

Ion Necoară

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7708787/publications.pdf>

Version: 2024-02-01

68
papers

1,406
citations

393982

19
h-index

344852

36
g-index

69
all docs

69
docs citations

69
times ranked

877
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of a Smoothing Technique to Decomposition in Convex Optimization. IEEE Transactions on Automatic Control, 2008, 53, 2674-2679.	3.6	125
2	Parallel and distributed optimization methods for estimation and control in networks. Journal of Process Control, 2011, 21, 756-766.	1.7	100
3	Linear convergence of first order methods for non-strongly convex optimization. Mathematical Programming, 2019, 175, 69-107.	1.6	98
4	Random Coordinate Descent Algorithms for Multi-Agent Convex Optimization Over Networks. IEEE Transactions on Automatic Control, 2013, 58, 2001-2012.	3.6	80
5	Rate Analysis of Inexact Dual First-Order Methods Application to Dual Decomposition. IEEE Transactions on Automatic Control, 2014, 59, 1232-1243.	3.6	72
6	Computational Complexity of Inexact Gradient Augmented Lagrangian Methods: Application to Constrained MPC. SIAM Journal on Control and Optimization, 2014, 52, 3109-3134.	1.1	62
7	Efficient parallel coordinate descent algorithm for convex optimization problems with separable constraints: Application to distributed MPC. Journal of Process Control, 2013, 23, 243-253.	1.7	60
8	Faster Randomized Block Kaczmarz Algorithms. SIAM Journal on Matrix Analysis and Applications, 2019, 40, 1425-1452.	0.7	58
9	A random coordinate descent algorithm for optimization problems with composite objective function and linear coupled constraints. Computational Optimization and Applications, 2014, 57, 307-337.	0.9	55
10	Interior-Point Lagrangian Decomposition Method for Separable Convex Optimization. Journal of Optimization Theory and Applications, 2009, 143, 567-588.	0.8	53
11	On linear convergence of a distributed dual gradient algorithm for linearly constrained separable convex problems. Automatica, 2015, 55, 209-216.	3.0	50
12	Efficient random coordinate descent algorithms for large-scale structured nonconvex optimization. Journal of Global Optimization, 2015, 61, 19-46.	1.1	50
13	Parallel Random Coordinate Descent Method for Composite Minimization: Convergence Analysis and Error Bounds. SIAM Journal on Optimization, 2016, 26, 197-226.	1.2	43
14	Improved Dual Decomposition Based Optimization for DSL Dynamic Spectrum Management. IEEE Transactions on Signal Processing, 2010, 58, 2230-2245.	3.2	40
15	Every Continuous Nonlinear Control System Can be Obtained by Parametric Convex Programming. IEEE Transactions on Automatic Control, 2008, 53, 1963-1967.	3.6	33
16	Random Block Coordinate Descent Methods for Linearly Constrained Optimization over Networks. Journal of Optimization Theory and Applications, 2017, 173, 227-254.	0.8	33
17	An Inexact Perturbed Path-Following Method for Lagrangian Decomposition in Large-Scale Separable Convex Optimization. SIAM Journal on Optimization, 2013, 23, 95-125.	1.2	32
18	Distributed nonlinear optimal control using sequential convex programming and smoothing techniques. , 2009, , .		23

#	ARTICLE	IF	CITATIONS
19	Randomized Projection Methods for Convex Feasibility: Conditioning and Convergence Rates. SIAM Journal on Optimization, 2019, 29, 2814-2852.	1.2	21
20	Stabilization of max-plus-linear systems using model predictive control: The unconstrained case. Automatica, 2008, 44, 971-981.	3.0	19
21	Iteration complexity analysis of dual first-order methods for conic convex programming. Optimization Methods and Software, 2016, 31, 645-678.	1.6	19
22	Application of the proximal center decomposition method to distributed model predictive control. , 2008, , .		17
23	Finite-Horizon Min-Max Control of Max-Plus-Linear Systems. IEEE Transactions on Automatic Control, 2007, 52, 1088-1093.	3.6	16
24	Inverse parametric convex programming problems via convex liftings. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2489-2494.	0.4	16
25	An adaptive constraint tightening approach to linear model predictive control based on approximation algorithms for optimization. Optimal Control Applications and Methods, 2015, 36, 648-666.	1.3	16
26	Computational complexity certification for dual gradient method: Application to embedded MPC. Systems and Control Letters, 2015, 81, 49-56.	1.3	16
27	Random Coordinate Descent Methods for ℓ_1 Regularized Convex Optimization. IEEE Transactions on Automatic Control, 2015, 60, 1811-1824.	3.6	16
28	Complexity of first-order inexact Lagrangian and penalty methods for conic convex programming. Optimization Methods and Software, 2019, 34, 305-335.	1.6	16
29	Adaptive inexact fast augmented Lagrangian methods for constrained convex optimization. Optimization Letters, 2017, 11, 609-626.	0.9	15
30	Constructive Solution of Inverse Parametric Linear/Quadratic Programming Problems. Journal of Optimization Theory and Applications, 2017, 172, 623-648.	0.8	15
31	Model predictive control for uncertain max-min-plus-scaling systems. International Journal of Control, 2008, 81, 701-713.	1.2	14
32	H_2 Model Reduction of Linear Network Systems by Moment Matching and Optimization. IEEE Transactions on Automatic Control, 2020, 65, 5328-5335.	3.6	14
33	Stable Model Predictive Control for Constrained Max-Plus-Linear Systems. Discrete Event Dynamic Systems: Theory and Applications, 2007, 17, 329-354.	0.6	13
34	On the lifting problems and their connections with piecewise affine control law design. , 2014, , .		12
35	Fast inexact decomposition algorithms for large-scale separable convex optimization. Optimization, 2016, 65, 325-356.	1.0	12
36	Path-following gradient-based decomposition algorithms for separable convex optimization. Journal of Global Optimization, 2014, 59, 59-80.	1.1	9

#	ARTICLE	IF	CITATIONS
37	Iteration complexity of an inexact augmented Lagrangian method for constrained MPC. , 2012, , .		8
38	On the Convergence of Inexact Projection Primal First-Order Methods for Convex Minimization. IEEE Transactions on Automatic Control, 2018, 63, 3317-3329.	3.6	7
39	Random Minibatch Subgradient Algorithms for Convex Problems with Functional Constraints. Applied Mathematics and Optimization, 2019, 80, 801-833.	0.8	6
40	Fast primal-dual projected linear iterations for distributed consensus in constrained convex optimization. , 2010, , .		4
41	A random coordinate descent method for large-scale resource allocation problems. , 2012, , .		4
42	Distributed model predictive control of leader-follower systems using an interior point method with efficient computations. , 2013, , .		4
43	General Convergence Analysis of Stochastic First-Order Methods for Composite Optimization. Journal of Optimization Theory and Applications, 2021, 189, 66-95.	0.8	4
44	Model reduction with pole-zero placement and high order moment matching. Automatica, 2022, 138, 110140.	3.0	4
45	A proximal center-based decomposition method for multi-agent convex optimization. , 2008, , .		2
46	Suboptimal distributed MPC based on a block-coordinate descent method with feasibility and stability guarantees. , 2012, , .		2
47	On fully distributed dual first order methods for convex network optimization 1 1The research leading to these results has received funding from: UEFISCDI Romania, project TE - MoCOBiDS, no. 176/01.10.2015; University Politehnica of Bucharest, through the Excellence Research Grants Program (UPBâ€™GEX 2016), no. 89/26.09.2016.. IFAC-PapersOnLine, 2017, 50, 2788-2793.	0.5	2
48	Randomized sketch descent methods for non-separable linearly constrained optimization. IMA Journal of Numerical Analysis, 2021, 41, 1056-1092.	1.5	2
49	Structural Properties of Helbing's Traffic Flow Model. Transportation Research Record, 2004, 1883, 21-30.	1.0	1
50	Penalty decomposition method for solving ℓ_1 regularized problems: Application to trend filtering. , 2014, , .		1
51	A proximal alternating minimization method for ℓ_1 -regularized nonlinear optimization problems: application to state estimation. , 2014, , .		1
52	A fully distributed dual gradient method with linear convergence for large-scale separable convex problems. , 2015, , .		1
53	Rate of convergence analysis of a dual fast gradient method for general convex optimization. , 2015, , .		1
54	Distributed and parallel random coordinate descent methods for huge convex programming over networks. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
55	Random Coordinate Descent Methods for Sparse Optimization: Application to Sparse Control. , 2015, , .		1
56	Parallel and distributed random coordinate descent method for convex error bound minimization. , 2015, , .		1
57	Primal and dual first order methods for SVM: applications to driver monitoring. , 2018, , .		1
58	Random minibatch projection algorithms for convex feasibility problems. , 2019, , .		1
59	Composite convex optimization with global and local inexact oracles. Computational Optimization and Applications, 2020, 76, 69-124.	0.9	1
60	Minibatch stochastic subgradient-based projection algorithms for feasibility problems with convex inequalities. Computational Optimization and Applications, 2021, 80, 121-152.	0.9	1
61	Stochastic block projection algorithms with extrapolation for convex feasibility problems. Optimization Methods and Software, 0, , 1-31.	1.6	1
62	Feasible distributed MPC scheme for network systems based on an inexact dual gradient method. , 2013, , .		0
63	A scalable moment matching-based model reduction technique of linear networks 1 1The research leading to these results has received funding from UEFISCDI Romania, project TE - MoCOBiDS, no. 176/01.10.2015.. IFAC-PapersOnLine, 2017, 50, 8232-8237.	0.5	0
64	On convergence of inexact projection gradient method for strongly convex minimization. , 2017, , .		0
65	Local linear convergence of stochastic higher-order methods for convex optimization. , 2021, , .		0
66	Random coordinate descent methods for non-separable composite optimization. , 2021, , .		0
67	Linear Convergence of Random Dual Coordinate Descent on Nonpolyhedral Convex Problems. Mathematics of Operations Research, 2022, 47, 2641-2666.	0.8	0
68	Optimal H2 Moment Matching-Based Model Reduction for Linear Systems through (Non)convex Optimization. Mathematics, 2022, 10, 1765.	1.1	0