

Stefan Gärttel

List of Publications by Year in descending order

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papers

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430442

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43
all docs

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docs citations

43
times ranked

695
citing authors

#	ARTICLE	IF	CITATIONS
1	A spectral-in-time Newton-Krylov method for nonlinear PDE-constrained optimization. IMA Journal of Numerical Analysis, 2022, 42, 1478-1499.	1.5	6
2	Calculating elements of matrix functions using divided differences. Computer Physics Communications, 2022, 271, 108219.	3.0	1
3	A Hamiltonian decomposition for fast interior-point solvers in model predictive control. Automatica, 2021, 133, 109833.	3.0	1
4	Algorithms for the Rational Approximation of Matrix-Valued Functions. SIAM Journal of Scientific Computing, 2021, 43, A3033-A3054.	1.3	14
5	A Comparison of Limited-memory Krylov Methods for Stieltjes Functions of Hermitian Matrices. SIAM Journal on Matrix Analysis and Applications, 2021, 42, 83-107.	0.7	8
6	A fast sorting-based aggregation method for symbolic time series representation. , 2021, , .		0
7	Topical Issue Applied and Numerical Linear Algebra (2/2). GAMM Mitteilungen, 2020, 43, e202000021.	2.7	3
8	The Block Rational Arnoldi Method. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 365-388.	0.7	9
9	ABBA: adaptive Brownian bridge-based symbolic aggregation of time series. Data Mining and Knowledge Discovery, 2020, 34, 1175-1200.	2.4	16
10	A block rational Krylov method for 3-D time-domain marine controlled-source electromagnetic modelling. Geophysical Journal International, 2019, 218, 100-114.	1.0	19
11	A Hamiltonian Decomposition-based Splitting Method for Interior Point Solvers in Model Predictive Control. , 2019, , .		1
12	Conversions between barycentric, RKFUN, and Newton representations of rational interpolants. Linear Algebra and Its Applications, 2019, 576, 246-257.	0.4	8
13	Preface to the Proceedings of ILAS 2017: Connections, Twenty-first Conference of the International Linear Algebra Society, Iowa State University, 24-28 July 2017. Linear Algebra and Its Applications, 2019, 576, 1-4.	0.4	0
14	A Nonlinear ParaExp Algorithm. Lecture Notes in Computational Science and Engineering, 2018, , 261-270.	0.1	4
15	A rational deferred correction approach to parabolic optimal control problems. IMA Journal of Numerical Analysis, 2018, 38, 1861-1892.	1.5	8
16	Scabies in residential care homes: Modelling, inference and interventions for well-connected population sub-units. PLoS Computational Biology, 2018, 14, e1006046.	1.5	19
17	The nonlinear eigenvalue problem. Acta Numerica, 2017, 26, 1-94.	6.3	128
18	The RKFIT Algorithm for Nonlinear Rational Approximation. SIAM Journal of Scientific Computing, 2017, 39, A2049-A2071.	1.3	51

#	ARTICLE	IF	CITATIONS
19	Parallelization of the Rational Arnoldi Algorithm. <i>SIAM Journal of Scientific Computing</i> , 2017, 39, S197-S221.	1.3	8
20	Scaled and Squared Subdiagonal Padé Approximation for the Matrix Exponential. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2016, 37, 145-170.	0.7	5
21	Near-Optimal Perfectly Matched Layers for Indefinite Helmholtz Problems. <i>SIAM Review</i> , 2016, 58, 90-116.	4.2	42
22	Zolotarev Quadrature Rules and Load Balancing for the FEAST Eigensolver. <i>SIAM Journal of Scientific Computing</i> , 2015, 37, A2100-A2122.	1.3	53
23	Detecting and reducing redundancy in alarm networks. , 2015, , .		2
24	Three-dimensional transient electromagnetic modelling using Rational Krylov methods. <i>Geophysical Journal International</i> , 2015, 202, 2025-2043.	1.0	53
25	Generalized Rational Krylov Decompositions with an Application to Rational Approximation. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2015, 36, 894-916.	0.7	49
26	Convergence of Restarted Krylov Subspace Methods for Stieltjes Functions of Matrices. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2014, 35, 1602-1624.	0.7	29
27	NLEIGS: A Class of Fully Rational Krylov Methods for Nonlinear Eigenvalue Problems. <i>SIAM Journal of Scientific Computing</i> , 2014, 36, A2842-A2864.	1.3	60
28	Some observations on weighted GMRES. <i>Numerical Algorithms</i> , 2014, 67, 733-752.	1.1	14
29	Efficient and Stable Arnoldi Restarts for Matrix Functions Based on Quadrature. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2014, 35, 661-683.	0.7	61
30	PARAEXP: A Parallel Integrator for Linear Initial-Value Problems. <i>SIAM Journal of Scientific Computing</i> , 2013, 35, C123-C142.	1.3	71
31	Robust Padé Approximation via SVD. <i>SIAM Review</i> , 2013, 55, 101-117.	4.2	79
32	A black-box rational Arnoldi variant for Cauchy–Stieltjes matrix functions. <i>BIT Numerical Mathematics</i> , 2013, 53, 595-616.	1.0	37
33	Rational Krylov approximation of matrix functions: Numerical methods and optimal pole selection. <i>GAMM Mitteilungen</i> , 2013, 36, 8-31.	2.7	102
34	A Parallel Overlapping Time-Domain Decomposition Method for ODEs. <i>Lecture Notes in Computational Science and Engineering</i> , 2013, , 459-466.	0.1	7
35	Convergence of Linear Barycentric Rational Interpolation for Analytic Functions. <i>SIAM Journal on Numerical Analysis</i> , 2012, 50, 2560-2580.	1.1	25
36	Superlinear convergence of the rational Arnoldi method for the approximation of matrix functions. <i>Numerische Mathematik</i> , 2012, 121, 205-236.	0.9	20

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37	Coupling methods for heat transfer and heat flow: Operator splitting and the parareal algorithm. <i>Journal of Mathematical Analysis and Applications</i> , 2012, 388, 873-887.	0.5	8
38	Deflated Restarting for Matrix Functions. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2011, 32, 621-641.	0.7	41
39	Automated parameter selection for rational Arnoldi approximation of Markov functions. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2011, 11, 15-18.	0.2	10
40	On the Convergence of Rational Ritz Values. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2010, 31, 1740-1774.	0.7	17
41	Implementation of a restarted Krylov subspace method for the evaluation of matrix functions. <i>Linear Algebra and Its Applications</i> , 2008, 429, 2293-2314.	0.4	67
42	An efficient aggregation method for the symbolic representation of temporal data. <i>ACM Transactions on Knowledge Discovery From Data</i> , 0, , .	2.5	0
43	Model order reduction of layered waveguides via rational Krylov fitting. <i>BIT Numerical Mathematics</i> , 0, , .	1.0	0