# Stephen J Wright

List of Publications by Year
in descending order

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|---|---|---|---|
| **69**<br>papers | **8,043**<br>citations | 159585<br>**30**<br>h-index | 123424<br>**61**<br>g-index |
| **69**<br>all docs | **69**<br>docs citations | **69**<br>times ranked | **6725**<br>citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Adversarial classification via distributional robustness with Wasserstein ambiguity. Mathematical Programming, 2023, 198, 1411-1447. | 2.4 | 1 |
| 2 | A log-barrier Newton-CG method for bound constrained optimization with complexity guarantees. IMA Journal of Numerical Analysis, 2021, 41, 84-121. | 2.9 | 11 |
| 3 | A Low-Rank Schwarz Method for Radiative Transfer Equation With Heterogeneous Scattering Coefficient. Multiscale Modeling and Simulation, 2021, 19, 775-801. | 1.6 | 5 |
| 4 | Variable Smoothing for Weakly Convex Composite Functions. Journal of Optimization Theory and Applications, 2021, 188, 628-649. | 1.5 | 8 |
| 5 | Complexity of Proximal Augmented Lagrangian for Nonconvex Optimization with Nonlinear Equality Constraints. Journal of Scientific Computing, 2021, 86, 1. | 2.3 | 7 |
| 6 | Industrial, large-scale model predictive control with structured neural networks. Computers and Chemical Engineering, 2021, 150, 107291. | 3.8 | 24 |
| 7 | Parallelizing Subgradient Methods for the Lagrangian Dual in Stochastic Mixed-Integer Programming. INFORMS Journal on Optimization, 2021, 3, 1-22. | 1.4 | 0 |
| 8 | Graph-Guided Regularized Regression of Pacific Ocean Climate Variables to Increase Predictive Skill of Southwestern U.S. Winter Precipitation. Journal of Climate, 2021, 34, 737-754. | 3.2 | 8 |
| 9 | Trust-Region Newton-CG with Strong Second-Order Complexity Guarantees for Nonconvex Optimization. SIAM Journal on Optimization, 2021, 31, 518-544. | 2.0 | 11 |
| 10 | A Newton-CG algorithm with complexity guarantees for smooth unconstrained optimization. Mathematical Programming, 2020, 180, 451-488. | 2.4 | 25 |
| 11 | Randomness and permutations in coordinate descent methods. Mathematical Programming, 2020, 181, 349-376. | 2.4 | 6 |
| 12 | Random Sampling and Efficient Algorithms for Multiscale PDEs. SIAM Journal of Scientific Computing, 2020, 42, A2974-A3005. | 2.8 | 10 |
| 13 | Structured Random Sketching for PDE Inverse Problems. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 1742-1770. | 1.4 | 3 |
| 14 | Analyzing random permutations for cyclic coordinate descent. Mathematics of Computation, 2020, 89, 2217-2248. | 2.1 | 10 |
| 15 | Inexact Variable Metric Stochastic Block-Coordinate Descent for Regularized Optimization. Journal of Optimization Theory and Applications, 2020, 185, 151-187. | 1.5 | 0 |
| 16 | Randomized Sampling for Basis Function Construction in Generalized Finite Element Methods. Multiscale Modeling and Simulation, 2020, 18, 1153-1177. | 1.6 | 11 |
| 17 | Random permutations fix a worst case for cyclic coordinate descent. IMA Journal of Numerical Analysis, 2019, 39, 1246-1275. | 2.9 | 15 |
| 18 | Predicting kinase inhibitors using bioactivity matrix derived informer sets. PLoS Computational Biology, 2019, 15, e1006813. | 3.2 | 9 |

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|---|---------|-----|-----------|
| 19 | Inexact Successive quadratic approximation for regularized optimization. Computational Optimization and Applications, 2019, 72, 641-674. | 1.6 | 20 |
| 20 | Efficient optimization of natural resonance theory weightings and bond orders by gram–based convex programming. Journal of Computational Chemistry, 2019, 40, 2028-2035. | 3.3 | 91 |
| 21 | Efficient Convex Optimization for Linear MPC. Control Engineering, 2019, , 287-303. | 0.3 | 6 |
| 22 | Behavior of accelerated gradient methods near critical points of nonconvex functions. Mathematical Programming, 2019, 176, 403-427. | 2.4 | 11 |
| 23 | PMU Placement for Line Outage Identification via Multinomial Logistic Regression. IEEE Transactions on Smart Grid, 2018, 9, 122-131. | 9.0 | 50 |
| 24 | Computing Generalized Matrix Inverse on Spiking Neural Substrate. Frontiers in Neuroscience, 2018, 12, 115. | 2.8 | 5 |
| 25 | Complexity Analysis of Second-Order Line-Search Algorithms for Smooth Nonconvex Optimization. SIAM Journal on Optimization, 2018, 28, 1448-1477. | 2.0 | 31 |
| 26 | A Distributed Quasi-Newton Algorithm for Empirical Risk Minimization with Nonsmooth Regularization. , 2018, , . |  | 7 |
| 27 | Analyzing Vulnerability of Power Systems with Continuous Optimization Formulations. IEEE Transactions on Network Science and Engineering, 2016, 3, 132-146. | 6.4 | 42 |
| 28 | An S $$\ell _1$$ â„" 1 LP-active set approach for feasibility restoration in power systems. Optimization and Engineering, 2016, 17, 385-419. | 2.4 | 14 |
| 29 | A proximal method for composite minimization. Mathematical Programming, 2016, 158, 501-546. | 2.4 | 62 |
| 30 | Quadratic programming. Wiley Interdisciplinary Reviews: Computational Statistics, 2015, 7, 153-159. | 3.9 | 3 |
| 31 | Local Convergence of an Algorithm for Subspace Identification from Partial Data. Foundations of Computational Mathematics, 2015, 15, 1279-1314. | 2.5 | 35 |
| 32 | Coordinate descent algorithms. Mathematical Programming, 2015, 151, 3-34. | 2.4 | 805 |
| 33 | Solving Dynamic Programming Problems on a Computational Grid. Computational Economics, 2015, 45, 261-284. | 2.6 | 22 |
| 34 | Forward &#x2014; Backward greedy algorithms for signal demixing. , 2014, , . |  | 2 |
| 35 | Optimization Algorithms and Applications for Speech and Language Processing. IEEE Transactions on Audio Speech and Language Processing, 2013, 21, 2231-2243. | 3.2 | 20 |
| 36 | Optimization in learning and data analysis. , 2013, , . |  | 0 |

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|---|---------|-----|-----------|
| 37 | On GROUSE and incremental SVD. , 2013, , . | | 30 |
| 38 | Accelerated Block-coordinate Relaxation for Regularized Optimization. SIAM Journal on Optimization, 2012, 22, 159-186. | 2.0 | 46 |
| 39 | Inherently robust suboptimal nonlinear MPC: Theory and application. , 2011, , . | | 12 |
| 40 | Conditions under which suboptimal nonlinear MPC is inherently robust. Systems and Control Letters, 2011, 60, 747-755. | 2.3 | 100 |
| 41 | Partial enumeration MPC: Robust stability results and application to an unstable CSTR. Journal of Process Control, 2011, 21, 1459-1466. | 3.3 | 28 |
| 42 | Cooperative distributed model predictive control for nonlinear systems. Journal of Process Control, 2011, 21, 698-704. | 3.3 | 124 |
| 43 | Duality-based algorithms forÂtotal-variation-regularized image restoration. Computational Optimization and Applications, 2010, 47, 377-400. | 1.6 | 121 |
| 44 | Computational Methods for Sparse Solution of Linear Inverse Problems. Proceedings of the IEEE, 2010, 98, 948-958. | 21.3 | 786 |
| 45 | Cooperative distributed model predictive control. Systems and Control Letters, 2010, 59, 460-469. | 2.3 | 409 |
| 46 | An accelerated Newton method for equations with semismooth Jacobians and nonlinear complementarity problems. Mathematical Programming, 2009, 117, 355-386. | 2.4 | 17 |
| 47 | Data assimilation in weather forecasting: a case study in PDE-constrained optimization. Optimization and Engineering, 2009, 10, 409-426. | 2.4 | 50 |
| 48 | Distributed MPC Strategies With Application to Power System Automatic Generation Control. IEEE Transactions on Control Systems Technology, 2008, 16, 1192-1206. | 5.2 | 643 |
| 49 | Sparse reconstruction by separable approximation. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , . | 1.8 | 79 |
| 50 | LASSO-Patternsearch algorithm with application to ophthalmology and genomic data. Statistics and Its Interface, 2008, 1, 137-153. | 0.3 | 24 |
| 51 | Global optimization in protein docking using clustering, underestimation and semidefinite programming. Optimization Methods and Software, 2007, 22, 803-811. | 2.4 | 5 |
| 52 | Gradient Projection for Sparse Reconstruction: Application to Compressed Sensing and Other Inverse Problems. IEEE Journal on Selected Topics in Signal Processing, 2007, 1, 586-597. | 10.8 | 2,723 |
| 53 | Fast, large-scale model predictive control by partial enumeration. Automatica, 2007, 43, 852-860. | 5.0 | 101 |
| 54 | Elastic-mode algorithms for mathematical programs with equilibrium constraints: global convergence and stationarity properties. Mathematical Programming, 2007, 110, 337-371. | 2.4 | 54 |

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|---|---------|-----|-----------|
| 55 | Efficient schemes for robust IMRT treatment planning. Physics in Medicine and Biology, 2006, 51, 5621-5642. | 3.0 | 38 |
| 56 | Distributed Output Feedback MPC for Power System Control. , 2006, , . | | 38 |
| 57 | Active Set Identification in Nonlinear Programming. SIAM Journal on Optimization, 2006, 17, 577-605. | 2.0 | 31 |
| 58 | The empirical behavior of sampling methods for stochastic programming. Annals of Operations Research, 2006, 142, 215-241. | 4.1 | 285 |
| 59 | Linear programing formulations and algorithms for radiotherapy treatment planning. Optimization Methods and Software, 2006, 21, 201-231. | 2.4 | 15 |
| 60 | Simultaneous Variable Selection. Technometrics, 2005, 47, 349-363. | 1.9 | 252 |
| 61 | An Algorithm for Degenerate Nonlinear Programming with Rapid Local Convergence. SIAM Journal on Optimization, 2005, 15, 673-696. | 2.0 | 53 |
| 62 | Nonlinear Model Predictive Control via Feasibility-Perturbed Sequential Quadratic Programming. Computational Optimization and Applications, 2004, 28, 87-121. | 1.6 | 75 |
| 63 | Closed-loop behavior of nonlinear model predictive control. AICHE Journal, 2004, 50, 2142-2154. | 3.6 | 40 |
| 64 | Some properties of regularization and penalization schemes for MPECs. Optimization Methods and Software, 2004, 19, 527-556. | 2.4 | 147 |
| 65 | Decomposition Algorithms for Stochastic Programming on a Computational Grid. Computational Optimization and Applications, 2003, 24, 207-250. | 1.6 | 121 |
| 66 | Constraint identification and algorithm stabilization for degenerate nonlinear programs. Mathematical Programming, 2003, 95, 137-160. | 2.4 | 31 |
| 67 | Warm-Start Strategies in Interior-Point Methods for Linear Programming. SIAM Journal on Optimization, 2002, 12, 782-810. | 2.0 | 107 |
| 68 | Superlinear Convergence of an Interior-Point Method Despite Dependent Constraints. Mathematics of Operations Research, 2000, 25, 179-194. | 1.3 | 23 |
| 69 | A Superlinear Infeasible-Interior-Point Algorithm for Monotone Complementarity Problems. Mathematics of Operations Research, 1996, 21, 815-838. | 1.3 | 45 |