Alexander Shapiro

List of Publications by Year
in descending order

117 papers	13,889 citations	50276 46 h-index	33894 99 g-index
122 all docs	122 docs citations	122 times ranked	6514 citing authors

#	Article	IF	Citations
1	Dual Bounds for Periodical Stochastic Programs. Operations Research, 2023, 71, 120-128.	1.9	1
2	Risk-Averse Stochastic Programming: Time Consistency and Optimal Stopping. Operations Research, 2022, 70, 2439-2455.	1.9	5
3	Tutorial on risk neutral, distributionally robust and risk averse multistage stochastic programming. European Journal of Operational Research, 2021, 288, 1-13.	5.7	23
4	Testing Rank of Incomplete Unimodal Matrices. IEEE Signal Processing Letters, 2021, 28, 877-881.	3.6	2
5	On Characteristic Rank for Matrix and Tensor Completion [Lecture Notes]. IEEE Signal Processing Magazine, 2021, 38, 125-129.	5.6	0
6	Goodness-of-Fit Tests on Manifolds. IEEE Transactions on Information Theory, 2021, 67, 2539-2553.	2.4	2
7	Central limit theorem and sample complexity of stationary stochastic programs. Operations Research Letters, 2021, 49, 676-681.	0.7	0
8	Distributionally robust Optimal Control and MDP modeling. Operations Research Letters, 2021, 49, 809-814.	0.7	3
9	Mathematical Foundations of Distributionally Robust Multistage Optimization. SIAM Journal on Optimization, 2021, 31, 3044-3067.	2.0	8
10	Periodical Multistage Stochastic Programs. SIAM Journal on Optimization, 2020, 30, 2083-2102.	2.0	4
11	Technical Noteâ€"Time Inconsistency of Optimal Policies of Distributionally Robust Inventory Models. Operations Research, 2020, 68, 1576-1584.	1.9	12
12	Risk neutral reformulation approach to risk averse stochastic programming. European Journal of Operational Research, 2020, 286, 21-31.	5.7	6
13	Topology Optimization With Many Right-Hand Sides Using Mirror Descent Stochastic Approximationâ€"Reduction From Many to a Single Sample. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	4
14	Statistical Rank Selection for Incomplete Low-rank Matrices. , 2019, , .		2
15	Modeling time-dependent randomness in stochastic dual dynamic programming. European Journal of Operational Research, 2019, 273, 650-661.	5.7	41
16	Convergence Analysis of Sample Average Approximation of Two-Stage Stochastic Generalized Equations. SIAM Journal on Optimization, 2019, 29, 135-161.	2.0	43
17	Matrix Completion With Deterministic Pattern: A Geometric Perspective. IEEE Transactions on Signal Processing, 2019, 67, 1088-1103.	5.3	13
18	Statistical inference of semidefinite programming. Mathematical Programming, 2019, 174, 77-97.	2.4	6

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19	Modified Distribution-Free Goodness-of-Fit Test Statistic. Psychometrika, 2018, 83, 48-66.	2.1	12
20	A Central Limit Theorem and Hypotheses Testing for Risk-averse Stochastic Programs. SIAM Journal on Optimization, 2018, 28, 1337-1366.	2.0	5
21	Distributionally Robust Stochastic Programming. SIAM Journal on Optimization, 2017, 27, 2258-2275.	2.0	82
22	Interchangeability principle and dynamic equations in risk averse stochastic programming. Operations Research Letters, 2017, 45, 377-381.	0.7	16
23	When Friends Become Competitors: The Design of Resource Exchange Alliances. Management Science, 2017, 63, 2127-2145.	4.1	16
24	Differentiability Properties of Metric Projections onto Convex Sets. Journal of Optimization Theory and Applications, 2016, 169, 953-964.	1.5	11
25	Rectangular Sets of Probability Measures. Operations Research, 2016, 64, 528-541.	1.9	22
26	Risk neutral and risk averse approaches to multistage renewable investment planning under uncertainty. European Journal of Operational Research, 2016, 250, 979-989.	5.7	67
27	Minimal representation of insurance prices. Insurance: Mathematics and Economics, 2015, 62, 184-193.	1.2	15
28	Comment on the Asymptotics of a Distribution-Free Goodness of Fit Test Statistic. Psychometrika, 2015, 80, 196-199.	2.1	4
29	Comments on â€œQuantifying Adventitious Error in a Covariance Structure as a Random Effectâ€•by Hao Wu and Michael Browne. Psychometrika, 2015, 80, 611-612.	2.1	1
30	Lectures on Stochastic Programming: Modeling and Theory, Second Edition. , 2014, , .		390
31	Risk exposure and Lagrange multipliers of nonanticipativity constraints in multistage stochastic problems. Mathematical Methods of Operations Research, 2013, 77, 393-405.	1.0	1
32	Risk neutral and risk averse Stochastic Dual Dynamic Programming method. European Journal of Operational Research, 2013, 224, 375-391.	5.7	186
33	Worst-Case-Expectation Approach to Optimization Under Uncertainty. Operations Research, 2013, 61, 1435-1449.	1.9	26
34	Consistency of Sample Estimates of Risk Averse Stochastic Programs. Journal of Applied Probability, 2013, 50, 533-541.	0.7	17
35	Sample Average Approximation. , 2013, , 1350-1355.		17
36	Validation analysis of mirror descent stochastic approximation method. Mathematical Programming, 2012, 134, 425-458.	2.4	63

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37	Time consistency of dynamic risk measures. Operations Research Letters, 2012, 40, 436-439.	0.7	40
38	Bounds for nested law invariant coherent risk measures. Operations Research Letters, 2012, 40, 431-435.	0.7	8
39	Comments on: Stability in linear optimization and related topics. A personal tour. Top, 2012, 20, 261-264.	1.6	0
40	Minimax and risk averse multistage stochastic programming. European Journal of Operational Research, 2012, 219, 719-726.	5.7	60
41	Analysis of stochastic dual dynamic programming method. European Journal of Operational Research, 2011, 209, 63-72.	5.7	287
42	A dynamic programming approach to adjustable robust optimization. Operations Research Letters, 2011, 39, 83-87.	0.7	27
43	Augmented Lagrangians in semi-infinite programming. Mathematical Programming, 2009, 116, 499-512.	2.4	19
44	Sample Average Approximation Method for Chance Constrained Programming: Theory and Applications. Journal of Optimization Theory and Applications, 2009, 142, 399-416.	1.5	378
45	On a time consistency concept in risk averse multistage stochastic programming. Operations Research Letters, 2009, 37, 143-147.	0.7	124
46	Asymptotic normality of test statistics under alternative hypotheses. Journal of Multivariate Analysis, 2009, 100, 936-945.	1.0	7
47	Normal Versus Noncentral Chi-square Asymptotics of Misspecified Models. Multivariate Behavioral Research, 2009, 44, 803-827.	3.1	28
48	Semi-infinite programming, duality, discretization and optimality conditionsâ€. Optimization, 2009, 58, 133-161.	1.7	78
49	Asymptotics of minimax stochastic programs. Statistics and Probability Letters, 2008, 78, 150-157.	0.7	10
50	Stochastic mathematical programs with equilibrium constraints, modelling and sample average approximation. Optimization, 2008, 57, 395-418.	1.7	115
51	Solving Chance-Constrained Stochastic Programs via Sampling and Integer Programming. , 2008, , 261-269.		70
52	Convex Approximations of Chance Constrained Programs. SIAM Journal on Optimization, 2007, 17, 969-996.	2.0	787
53	Nonparametric estimation of concave production technologies by entropic methods. Journal of Applied Econometrics, 2007, 22, 795-816.	2.3	26
54	Coherent risk measures in inventory problems. European Journal of Operational Research, 2007, 182, 226-238.	5.7	166

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55	Stochastic programming approach to optimization under uncertainty. Mathematical Programming, 2007, 112, 183-220.	2.4	141
56	Scenario Approximations of Chance Constraints. , 2006, , 3-47.		95
57	Optimization of Convex Risk Functions. Mathematics of Operations Research, 2006, 31, 433-452.	1.3	335
58	Conditional Risk Mappings. Mathematics of Operations Research, 2006, 31, 544-561.	1.3	184
59	Simulation-based approach to estimation of latent variable models. Computational Statistics and Data Analysis, 2006, 51, 1243-1259.	1.2	6
60	On complexity of multistage stochastic programs. Operations Research Letters, 2006, 34, 1-8.	0.7	100
61	The empirical behavior of sampling methods for stochastic programming. Annals of Operations Research, 2006, 142, 215-241.	4.1	285
62	Worst-case distribution analysis of stochastic programs. Mathematical Programming, 2006, 107, 91-96.	2.4	22
63	Solving multistage asset investment problems by the sample average approximation method. Mathematical Programming, 2006, 108, 571-595.	2.4	28
64	A stochastic programming approach for supply chain network design under uncertainty. European Journal of Operational Research, 2005, 167, 96-115.	5.7	870
65	Differentiability and semismoothness properties of integral functions and their applications. Mathematical Programming, 2005, 102, 223-248.	2.4	27
66	On duality theory of convex semi-infinite programming. Optimization, 2005, 54, 535-543.	1.7	37
67	Sensitivity Analysis of Parameterized Variational Inequalities. Mathematics of Operations Research, 2005, 30, 109-126.	1.3	23
68	On Complexity of Stochastic Programming Problems. , 2005, , 111-146.		165
69	On a Class of Minimax Stochastic Programs. SIAM Journal on Optimization, 2004, 14, 1237-1249.	2.0	95
70	Title is missing!. Computational Optimization and Applications, 2003, 24, 289-333.	1.6	337
71	Inference of statistical bounds for multistage stochastic programming problems. Mathematical Methods of Operations Research, 2003, 58, 57-68.	1.0	74
72	Scheffe's method for constructing simultaneous confidence intervals subject to cone constraints. Statistics and Probability Letters, 2003, 64, 403-406.	0.7	4

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73	Stochastic Programming Models. Handbooks in Operations Research and Management Science, 2003, 10, 1-64.	0.6	229
74	Monte Carlo Sampling Methods. Handbooks in Operations Research and Management Science, 2003, 10, 353-425.	0.6	364
75	Minimax analysis of stochastic problems. Optimization Methods and Software, 2002, 17, 523-542.	2.4	168
76	The Sample Average Approximation Method for Stochastic Discrete Optimization. SIAM Journal on Optimization, 2002, 12, 479-502.	2.0	1,310
77	Statistical inference of minimum rank factor analysis. Psychometrika, 2002, 67, 79-94.	2.1	102
78	Conditioning of convex piecewise linear stochastic programs. Mathematical Programming, 2002, 94, 1-19.	2.4	49
79	Second-Order Optimality Conditions in Generalized Semi-Infinite Programming. Set-Valued and Variational Analysis, 2001, 9, 169-186.	0.5	29
80	On Duality Theory of Conic Linear Problems. Nonconvex Optimization and Its Applications, 2001, , 135-165.	0.1	163
81	The asymptotic bias of minimum trace factor analysis, with applications to the greatest lower bound to reliability. Psychometrika, 2000, 65, 413-425.	2.1	34
82	On the Rate of Convergence of Optimal Solutions of Monte Carlo Approximations of Stochastic Programs. SIAM Journal on Optimization, 2000, 11, 70-86.	2.0	194
83	Perturbation Analysis of Optimization Problems. , 2000, , .		1,387
84	Duality and Optimality Conditions. Profiles in Operations Research, 2000, , 67-110.	0.4	29
85	Second Order Optimality Conditions Based on Parabolic Second Order Tangent Sets. SIAM Journal on Optimization, 1999, 9, 466-492.	2.0	136
86	Finding Optimal Material Release Times Using Simulation-Based Optimization. Management Science, 1999, 45, 86-102.	4.1	63
87	A simulation-based approach to two-stage stochastic programming with recourse. Mathematical Programming, 1998, 81, 301-325.	2.4	187
88	Nondegeneracy and Quantitative Stability of Parameterized Optimization Problems with Multiple Solutions. SIAM Journal on Optimization, 1998, 8, 940-946.	2.0	19
89	Sensitivity Analysis of Optimization Problems Under Second Order Regular Constraints. Mathematics of Operations Research, 1998, 23, 806-831.	1.3	50
90	Optimization Problems with Perturbations: A Guided Tour. SIAM Review, 1998, 40, 228-264.	9.5	189

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91	On Uniqueness of Lagrange Multipliers in Optimization Problems Subject to Cone Constraints. SIAM Journal on Optimization, 1997, 7, 508-518.	2.0	30
92	First and second order analysis of nonlinear semidefinite programs. Mathematical Programming, 1997, 77, 301-320.	2.4	93
93	Simulation-based optimizationâ€"convergence analysis and statistical inference. Stochastic Models, 1996, 12, 425-454.	0.3	40
94	Directional differentiability of the optimal value function in convex semi-infinite programming. Mathematical Programming, 1995, 70, 149-157.	2.4	7
95	On Eigenvalue Optimization. SIAM Journal on Optimization, 1995, 5, 552-569.	2.0	92
96	On Lipschitzian Stability of Optimal Solutions of Parametrized Semi-Infinite Programs. Mathematics of Operations Research, 1994, 19, 743-752.	1.3	27
97	Asymptotic Behavior of Optimal Solutions in Stochastic Programming. Mathematics of Operations Research, 1993, 18, 829-845.	1.3	67
98	On optimal choice of reference parameters in the likelihood ratio method. , 1992, , .		2
99	Perturbation analysis of optimization problems in banach spaces. Numerical Functional Analysis and Optimization, 1992, 13, 97-116.	1.4	55
100	Asymptotic analysis of stochastic programs. Annals of Operations Research, 1991, 30, 169-186.	4.1	174
101	Optimization of static simulation models by the score function method. Mathematics and Computers in Simulation, 1990, 32, 373-392.	4.4	42
102	Asymptotic Properties of Statistical Estimators in Stochastic Programming. Annals of Statistics, 1989, 17, 841.	2.6	99
103	Perturbation theory of nonlinear programs when the set of optimal solutions is not a singleton. Applied Mathematics and Optimization, 1988, 18, 215-229.	1.6	38
104	Sensitivity Analysis of Nonlinear Programs and Differentiability Properties of Metric Projections. SIAM Journal on Control and Optimization, 1988, 26, 628-645.	2.1	113
105	Analysis of Covariance Structures under Elliptical Distributions. Journal of the American Statistical Association, 1987, 82, 1092-1097.	3.1	107
106	A Conjecture Related to Chi-Bar-Squared Distributions. American Mathematical Monthly, 1987, 94, 46-48.	0.3	5
107	Analysis of Covariance Structures Under Elliptical Distributions. Journal of the American Statistical Association, 1987, 82, 1092.	3.1	19
108	Asymptotic Theory of Overparameterized Structural Models. Journal of the American Statistical Association, 1986, 81, 142-149.	3.1	127

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109	Asymptotic Theory of Overparameterized Structural Models. Journal of the American Statistical Association, 1986, 81, 142.	3.1	35
110	Identifiability of factor analysis: some results and open problems. Linear Algebra and Its Applications, 1985, 70, 1-7.	0.9	60
111	Extremal problems on the set of nonnegative definite matrices. Linear Algebra and Its Applications, 1985, 67, 7-18.	0.9	35
112	On the multivariate asymptotic distribution of sequential Chi-square statistics. Psychometrika, 1985, 50, 253-263.	2.1	421
113	On the unsolvability of inverse eigenvalues problems almost everywhere. Linear Algebra and Its Applications, 1983, 49, 27-31.	0.9	10
114	Minimum rank and minimum trace of covariance matrices. Psychometrika, 1982, 47, 443-448.	2.1	37
115	Weighted minimum trace factor analysis. Psychometrika, 1982, 47, 243-264.	2.1	46
116	Rank-reducibility of a symmetric matrix and sampling theory of minimum trace factor analysis. Psychometrika, 1982, 47, 187-199.	2.1	83
117	Resource Exchange Seller Alliances. SSRN Electronic Journal, 0, , .	0.4	1