Demand Uncertainty. Operations Research, 2013, 61, 677-693.	1.9	142
57	Estimation of diffusion anisotropy in microporous crystalline materials and optimization of crystal orientation in membranes. Journal of Chemical Physics, 2013, 139, 124703.	3.0	5
58	Medium-Term Production Scheduling of a Large-Scale Steelmaking Continuous Casting Process under Demand Uncertainty. Computer Aided Chemical Engineering, 2013, 32, 571-576.	0.5	1
59	ADVANCES IN DE NOVO PROTEIN DESIGN FOR MONOMERIC, MULTIMERIC, AND CONFORMATIONAL SWITCH PROTEINS. , 2013, , .		0
60	Global optimization of mixed-integer quadratically-constrained quadratic programs (MIQCQP) through piecewise-linear and edge-concave relaxations. Mathematical Programming, 2012, 136, 155-182.	2.4	81
61	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.	3.7	5
62	Production Scheduling of a Large-Scale Steelmaking Continuous Casting Process via Unit-Specific Event-Based Continuous-Time Models: Short-Term and Medium-Term Scheduling. Industrial & Engineering Chemistry Research, 2012, 51, 7300-7319.	3.7	48
63	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.	3.7	161
64	A Comparative Theoretical and Computational Study on Robust Counterpart Optimization: II. Probabilistic Guarantees on Constraint Satisfaction. Industrial & Engineering Chemistry Research, 2012, 51, 6769-6788.	3.7	74
65	An Efficient Unit-Specific Event-Based Continuous-Time MILP Formulation for Short-Term Scheduling of Multistage and Multiproduct Batch Plants. Computer Aided Chemical Engineering, 2012, 30, 772-776.	0.5	2
66	Scheduling of crude oil operations under demand uncertainty: A robust optimization framework coupled with global optimization. AICHE Journal, 2012, 58, 2373-2396.	3.6	40
67	Nationwide energy supply chain analysis for hybrid feedstock processes with significant CO_2 emissions reduction. AICHE Journal, 2012, 58, 2142-2154.	3.6	51
68	Optimization framework for process scheduling of operation-dependent automobile assembly lines. Optimization Letters, 2012, 6, 797-824.	1.6	7
69	Continuous†time modeling and global optimization approach for scheduling of crude oil operations. AICHE Journal, 2012, 58, 205-226.	3.6	73
70	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.	3.7	205
71	Multisite Planning under Demand and Transportation Time Uncertainty: Robust Optimization and Conditional Value-at-Risk Frameworks. Industrial & Engineering Chemistry Research, 2011, 50, 4959-4982.	3.7	27
72	Generation of networks with prescribed degree-dependent clustering. Optimization Letters, 2011, 5, 435-451.	1.6	10

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73	APOGEE: Global optimization of standard, generalized, and extended pooling problems via linear and logarithmic partitioning schemes. Computers and Chemical Engineering, 2011, 35, 876-892.	3.8	101
74	Enhancing molecular discovery using descriptor‑free rearrangement clustering techniques for sparse data sets. AICHE Journal, 2010, 56, 405-418.	3.6	1
75	Rational design of shape selective separations and catalysis: Lattice relaxation and effective aperture size. AICHE Journal, 2010, 56, 611-632.	3.6	5
76	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.	3.7	129
77	A network flow model for biclustering via optimal re-ordering of data matrices. Journal of Global Optimization, 2010, 47, 343-354.	1.8	12
78	Convex relaxation for solving posynomial programs. Journal of Global Optimization, 2010, 46, 147-154.	1.8	18
79	Planning and Scheduling under Uncertainty: A Review Across Multiple Sectors. Industrial & Engineering Chemistry Research, 2010, 49, 3993-4017.	3.7	175
80	An Analysis of Some Unit-Specific Event-Based Models for the Short-Term Scheduling of Noncontinuous Processes. Industrial & Engineering Chemistry Research, 2010, 49, 633-647.	3.7	31
81	Global Optimization of Large-Scale Generalized Pooling Problems: Quadratically Constrained MINLP Models. Industrial & Engineering Chemistry Research, 2010, 49, 5424-5438.	3.7	122
82	Optimal Event Point Determination for Short-Term Scheduling of Multipurpose Batch Plants via Unit-Specific Event-Based Continuous-Time Approaches. Industrial & Engineering Chemistry Research, 2010, 49, 7446-7469.	3.7	40
83	Operational Planning of Large-Scale Industrial Batch Plants under Demand Due Date and Amount Uncertainty: II. Conditional Value-at-Risk Framework. Industrial & Engineering Chemistry Research, 2010, 49, 260-275.	3.7	41
84	Integration of Operational Planning and Medium-Term Scheduling for Large-Scale Industrial Batch Plants under Demand and Processing Time Uncertainty. Industrial & Engineering Chemistry Research, 2010, 49, 4948-4965.	3.7	21
85	Toward Novel Hybrid Biomass, Coal, and Natural Gas Processes for Satisfying Current Transportation Fuel Demands, 2: Simultaneous Heat and Power Integration. Industrial & Engineering Chemistry Research, 2010, 49, 7371-7388.	3.7	91
86	Search Engines for Shape Selectivity. Catalysis Letters, 2009, 133, 234-241.	2.6	13
87	Mathematical modeling and efficient optimization methods for the distance-dependent rearrangement clustering problem. Journal of Global Optimization, 2009, 45, 111.	1.8	4
88	Comments on: Optimization and data mining in biomedicine. Top, 2009, 17, 237-238.	1.6	0
89	Production scheduling of a large-scale industrial continuous plant: Short-term and medium-term scheduling. Computers and Chemical Engineering, 2009, 33, 670-686.	3.8	52
90	Operational planning framework for multisite production and distribution networks. Computers and Chemical Engineering, 2009, 33, 1036-1050.	3.8	45

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91	Novel Unified Modeling Approach for Short-Term Scheduling. Industrial & Engineering Chemistry Research, 2009, 48, 2947-2964.	3.7	82
92	Global Optimization of Gas Lifting Operations: A Comparative Study of Piecewise Linear Formulations. Industrial & Engineering Chemistry Research, 2009, 48, 6098-6104.	3.7	48
93	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.	3.7	10
94	Operational Planning of Large-Scale Industrial Batch Plants under Demand Due Date and Amount Uncertainty. I. Robust Optimization Framework. Industrial & Engineering Chemistry Research, 2009, 48, 7214-7231.	3.7	50
95	A Novel Clustering Approach: Global Optimum Search with Enhanced Positioning. , 2009, , 307-332.		0
96	Tight convex underestimators for $\mathcal{C}^2$ -continuous problems: I. univariate functions. Journal of Global Optimization, 2008, 42, 51-67.	1.8	23
97	Tight convex underestimators for $\mathcal{C}^2$ -continuous problems: II. multivariate functions. Journal of Global Optimization, 2008, 42, 69-89.	1.8	35
98	Convex underestimation for posynomial functions of positive variables. Optimization Letters, 2008, 2, 333-340.	1.6	18
99	Improving unit-specific event based continuous-time approaches for batch processes: Integrality gap and task splitting. Computers and Chemical Engineering, 2008, 32, 913-955.	3.8	72
100	Unit-specific event-based continuous-time approach for short-term scheduling of batch plants using RTN framework. Computers and Chemical Engineering, 2008, 32, 260-274.	3.8	85
101	Integrated Operational Planning and Medium-Term Scheduling for Large-Scale Industrial Batch Plants. Industrial & Engineering Chemistry Research, 2008, 47, 4845-4860.	3.7	47
102	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.	3.7	8
103	OPTIMAL METHODS FOR RE-ORDERING DATA MATRICES IN SYSTEMS BIOLOGY AND DRUG DISCOVERY APPLICATIONS. Biophysical Reviews and Letters, 2008, 03, 19-42.	0.8	1
104	OPTIMAL METHODS FOR RE-ORDERING DATA MATRICES IN SYSTEMS BIOLOGY AND DRUG DISCOVERY APPLICATIONS. , 2008, , .		1
105	Alpha-helical topology and tertiary structure prediction in globular proteins. , 2007, , .		2
106	Production scheduling of a large-scale industrial continuous plant: Short-term and medium-term scheduling. Computer Aided Chemical Engineering, 2007, , 613-618.	0.5	1
107	Improved Unit-Specific Event-Based Continuous-Time Model for Short-Term Scheduling of Continuous Processes:Â Rigorous Treatment of Storage Requirements. Industrial & Engineering Chemistry Research, 2007, 46, 1764-1779.	3.7	66
108	A new robust optimization approach for scheduling under uncertainty. Computers and Chemical Engineering, 2007, 31, 171-195.	3.8	197

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109	A novel clustering approach and prediction of optimal number of clusters: global optimum search with enhanced positioning. Journal of Global Optimization, 2007, 39, 323-346.	1.8	37
110	On the functional form of convex underestimators for twice continuously differentiable functions. Optimization Letters, 2007, 1, 187-192.	1.6	12
111	Production Scheduling of a Large-Scale Industrial Batch Plant. I. Short-Term and Medium-Term Scheduling. Industrial & Engineering Chemistry Research, 2006, 45, 8234-8252.	3.7	84
112	Production Scheduling of a Large-Scale Industrial Batch Plant. II. Reactive Scheduling. Industrial & Engineering Chemistry Research, 2006, 45, 8253-8269.	3.7	118
113	Continuous-Time Models for Short-Term Scheduling of Multipurpose Batch Plants: A Comparative Study. Industrial & Engineering Chemistry Research, 2006, 45, 6190-6209.	3.7	102
114	Slot-based vs. global event-based vs. unit-specific event-based models in scheduling of batch plants. Computer Aided Chemical Engineering, 2006, 21, 1923-1928.	0.5	1
115	Global optimization of a combinatorially complex generalized pooling problem. AICHE Journal, 2006, 52, 1027-1037.	3.6	121
116	STRUCTURE PREDICTION OF ALPHA-HELICAL PROTEINS. , 2006, , .		0
117	Research challenges, opportunities and synergism in systems engineering and computational biology. AICHE Journal, 2005, 51, 1872-1884.	3.6	39
118	Mixed Integer Linear Programming in Process Scheduling: Modeling, Algorithms, and Applications. Annals of Operations Research, 2005, 139, 131-162.	4.1	276
119	Convex envelopes for edge-concave functions. Mathematical Programming, 2005, 103, 207-224.	2.4	73
120	Convex Underestimation of Twice Continuously Differentiable Functions by Piecewise Quadratic Perturbation: Spline αBB Underestimators. Journal of Global Optimization, 2005, 32, 221-258.	1.8	34
121	Global Solution Approach for a Nonconvex MINLP Problem in Product Portfolio Optimization. Journal of Global Optimization, 2005, 32, 417-431.	1.8	14
122	Advances in robust optimization approaches for scheduling under uncertainty. Computer Aided Chemical Engineering, 2005, , 1051-1056.	0.5	7
123	Comments on â€œNew General Continuous-Time Stateâˆ'Task Network Formulation for Short-Term Scheduling of Multipurpose Batch Plantsâ€•by Christos T. Maravelias and Ignacio E. Grossmann and on â€œEnhanced Continuous-Time Unit-Specific Event-Based Formulation for Short-Term Scheduling of Multipurpose Batch Processes:â€‰ Resource Constraints and Mixed Storage Policiesâ€•by Stacy L. Janak, Xiaoxia Lin, and Christodoulos A. Floudas. Industrial & Engineering Chemistry Research, 2005, 44, 1985-1986.	3.7	2
124	Trilinear Monomials with Mixed Sign Domains: Facets of the Convex and Concave Envelopes. Journal of Global Optimization, 2004, 29, 125-155.	1.8	84
125	Computational Experience with a New Class of Convex Underestimators: Box-constrained NLP Problems. Journal of Global Optimization, 2004, 29, 249-264.	1.8	51
126	A New Class of Improved Convex Underestimators for Twice Continuously Differentiable Constrained NLPs. Journal of Global Optimization, 2004, 30, 367-390.	1.8	57

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127	A new robust optimization approach for scheduling under uncertainty:. Computers and Chemical Engineering, 2004, 28, 1069-1085.	3.8	317
128	Continuous-time versus discrete-time approaches for scheduling of chemical processes: a review. Computers and Chemical Engineering, 2004, 28, 2109-2129.	3.8	555
129	Enhanced Continuous-Time Unit-Specific Event-Based Formulation for Short-Term Scheduling of Multipurpose Batch Processes:Â Resource Constraints and Mixed Storage Policies. Industrial & Engineering Chemistry Research, 2004, 43, 2516-2533.	3.7	143
130	A Novel Continuous-Time Modeling and Optimization Framework for Well Platform Planning Problems. Optimization and Engineering, 2003, 4, 65-95.	2.4	28
131	Scheduling of Tanker Lightering via a Novel Continuous-Time Optimization Framework. Industrial & Engineering Chemistry Research, 2003, 42, 4441-4451.	3.7	28
132	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
133	Global Optimization with Nonfactorable Constraints. Industrial & Engineering Chemistry Research, 2002, 41, 6413-6424.	3.7	26
134	Continuous-Time Optimization Approach for Medium-Range Production Scheduling of a Multiproduct Batch Plant. Industrial & Engineering Chemistry Research, 2002, 41, 3884-3906.	3.7	92
135	Optimization of polymer synthesis through distributed control of polymerization conditions. Journal of Applied Polymer Science, 2002, 85, 2922-2928.	2.6	3
136	Rebuttal to Comments on â€œGlobal Optimization for the Parameter Estimation of Differentialâ^'Algebraic Systemsâ€. Industrial & Engineering Chemistry Research, 2001, 40, 490-491.	3.7	4
137	Global Optimization in Design under Uncertainty:Â Feasibility Test and Flexibility Index Problems. Industrial & Engineering Chemistry Research, 2001, 40, 4267-4282.	3.7	136
138	Optimization of Living Radical Polymerization Through Distributed Control of Energy. Macromolecular Chemistry and Physics, 2001, 202, 2797-2801.	2.2	0
139	Global Optimization of Nonlinear Bilevel Programming Problems. Journal of Global Optimization, 2001, 20, 1-31.	1.8	125
140	Deterministic Global Optimization in Nonlinear Optimal Control Problems. Journal of Global Optimization, 2000, 17, 97-126.	1.8	133
141	Deterministic Global Optimization. Nonconvex Optimization and Its Applications, 2000, , .	0.1	363
142	Locating All Heterogeneous and Reactive Azeotropes in Multicomponent Mixtures. Industrial & Engineering Chemistry Research, 2000, 39, 1576-1595.	3.7	22
143	Global Optimization for the Parameter Estimation of Differential-Algebraic Systems. Industrial & Engineering Chemistry Research, 2000, 39, 1291-1310.	3.7	169
144	Handbook of Test Problems in Local and Global Optimization. Nonconvex Optimization and Its Applications, 1999, , .	0.1	379

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146	Global optimization in generalized geometric programming. Computers and Chemical Engineering, 1997, 21, 351-369.	3.8	185
147	GLOPEQ: A new computational tool for the phase and chemical equilibrium problem. Computers and Chemical Engineering, 1997, 21, 1-23.	3.8	154
148	Methane Conversion to Ethylene and Acetylene:Â Optimal Control with Chlorine, Oxygen, and Heat Flux. Industrial & Engineering Chemistry Research, 1996, 35, 683-696.	3.7	12
149	Analysis and design of metabolic reaction networks via mixed-integer linear optimization. AICHE Journal, 1996, 42, 1277-1292.	3.6	160
150	Optimization of regulatory architectures in metabolic reaction networks. , 1996, 52, 485-500.		77
151	Rigorous convex underestimators for general twice-differentiable problems. Journal of Global Optimization, 1996, 9, 23-40.	1.8	143
152	Global optimization for the phase stability problem. AICHE Journal, 1995, 41, 1798-1814.	3.6	154
153	Finding all solutions of nonlinearly constrained systems of equations. Journal of Global Optimization, 1995, 7, 143-182.	1.8	190
154	Robust stability analysis of systems with real parametric uncertainty: A global optimization approach. International Journal of Robust and Nonlinear Control, 1995, 5, 699-717.	3.7	13
155	A deterministic global optimization approach for molecular structure determination. Journal of Chemical Physics, 1994, 100, 1247-1261.	3.0	95
156	Global optimization for molecular conformation problems. Annals of Operations Research, 1993, 42, 85-117.	4.1	35
157	A global optimization approach for Lennardâ€Jones microclusters. Journal of Chemical Physics, 1992, 97, 7667-7678.	3.0	128
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159	A decomposition approach for global optimum search in QP, NLP and MINLP problems. Annals of Operations Research, 1990, 25, 119-145.	4.1	7
160	A Decomposition Strategy for Global Optimum Search in the Pooling Problem. ORSA Journal on Computing, 1990, 2, 225-235.	1.7	52
161	Structural properties of large scale systems. International Journal of Control, 1990, 51, 169-187.	1.9	6
162	Optimization model for generic rank determination of structural matrices. International Journal of Control, 1989, 49, 1633-1644.	1.9	12

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