Aleksandr Y Aravkin

List of Publications by Year
in descending order

68	4,115	279798 23	168389 53
papers	citations	h-index	g-index

70	70	70	2780
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. Lancet, The, 2021, 398, 1700-1712.	13.7	2,234
2	Estimating global and regional disruptions to routine childhood vaccine coverage during the COVID-19 pandemic in 2020: a modelling study. Lancet, The, 2021, 398, 522-534.	13.7	232
3	Estimating the cause-specific relative risks of non-optimal temperature on daily mortality: a two-part modelling approach applied to the Global Burden of Disease Study. Lancet, The, 2021, 398, 685-697.	13.7	147
4	Measuring the availability of human resources for health and its relationship to universal health coverage for 204 countries and territories from 1990 to 2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet, The, 2022, 399, 2129-2154.	13.7	91
5	A Unified Framework for Sparse Relaxed Regularized Regression: SR3. IEEE Access, 2019, 7, 1404-1423.	4.2	90
6	Fast randomized full-waveform inversion with compressive sensing. Geophysics, 2012, 77, A13-A17.	2.6	85
7	Total Variation Regularization Strategies in Full-Waveform Inversion. SIAM Journal on Imaging Sciences, 2018, 11, 376-406.	2.2	84
8	Generalized Kalman smoothing: Modeling and algorithms. Automatica, 2017, 86, 63-86.	5.0	80
9	Parental education and inequalities in child mortality: a global systematic review and meta-analysis. Lancet, The, 2021, 398, 608-620.	13.7	80
10	A Unified Sparse Optimization Framework to Learn Parsimonious Physics-Informed Models From Data. IEEE Access, 2020, 8, 169259-169271.	4.2	75
11	Efficient matrix completion for seismic data reconstruction. Geophysics, 2015, 80, V97-V114.	2.6	74
12	An $ell _{1}$-Laplace Robust Kalman Smoother. IEEE Transactions on Automatic Control, 2011, 56, 2898-2911.	5.7	70
13	Sparse Principal Component Analysis via Variable Projection. SIAM Journal on Applied Mathematics, 2020, 80, 977-1002.	1.8	65
14	Estimating nuisance parameters in inverse problems. Inverse Problems, 2012, 28, 115016.	2.0	57
15	Trimmed Constrained Mixed Effects Models: Formulations and Algorithms. Journal of Computational and Graphical Statistics, 2021, 30, 544-556.	1.7	50
16	Robust inversion, dimensionality reduction, and randomized sampling. Mathematical Programming, 2012, 134, 101-125.	2.4	49
17	Fast Methods for Denoising Matrix Completion Formulations, with Applications to Robust Seismic Data Interpolation. SIAM Journal of Scientific Computing, 2014, 36, S237-S266.	2.8	49
18	Promoting global stability in data-driven models of quadratic nonlinear dynamics. Physical Review Fluids, 2021, 6, .	2.5	44

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19	Robust EM kernel-based methods for linear system identification. Automatica, 2016, 67, 114-126.	5.0	37
20	Data-Driven Aerospace Engineering: Reframing the Industry with Machine Learning. AIAA Journal, 0, , 1-26.	2.6	37
21	Patterns of acute bilirubin encephalopathy in Nigeria: a multicenter pre-intervention study. Journal of Perinatology, 2018, 38, 873-880.	2.0	36
22	Robust and Trend-Following Student's t Kalman Smoothers. SIAM Journal on Control and Optimization, 2014, 52, 2891-2916.	2.1	30
23	Dimensionality reduction and reduced-order modeling for traveling wave physics. Theoretical and Computational Fluid Dynamics, 2020, 34, 385-400.	2.2	28
24	Variational Properties of Value Functions. SIAM Journal on Optimization, 2013, 23, 1689-1717.	2.0	25
25	Efficient Quadratic Penalization Through the Partial Minimization Technique. IEEE Transactions on Automatic Control, 2018, 63, 2131-2138.	5.7	23
26	Level-set methods for convex optimization. Mathematical Programming, 2019, 174, 359-390.	2.4	21
27	A general family of trimmed estimators for robust high-dimensional data analysis. Electronic Journal of Statistics, 2018, 12, .	0.7	17
28	Cost-effectiveness of HPV vaccination in 195 countries: A meta-regression analysis. PLoS ONE, 2021, 16, e0260808.	2.5	16
29	Trimmed Statistical Estimation via Variance Reduction. Mathematics of Operations Research, 2020, 45, 292-322.	1.3	14
30	Robust and Trend-following Kalman Smoothers using Student's t*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1215-1220.	0.4	12
31	Sparse mean-reverting portfolios via penalized likelihood optimization. Automatica, 2020, 111, 108651.	5.0	11
32	Stable and robust LQR design via scenario approach. Automatica, 2021, 129, 109571.	5.0	11
33	Life Expectancy for White, Black, and Hispanic Race/Ethnicity in U.S. States: Trends and Disparities, 1990 to 2019. Annals of Internal Medicine, 2022, 175, 1057-1064.	3.9	11
34	Orthogonal Matching Pursuit for Sparse Quantile Regression. , 2014, , .		10
35	Basis Pursuit Denoise With Nonsmooth Constraints. IEEE Transactions on Signal Processing, 2019, 67, 5811-5823.	5.3	9
36	Variable Projection for NonSmooth Problems. SIAM Journal of Scientific Computing, 2021, 43, S249-S268.	2.8	8

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37	Time-Varying Autoregression with Low-Rank Tensors. SIAM Journal on Applied Dynamical Systems, 2021, 20, 2335-2358.	1.6	8
38	Generalized System Identification with Stable Spline Kernels. SIAM Journal of Scientific Computing, 2018, 40, B1419-B1443.	2.8	7
39	Fast robust methods for singular state-space models. Automatica, 2019, 105, 399-405.	5.0	6
40	Adapting Regularized Low-Rank Models for Parallel Architectures. SIAM Journal of Scientific Computing, 2019, 41, A163-A189.	2.8	6
41	Relax-and-split method for nonconvex inverse problems. Inverse Problems, 2020, 36, 095013.	2.0	6
42	Cost-effectiveness of rotavirus vaccination in children under five years of age in 195 countries: A meta-regression analysis. Vaccine, 2022, 40, 3903-3917.	3.8	6
43	Dynamic matrix factorization with social influence. , 2016, , .		5
44	Preliminary Results in Current Profile Estimation and Doppler-aided Navigation for Autonomous Underwater Gliders. , 2019, , .		5
45	Offline state estimation for hybrid systems via nonsmooth variable projection. Automatica, 2020, 115, 108871.	5.0	5
46	Robust and Scalable Methods for the Dynamic Mode Decomposition. SIAM Journal on Applied Dynamical Systems, 2022, 21, 60-79.	1.6	5
47	Beating Level-Set Methods for 5-D Seismic Data Interpolation: A Primal-Dual Alternating Approach. IEEE Transactions on Computational Imaging, 2017, 3, 264-274.	4.4	4
48	A Relaxed Optimization Approach for Cardinality-Constrained Portfolios. , 2019, , .		4
49	A Proximal Quasi-Newton Trust-Region Method for Nonsmooth Regularized Optimization. SIAM Journal on Optimization, 2022, 32, 900-929.	2.0	4
50	Mean Reverting Portfolios via Penalized OU-Likelihood Estimation. , 2018, , .		3
51	Robust trimmed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mi>k</mml:mi></mml:math>-means. Pattern Recognition Letters, 2022, 161, 9-16.	4.2	3
52	Beyond L2-loss functions for learning sparse models. , 2016, , .		2
53	Boosting as a kernel-based method. Machine Learning, 2019, 108, 1951-1974.	5.4	2
54	Simultaneous-shot inversion for PDE-constrained optimization problems with missing data. Inverse Problems, 2019, 35, 025003.	2.0	2

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55	Efficient Robust Parameter Identification in Generalized Kalman Smoothing Models. IEEE Transactions on Automatic Control, 2020, , 1-1.	5.7	2
56	Algorithms for Block Tridiagonal Systems: Stability Results for Generalized Kalman Smoothing. IFAC-PapersOnLine, 2021, 54, 821-826.	0.9	2
57	Learning Brain Dynamics With Coupled Low-Dimensional Nonlinear Oscillators and Deep Recurrent Networks. Neural Computation, 2021, 33, 2087-2127.	2.2	2
58	$ell _{1}$-Norm Minimization With Regula Falsi Type Root Finding Methods. IEEE Signal Processing Letters, 2021, 28, 2132-2136.	3.6	2
59	A Nonconvex Optimization Approach to IMRT Planning with Doseâ€“Volume Constraints. INFORMS Journal on Computing, 2022, 34, 1366-1386.	1.7	2
60	Learning Robust Representations for Computer Vision. , 2017, , .		1
61	Estimating health care delivery system value for each US state and testing key associations. Health Services Research, 2021, , .	2.0	1
62	Global mortality burden attributable to non-optimal temperatures â€“ Authorsâ€™ reply. Lancet, The, 2022, 399, 1113-1114.	13.7	1
63	A stable spline convex approach to hybrid systems identification. , 2016, , .		0
64	Relaxation algorithms for matrix completion, with applications to seismic travel-time data interpolation. Inverse Problems, 2019, 35, 105009.	2.0	0
65	On the Global Minimizers of Real Robust Phase Retrieval With Sparse Noise. IEEE Transactions on Information Theory, 2021, 67, 1886-1896.	2.4	0
66	Estimating Shape Parameters of Piecewise Linear-Quadratic Problems. Open Journal of Mathematical Optimization, 0, 2, 1-18.	0.0	0
67	Mean Reverting Portfolios via Penalized OU-Likelihood Estimation. SSRN Electronic Journal, 0, , .	0.4	0
68	LQR Design under Stability Constraints. IFAC-PapersOnLine, 2020, 53, 5556-5560.	0.9	0