Mohit Tawarmalani

List of Publications by Year in Descending Order

54 papers	2,840 citations	22 h-index	53 g-index
58 ext. papers	3,110 ext. citations	3.3 avg, IF	5.44 L-index

#	Paper	IF	Citations
54	Convexification techniques for linear complementarity constraints. *Journal of Global Optimization*, **2021**, 80, 249-286	1.5	
53	Systematic Analysis Reveals Thermal Separations Are Not Necessarily Most Energy Intensive. *Joule*, **2021**, 5, 330-343	27.8	6
52	A Simple Criterion for Feasibility of Heat Integration between Distillation Streams Based on Relative Volatilities. *Industrial & Engineering Chemistry Research*, **2021**, 60, 10286-10302	3.9	2
51	Optimal design of membrane cascades for gaseous and liquid mixtures via MINLP. *Journal of Membrane Science*, **2021**, 636, 119514	9.6	3
50	Lancet. *Performance Evaluation Review*, **2020**, 48, 53-54	0.4	2
49	A new framework to relax composite functions in nonlinear programs. *Mathematical Programming*, **2020**, 190, 427	2.1	0
48	An MINLP formulation for the optimization of multicomponent distillation configurations. *Computers and Chemical Engineering*, **2019**, 125, 13-30	4	16
47	Global optimization of multicomponent distillation configurations: Global minimization of total cost for multicomponent mixture separations. *Computers and Chemical Engineering*, **2019**, 126, 249-262	4	12
46	On cutting planes for cardinality-constrained linear programs. *Mathematical Programming*, **2019**, 178, 417-448	2.1	1
45	Cardinality Bundling with Spence Mirrlees Reservation Prices. *Management Science*, **2019**, 65, 1891-1908	3.9	5
44	Global minimization of total exergy loss of multicomponent distillation configurations. *AICHE Journal*, **2019**, 65, e16737	3.6	5
43	110th Anniversary: Thermal Coupling via Heat Transfer: A Potential Route to Simple Distillation Configurations with Lower Heat Duty. *Industrial & Engineering Chemistry Research*, **2019**, 58, 21671-21678	3.9	7
42	Lancet: Better Network Resilience by Designing for Pruned Failure Sets. *Proceedings of the ACM on Measurement and Analysis of Computing Systems*, **2019**, 3, 1-26	1.4	2
41	Minimum energy of multicomponent distillation systems using minimum additional heat and mass integration sections. *AICHE Journal*, **2018**, 64, 3410-3418	3.6	11
40	Deriving convex hulls through lifting and projection. *Mathematical Programming*, **2018**, 169, 377-415	2.1	10
39	A systematic method to synthesize all dividing wall columns for n-component separation: Part II. *AICHE Journal*, **2018**, 64, 660-672	3.6	22
38	A systematic method to synthesize all dividing wall columns for n-component separation Part I. *AICHE Journal*, **2018**, 64, 649-659	3.6	26

37	Optimal Multicomponent Distillation Column Sequencing: Software and Case Studies. *Computer Aided Chemical Engineering*, **2018**, 44, 223-228	0.6	2
36	Short-Cut Methods versus Rigorous Methods for Performance-Evaluation of Distillation Configurations. *Industrial & Engineering Chemistry Research*, **2018**, 57, 7726-7731	3.9	14
35	Simultaneous Convexification of Bilinear Functions over Polytopes with Application to Network Interdiction. *SIAM Journal on Optimization*, **2017**, 27, 1801-1833	2	6
34	Global optimization of multicomponent distillation configurations: 2. Enumeration based global minimization algorithm. *AICHE Journal*, **2016**, 62, 2071-2086	3.6	36
33	Thermal coupling links to liquid-only transfer streams: An enumeration method for new FTC dividing wall columns. *AICHE Journal*, **2016**, 62, 1200-1211	3.6	17
32	Economic and Policy Implications of Restricted Patch Distribution. *Management Science*, **2016**, 62, 3161-3182	3.9	11
31	Global optimization of nonconvex problems with multilinear intermediates. *Mathematical Programming Computation*, **2015**, 7, 1-37	7.8	29
30	Integrated Solar Thermal Hydrogen and Power Coproduction Process for Continuous Power Supply and Production of Chemicals. *Computer Aided Chemical Engineering*, **2015**, 37, 2291-2296	0.6	4
29	Round-the-clock power supply and a sustainable economy via synergistic integration of solar thermal power and hydrogen processes. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 15821-6	11.5	12
28	A New Framework for Combining a Condenser and Reboiler in a Configuration To Consolidate Distillation Columns. *Industrial & Engineering Chemistry Research*, **2015**, 54, 10449-10464	3.9	8
27	Modified basic distillation configurations with intermediate sections for energy savings. *AICHE Journal*, **2014**, 60, 1091-1097	3.6	5
26	Lifted inequalities for (0mathord {-}1) mixed-integer bilinear covering sets. *Mathematical Programming*, **2014**, 145, 403-450	2.1	2
25	Thermal coupling links to liquid-only transfer streams: A path for new dividing wall columns. *AICHE Journal*, **2014**, 60, 2949-2961	3.6	41
24	Synthesis of augmented biofuel processes using solar energy. *AICHE Journal*, **2014**, 60, 2533-2545	3.6	12
23	Global optimization of multicomponent distillation configurations: 1. Need for a reliable global optimization algorithm. *AICHE Journal*, **2013**, 59, 971-981	3.6	22
22	Explicit convex and concave envelopes through polyhedral subdivisions. *Mathematical Programming*, **2013**, 138, 531-577	2.1	47
21	D-tunes. *Computer Communication Review*, **2013**, 43, 483-484	1.4	0
20	Semidefinite relaxations for quadratically constrained quadratic programming: A review and comparisons. *Mathematical Programming*, **2011**, 129, 129-157	2.1	70

19	Multi-period maintenance scheduling of tree networks with minimum flow disruption. *Naval Research Logistics*, **2011**, 58, 507-530	1.5	6
18	Convexification Techniques for Linear Complementarity Constraints. *Lecture Notes in Computer Science*, **2011**, 336-348	0.9	7
17	Cloudward bound. *Computer Communication Review*, **2010**, 40, 243-254	1.4	75
16	Lifting inequalities: a framework for generating strong cuts for nonlinear programs. *Mathematical Programming*, **2010**, 121, 61-104	2.1	19
15	Strong valid inequalities for orthogonal disjunctions and bilinear covering sets. *Mathematical Programming*, **2010**, 124, 481-512	2.1	25
14	Multiterm polyhedral relaxations for nonconvex, quadratically constrained quadratic programs. *Optimization Methods and Software*, **2009**, 24, 485-504	1.3	65
13	Allocating Objects in a Network of Caches: Centralized and Decentralized Analyses. *Management Science*, **2009**, 55, 132-147	3.9	5
12	A polyhedral branch-and-cut approach to global optimization. *Mathematical Programming*, **2005**, 103, 225-249	2.1	843
11	Accelerating Branch-and-Bound through a Modeling Language Construct for Relaxation-Specific Constraints. *Journal of Global Optimization*, **2005**, 32, 259-280	1.5	27
10	Global optimization of mixed-integer nonlinear programs: A theoretical and computational study. *Mathematical Programming*, **2004**, 99, 563-591	2.1	377
9	A finite branch-and-bound algorithm for two-stage stochastic integer programs. *Mathematical Programming*, **2004**, 100, 355-377	2.1	140
8	Design of alternative refrigerants via global optimization. *AICHE Journal*, **2003**, 49, 1761-1775	3.6	84
7	Convex extensions and envelopes of lower semi-continuous functions. *Mathematical Programming*, **2002**, 93, 247-263	2.1	85
6	Product Disaggregation in Global Optimization and Relaxations of Rational Programs. *Optimization and Engineering*, **2002**, 3, 281-303	2.1	15
5	Global Optimization of 0-1 Hyperbolic Programs. *Journal of Global Optimization*, **2002**, 24, 385-416	1.5	42
4	Convexification and Global Optimization in Continuous and Mixed-Integer Nonlinear Programming. *Nonconvex Optimization and Its Applications*, **2002**,		329
3	Semidefinite Relaxations of Fractional Programs via Novel Convexification Techniques. *Journal of Global Optimization*, **2001**, 20, 133-154	1.5	88
2	Applications of global optimization to process and molecular design. *Computers and Chemical Engineering*, **2000**, 24, 2157-2169	4	39

1	A Lagrangian Approach to the Pooling Problem. *Industrial & Engineering Chemistry Research*, **1999**, 38, 1956-1972	3.9	101