

Kim Batselier

List of Publications by Year in descending order

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Version: 2024-02-01

44
papers

417
citations

758635

12
h-index

794141

19
g-index

44
all docs

44
docs citations

44
times ranked

313
citing authors

#	ARTICLE	IF	CITATIONS
1	Tensor Network alternating linear scheme for MIMO Volterra system identification. Automatica, 2017, 84, 26-35.	3.0	45
2	Fast and Accurate Tensor Completion With Total Variation Regularized Tensor Trains. IEEE Transactions on Image Processing, 2020, 29, 6918-6931.	6.0	32
3	Tensor Computation: A New Framework for High-Dimensional Problems in EDA. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 521-536.	1.9	29
4	A Tensor Network Kalman filter with an application in recursive MIMO Volterra system identification. Automatica, 2017, 84, 17-25.	3.0	27
5	A Constructive Algorithm for Decomposing a Tensor into a Finite Sum of Orthonormal Rank-1 Terms. SIAM Journal on Matrix Analysis and Applications, 2015, 36, 1315-1337.	0.7	20
6	Parallelized Tensor Train Learning of Polynomial Classifiers. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4621-4632.	7.2	20
7	A constructive arbitrary-degree Kronecker product decomposition of tensors. Numerical Linear Algebra With Applications, 2017, 24, e2097.	0.9	19
8	Back to the Roots: Polynomial System Solving, Linear Algebra, Systems Theory. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1203-1208.	0.4	18
9	Computing Low-Rank Approximations of Large-Scale Matrices with the Tensor Network Randomized SVD. SIAM Journal on Matrix Analysis and Applications, 2018, 39, 1221-1244.	0.7	18
10	Matrix output extension of the tensor network Kalman filter with an application in MIMO Volterra system identification. Automatica, 2018, 95, 413-418.	3.0	17
11	Tensor network subspace identification of polynomial state space models. Automatica, 2018, 95, 187-196.	3.0	15
12	Symmetric tensor decomposition by an iterative eigendecomposition algorithm. Journal of Computational and Applied Mathematics, 2016, 308, 69-82.	1.1	13
13	Multidimensional realisation theory and polynomial system solving. International Journal of Control, 2018, 91, 2692-2704.	1.2	13
14	Kernelized support tensor train machines. Pattern Recognition, 2022, 122, 108337.	5.1	13
15	The Geometry of Multivariate Polynomial Division and Elimination. SIAM Journal on Matrix Analysis and Applications, 2013, 34, 102-125.	0.7	11
16	On the null spaces of the Macaulay matrix. Linear Algebra and Its Applications, 2014, 460, 259-289.	0.4	11
17	Nonlinear system identification with regularized Tensor Network B-splines. Automatica, 2020, 122, 109300.	3.0	11
18	A fast recursive orthogonalization scheme for the Macaulay matrix. Journal of Computational and Applied Mathematics, 2014, 267, 20-32.	1.1	8

#	ARTICLE	IF	CITATIONS
19	A geometrical approach to finding multivariate approximate LCMs and GCDs. Linear Algebra and Its Applications, 2013, 438, 3618-3628.	0.4	7
20	Faster tensor train decomposition for sparse data. Journal of Computational and Applied Mathematics, 2022, 405, 113972.	1.1	7
21	Low-Rank Tensor Decompositions for Nonlinear System Identification: A Tutorial with Examples. IEEE Control Systems, 2022, 42, 54-74.	1.0	7
22	Prediction Error Method Identification is an Eigenvalue Problem. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 221-226.	0.4	6
23	The Canonical Decomposition of \mathcal{C}^n_d and Numerical Gröbner and Border Bases. SIAM Journal on Matrix Analysis and Applications, 2014, 35, 1242-1264.	0.7	6
24	A novel linear algebra method for the determination of periodic steady states of nonlinear oscillators. , 2014, , .		6
25	An Efficient Two-level DC Operating Points Finder for Transistor Circuits. , 2014, , .		5
26	A tensor-based volterra series black-box nonlinear system identification and simulation framework. , 2016, , .		5
27	An efficient homotopy-based Poincaré-Lindstedt method for the periodic steady-state analysis of nonlinear autonomous oscillators. , 2017, , .		5
28	MERACLE: Constructive Layer-Wise Conversion of a Tensor Train into a MERA. Communications on Applied Mathematics and Computation, 2021, 3, 257-279.	0.7	3
29	Alternating Linear Scheme in a Bayesian Framework for Low-Rank Tensor Approximation. SIAM Journal of Scientific Computing, 2022, 44, A1116-A1144.	1.3	3
30	STORM: A nonlinear model order reduction method via symmetric tensor decomposition. , 2016, , .		2
31	Computing the state difference equations for discrete overdetermined linear m systems. Automatica, 2016, 64, 254-261.	3.0	2
32	Tensor-network-based predistorter design for multiple-input multiple-output nonlinear systems. , 2017, , .		2
33	Multilinear state space system identification with matrix product operators. IFAC-PapersOnLine, 2018, 51, 640-645.	0.5	2
34	Deep Model Compression and Inference Speedup of Sum-Product Networks on Tensor Trains. IEEE Transactions on Neural Networks and Learning Systems, 2019, 31, 1-7.	7.2	2
35	Extended Kalman Filtering with Low-Rank Tensor Networks for MIMO Volterra System Identification. , 2019, , .		2
36	Limit Cycle Identification in Nonlinear Polynomial Systems. Applied Mathematics, 2013, 04, 19-26.	0.1	2

#	ARTICLE	IF	CITATIONS
37	Maximum likelihood and polynomial system solving. , 2010, , .		1
38	STAVES: Speedy tensor-aided Volterra-based electronic simulator. , 2015, , .		1
39	Enforcing symmetry in tensor network MIMO Volterra identification. IFAC-PapersOnLine, 2021, 54, 469-474.	0.5	1
40	An adaptive dynamical low-rank tensor approximation scheme for fast circuit simulation. , 2015, , .		0
41	Inverse multivariate polynomial root-finding: Numerical implementations of the affine and projective Buchbergerâ€™MÃ¶ller algorithm. Journal of Computational and Applied Mathematics, 2017, 320, 15-29.	1.1	0
42	A novel tensor-based model compression method via tucker and tensor train decompositions. , 2017, , .		0
43	Sparse Tensor Network System Identification for Nonlinear Circuit Macromodeling. , 2018, , .		0
44	Tensor Network Kalman Filter for LTI Systems. , 2019, , .		0