Anthony Man-Cho So

List of Publications by Year
in descending order

100 papers	5,323 citations	257357 24 h-index	168321 53 g-index
101 all docs	101 docs citations	101 times ranked	3801 citing authors

#	Article	IF	Citations
1	Adaptive coordinate sampling for stochastic primal–dual optimization. International Transactions in Operational Research, 2022, 29, 24-47.	1.8	0
2	Non-convex exact community recovery in stochastic block model. Mathematical Programming, 2022, 195, 1-37.	1.6	0
3	Probabilistic Simplex Component Analysis. IEEE Transactions on Signal Processing, 2022, 70, 582-599.	3.2	4
4	Local Strong Convexity of Source Localization and Error Bound for Target Tracking under Time-of-Arrival Measurements. IEEE Transactions on Signal Processing, 2022, 70, 190-201.	3.2	9
5	Maximum Flow Routing Strategy With Dynamic Link Allocation for Space Information Networks Under Transceiver Constraints. IEEE Transactions on Vehicular Technology, 2022, 71, 9993-10000.	3.9	3
6	SISAL Revisited. SIAM Journal on Imaging Sciences, 2022, 15, 591-624.	1.3	2
7	Voting-Based Multiagent Reinforcement Learning for Intelligent IoT. IEEE Internet of Things Journal, 2021, 8, 2681-2693.	5.5	7
8	Low-Cost Lipschitz-Independent Adaptive Importance Sampling of Stochastic Gradients. , 2021, , .		0
9	A Penalty Alternating Direction Method of Multipliers for Convex Composite Optimization Over Decentralized Networks. IEEE Transactions on Signal Processing, 2021, 69, 4282-4295.	3.2	8
10	Manifold Proximal Point Algorithms for Dual Principal Component Pursuit and Orthogonal Dictionary Learning. IEEE Transactions on Signal Processing, 2021, 69, 4759-4773.	3.2	4
11	An Efficient Alternating Direction Method for Graph Learning from Smooth Signals. , 2021, , .		7
12	Sparse High-Order Portfolios Via Proximal Dca And Sca. , 2021, , .		1
13	A Newton Tracking Algorithm With Exact Linear Convergence for Decentralized Consensus Optimization. IEEE Transactions on Signal and Information Processing Over Networks, 2021, 7, 346-358.	1.6	13
14	Weakly Convex Optimization over Stiefel Manifold Using Riemannian Subgradient-Type Methods. SIAM Journal on Optimization, 2021, 31, 1605-1634.	1.2	16
15	Proximal Gradient Method for Nonsmooth Optimization over the Stiefel Manifold. SIAM Journal on Optimization, 2020, 30, 210-239.	1.2	60
16	A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. IEEE Signal Processing Letters, 2020, 27, 1335-1339.	2.1	9
17	A Fast Proximal Point Algorithm for Generalized Graph Laplacian Learning. , 2020, , .		3
18	Understanding Notions of Stationarity in Nonsmooth Optimization: A Guided Tour of Various Constructions of Subdifferential for Nonsmooth Functions. IEEE Signal Processing Magazine, 2020, 37, 18-31.	4.6	20

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19	Nonconvex Optimization for Signal Processing and Machine Learning [From the Guest Editors]. IEEE Signal Processing Magazine, 2020, 37, 15-17.	4.6	4
20	A Penalty Alternating Direction Method of Multipliers for Decentralized Composite Optimization. , 2020, , .		0
21	An Efficient Augmented Lagrangian-Based Method for Linear Equality-Constrained Lasso. , 2020, , .		0
22	Nonconvex Robust Low-Rank Matrix Recovery. SIAM Journal on Optimization, 2020, 30, 660-686.	1.2	25
23	An Integrated Approach of Machine Learning and Systems Thinking for Waiting Time Prediction in an Emergency Department. International Journal of Medical Informatics, 2020, 139, 104143.	1.6	34
24	A Newton Tracking Algorithm with Exact Linear Convergence Rate for Decentralized Consensus Optimization. , 2020, , .		1
25	Dynamic Regret Bound for Moving Target Tracking Based on Online Time-of-Arrival Measurements. , 2020, , .		1
26	Another Look at Anonymous Communication. IEEE Transactions on Dependable and Secure Computing, 2019, 16, 731-742.	3.7	10
27	Quadratic optimization with orthogonality constraint: explicit Åojasiewicz exponent and linear convergence of retraction-based line-search and stochastic variance-reduced gradient methods. Mathematical Programming, 2019, 178, 215-262.	1.6	28
28	Fast First-order Methods for the Massive Robust Multicast Beamforming Problem with Interference Temperature Constraints. , 2019, , .		0
29	Globally Convergent Accelerated Proximal Alternating Maximization Method for L1-Principal Component Analysis. , 2019, , .		5
30	A Framework for One-Bit and Constant-Envelope Precoding Over Multiuser Massive MISO Channels. IEEE Transactions on Signal Processing, 2019, 67, 5309-5324.	3.2	66
31	Phase Retrieval via Sensor Network Localization. Journal of the Operations Research Society of China, 2019, 7, 127-146.	0.9	2
32	On the Quadratic Convergence of the Cubic Regularization Method under a Local Error Bound Condition. SIAM Journal on Optimization, 2019, 29, 904-932.	1.2	10
33	Manifold Proximal Point Algorithms for Dual Principal Component Pursuit and Orthogonal Dictionary Learning. , 2019, , .		2
34	A family of inexact SQA methods for non-smooth convex minimization with provable convergence guarantees based on the Luoâ€"Tseng error bound property. Mathematical Programming, 2019, 174, 327-358.	1.6	21
35	Online Nonlinear AUC Maximization for Imbalanced Data Sets. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 882-895.	7.2	33
36	Geolocation of Unknown Emitters Using Tdoa of Path Rays Through the Ionosphere by Multiple Coordinated Distant Receivers. , 2018, , .		6

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37	LPA-SD: An Efficient First-Order Method for Single-Group Multicast Beamforming. , 2018, , .		2
38	Minimum Symbol Error Rate-Based Constant Envelope Precoding for Multiuser Massive Miso Downlink. , 2018, , .		11
39	Mixed-Integer Semidefinite Relaxation of Joint Admission Control and Beamforming: An SOC-Based Outer Approximation Approach with Provable Guarantees. , 2018, , .		4
40	A unified approach to error bounds for structured convex optimization problems. Mathematical Programming, 2017, 165, 689-728.	1.6	101
41	Semidefinite Relaxation and Approximation Analysis of a Beamformed Alamouti Scheme for Relay Beamforming Networks. IEEE Transactions on Signal Processing, 2017, 65, 2428-2443.	3.2	4
42	Unraveling the Rank-One Solution Mystery of Robust MISO Downlink Transmit Optimization: A Verifiable Sufficient Condition via a New Duality Result. IEEE Transactions on Signal Processing, 2017, 65, 1909-1924.	3.2	16
43	SDR approximation bounds for the robust multicast beamforming problem with interference temperature constraints. , 2017, , .		3
44	Non-asymptotic convergence analysis of inexact gradient methods for machine learning without strong convexity. Optimization Methods and Software, 2017, 32, 963-992.	1.6	15
45	Distributionally Robust Collaborative Beamforming in D2D Relay Networks With Interference Constraints. IEEE Transactions on Wireless Communications, 2017, 16, 5048-5060.	6.1	12
46	On the Estimation Performance and Convergence Rate of the Generalized Power Method for Phase Synchronization. SIAM Journal on Optimization, 2017, 27, 2426-2446.	1.2	35
47	LDPC code design for Gaussian multiple-access channels using dynamic EXIT chart analysis. , 2017, , .		5
48	Scalable and Flexible Multiview MAX-VAR Canonical Correlation Analysis. IEEE Transactions on Signal Processing, 2017, 65, 4150-4165.	3.2	34
49	Local strong convexity of maximum-likelihood TDOA-Based source localization and its algorithmic implications. , 2017, , .		9
50	A discrete first-order method for large-scale MIMO detection with provable guarantees. , 2017, , .		17
51	Scalable and flexible Max-Var generalized canonical correlation analysis via alternating optimization. , 2017, , .		1
52	Another Look at Anonymous Communication. Lecture Notes in Computer Science, 2017, , 56-82.	1.0	1
53	A semidefinite relaxation approach to the geolocation of two unknown co-channel emitters by a cluster of formation-flying satellites using both TDOA and FDOA measurements. , 2016, , .		1
54	Robust Relay Beamforming in Device-to-Device Networks with Energy Harvesting Constraints. , 2016, , .		7

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55	Distributionally Robust Relay Beamforming in Wireless Communications. , 2016, , .		1
56	A Stochastic Beamformed Amplify-and-Forward Scheme in a Multigroup Multicast MIMO Relay Network with Per-Antenna Power Constraints. IEEE Transactions on Wireless Communications, 2016, , 1-1.	6.1	16
57	Low-Rank Semidefinite Programming: Theory and Applications. Foundations and TrendsÂ® in Optimization, 2016, 2, 1-156.	7.2	21
58	A polynomial optimization approach for robust beamforming design in a device-to-device two-hop one-way relay network. , 2016, , .		3
59	A Robust Design for MISO Physical-Layer Multicasting Over Line-of-Sight Channels. IEEE Signal Processing Letters, 2016, 23, 939-943.	2.1	25
60	Robust Convex Approximation Methods for TDOA-Based Localization Under NLOS Conditions. IEEE Transactions on Signal Processing, 2016, 64, 3281-3296.	3.2	140
61	A perturbation inequality for concave functions of singular values and its applications in low-rank matrix recovery. Applied and Computational Harmonic Analysis, 2016, 40, 396-416.	1.1	12
62	Stochastic amplify-and-forward schemes for multigroup multicast transmission in a distributed relay network. , 2015, , .		4
63	A beamformed alamouti amplify-and-forward scheme in multigroup multicast cloud-relay networks. , 2015, , .		6
64	Rank-Two Beamforming and Stochastic Beamforming for MISO Physical-Layer Multicasting with Finite-Alphabet Inputs. IEEE Signal Processing Letters, 2015, 22, 1614-1618.	2.1	6
65	Latent Aspect Mining via Exploring Sparsity and Intrinsic Information. , 2014, , .		10
66	Distributionally robust chance-constrained transmit beamforming for multiuser MISO downlink. , 2014, , .		21
67	Robust transmit designs for an energy harvesting multicast system. , 2014, , .		18
68	Robust beamforming in two-way relay networks: Quartically perturbed chance constrained formulation and tractable approximation. , 2014, , .		1
69	Outage Constrained Robust Transmit Optimization for Multiuser MISO Downlinks: Tractable Approximations by Conic Optimization. IEEE Transactions on Signal Processing, 2014, 62, 5690-5705.	3.2	507
70	Robust artificial noise-aided transmit optimization for achieving secrecy and energy harvesting. , 2014, , .		21
71	A Safe Approximation Approach to Secrecy Outage Design for MIMO Wiretap Channels. IEEE Signal Processing Letters, 2014, 21, 118-121.	2.1	40
72	Hardness and Approximation Results for L_p-Ball Constrained Homogeneous Polynomial Optimization Problems. Mathematics of Operations Research, 2014, 39, 1084-1108.	0.8	6

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73	Physical-Layer Multicasting by Stochastic Transmit Beamforming and Alamouti Space-Time Coding. IEEE Transactions on Signal Processing, 2013, 61, 4230-4245.	3.2	130
74	Distributionally Robust Slow Adaptive OFDMA with Soft QoS via Linear Programming. IEEE Journal on Selected Areas in Communications, 2013, 31, 947-958.	9.7	27
75	Multi-group multicast beamforming in cognitive radio networks via rank-two transmit beamformed Alamouti space-time coding. , 2013, , .		15
76	Beyond convex relaxation: A polynomial-time non-convex optimization approach to network localization. , 2013, , .		31
77	Linear Matrix Inequalities with Stochastically Dependent Perturbations and Applications to Chance-Constrained Semidefinite Optimization. SIAM Journal on Optimization, 2012, 22, 1394-1430.	1.2	23
78	Rank-two transmit beamformed Alamouti space-time coding for physical-layer multicasting. , 2012, , .		33
79	Safe convex approximation to outage-based MISO secrecy rate optimization under imperfect CSI and with artificial noise. , 2011, , .		33
80	Optimal Spectrum Sharing in MIMO Cognitive Radio Networks via Semidefinite Programming. IEEE Journal on Selected Areas in Communications, 2011, 29, 362-373.	9.7	130
81	Probabilistic SINR constrained robust transmit beamforming: A Bernstein-type inequality based conservative approach. , 2011, , .		62
82	Moment inequalities for sums of random matrices and their applications in optimization. Mathematical Programming, 2011, 130, 125-151.	1.6	44
83	Deterministic approximation algorithms for sphere constrained homogeneous polynomial optimization problems. Mathematical Programming, 2011, 129, 357-382.	1.6	41
84	Cheap semidefinite relaxation MIMO detection using row-by-row block coordinate descent. , 2011, , .		21
85	Probabilistic Analysis of the Semidefinite Relaxation Detector in Digital Communications. , 2010, , .		14
86	Universal Rigidity and Edge Sparsification for Sensor Network Localization. SIAM Journal on Optimization, 2010, 20, 3059-3081.	1.2	29
87	Universal Rigidity: Towards Accurate and Efficient Localization of Wireless Networks. , 2010, , .		32
88	Semidefinite Relaxation of Quadratic Optimization Problems. IEEE Signal Processing Magazine, 2010, 27, 20-34.	4.6	2,486
89	Slow Adaptive OFDMA Systems Through Chance Constrained Programming. IEEE Transactions on Signal Processing, 2010, 58, 3858-3869.	3.2	85
90	Probabilistic analysis of semidefinite relaxation detectors for multiple-input, multiple-output systems. , 2009, , 166-191.		4

#	ARTICLE	IF	CITATIONS
91	On the performance of semidefinite relaxation MIMO detectors for QAM constellations. , 2009, , .		5
92	Stochastic Combinatorial Optimization with Controllable Risk Aversion Level. Mathematics of Operations Research, 2009, 34, 522-537.	0.8	10
93	A Unified Theorem on SDP Rank Reduction. Mathematics of Operations Research, 2008, 33, 910-920.	0.8	48
94	Theory of semidefinite programming for Sensor Network Localization. Mathematical Programming, 2007, 109, 367-384.	1.6	226
95	On approximating complex quadratic optimization problems via semidefinite programming relaxations. Mathematical Programming, 2007, 110, 93-110.	1.6	153
96	Pari-Mutuel Markets: Mechanisms and Performance. , 2007, , 82-95.		12
97	Stochastic Mechanism Design. , 2007, , 269-280.		2
98	A semidefinite programming approach to tensegrity theory and realizability of graphs. , 2006, , .		15
99	On Solving Coverage Problems in a Wireless Sensor Network Using Voronoi Diagrams. Lecture Notes in Computer Science, 2005, , 584-593.	1.0	59
100	Supporting group communication among interacting agents in wireless sensor networks. , 0, , .		3