Giuseppe Rodriguez

List of Publications by Year
in descending order

70	1,387	361413 20	361022 35
papers	citations	h-index	g-index

72	72	72	785
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Regularized minimal-norm solution of an overdetermined system of first kind integral equations. Numerical Algorithms, 2023, 92, 471-502.	1.9	4
2	A doubly relaxed minimal-norm Gaussâ€“Newton method for underdetermined nonlinear least-squares problems. Applied Numerical Mathematics, 2022, 171, 233-248.	2.1	11
3	Scorepochs: A Computer-Aided Scoring Tool for Resting-State M/EEG Epochs. Sensors, 2022, 22, 2853.	3.8	2
4	On the block Lanczos and block Golubâ€“Kahan reduction methods applied to discrete illâ€posed problems. Numerical Linear Algebra With Applications, 2021, 28, e2376.	1.6	5
5	Chained graphs and some applications. Applied Network Science, 2021, 6, .	1.5	3
6	Iterative Methods for the Computation of the Perron Vector of Adjacency Matrices. Mathematics, 2021, 9, 1522.	2.2	1
7	Block matrix models for dynamic networks. Applied Mathematics and Computation, 2021, 402, 126121.	2.2	3
8	Identifying the lights position in photometric stereo under unknown lighting. , 2021, , .		2
9	Minimal-norm RKHS solution of an integral model in geo-electromagnetism. , 2021, , .		3
10	A spectral method for bipartizing a network and detecting a large anti-community. Journal of Computational and Applied Mathematics, 2020, 373, 112306.	2.0	9
11	FDEMtools: a MATLAB package for FDEM data inversion. Numerical Algorithms, 2020, 84, 1313-1327.	1.9	13
12	Solution of second kind Fredholm integral equations by means of Gauss and anti-Gauss quadrature rules. Numerische Mathematik, 2020, 146, 699-728.	1.9	8
13	Inversion of Multiconfiguration Complex EMI Data with Minimum Gradient Support Regularization: A Case Study. Mathematical Geosciences, 2020, 52, 945-970.	2.4	15
14	PQser: a Matlab package for spectral seriation. Numerical Algorithms, 2019, 80, 879-902.	1.9	8
15	Recovering the electrical conductivity of the soil via a linear integral model. Journal of Computational and Applied Mathematics, 2019, 352, 132-145.	2.0	6
16	Geophysical investigations unravel the vestiges of ancient meandering channels and their dynamics in tidal landscapes. Scientific Reports, 2018, 8, 1708.	3.3	23
17	Parameter determination for Tikhonov regularization problems in general form. Journal of Computational and Applied Mathematics, 2018, 343, 12-25.	2.0	32
18	Smooth and Sparse Inversion of EMI Data from Multi-Configuration Measurements. , 2018, , .		4

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19	Fast and accurate computation of orthogonal moments for texture analysis. Pattern Recognition, 2018, 83, 498-510.	8.1	28
20	Calibrating electromagnetic induction conductivities with time-domain reflectometry measurements. Hydrology and Earth System Sciences, 2018, 22, 1509-1523.	4.9	27
21	GCV for Tikhonov regularization by partial SVD. BIT Numerical Mathematics, 2017, 57, 1019-1039.	2.0	40
22	GCV for Tikhonov regularization via global Golubâ€“Kahan decomposition. Numerical Linear Algebra With Applications, 2016, 23, 467-484.	1.6	37
23	A rational Arnoldi process with applications. Numerical Linear Algebra With Applications, 2016, 23, 1007-1022.	1.6	6
24	On the Lanczos and Golubâ€“Kahan reduction methods applied to discrete illâ€posed problems. Numerical Linear Algebra With Applications, 2016, 23, 187-204.	1.6	9
25	New block quadrature rules for the approximation of matrix functions. Linear Algebra and Its Applications, 2016, 502, 299-326.	0.9	13
26	Regularized Inversion of Multi-Frequency EM Data in Geophysical Applications. SEMA SIMAI Springer Series, 2016, , 357-369.	0.7	6
27	Recent improvements in photometric stereo for rock art 3D imaging. Digital Applications in Archaeology and Cultural Heritage, 2015, 2, 132-139.	1.3	2
28	Bounding matrix functionals via partial global block Lanczos decomposition. Applied Numerical Mathematics, 2015, 94, 127-139.	2.1	21
29	Energy and exergy analysis of a geothermal heat pump air conditioning system. Applied Thermal Engineering, 2015, 86, 333-347.	6.0	29
30	Regularization parameter determination for discrete ill-posed problems. Journal of Computational and Applied Mathematics, 2015, 273, 132-149.	2.0	34
31	Regularized solution of a nonlinear problem in electromagnetic sounding. Inverse Problems, 2014, 30, 125014.	2.0	29
32	Two-Dimensional TSVD to Enhance the Spatial Resolution of Radiometer Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 2450-2458.	6.3	63
33	Analysis of directed networks via partial singular value decomposition and Gauss quadrature. Linear Algebra and Its Applications, 2014, 456, 93-121.	0.9	11
34	Old and new parameter choice rules for discrete ill-posed problems. Numerical Algorithms, 2013, 63, 65-87.	1.9	149
35	Block Gauss and Anti-Gauss Quadrature with Application to Networks. SIAM Journal on Matrix Analysis and Applications, 2013, 34, 1655-1684.	1.4	38
36	Network Analysis via Partial Spectral Factorization and Gauss Quadrature. SIAM Journal of Scientific Computing, 2013, 35, A2046-A2068.	2.8	27

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37	2D TSVD to enhance the resolution of radiometer data. , 2012, , .		8
38	smt: a Matlab toolbox for structured matrices. Numerical Algorithms, 2012, 59, 639-659.	1.9	13
39	Numerical solution of the nonlinear SchrÃ¶dinger equation, starting from the scattering data. Calcolo, 2011, 48, 75-88.	1.1	16
40	Numerical solution of the Helmholtz equation in an infinite strip by Wienerâ€Hopf factorization. Numerical Methods for Partial Differential Equations, 2010, 26, 1247-1274.	3.6	2
41	A fast solver for linear systems with displacement structure. Numerical Algorithms, 2010, 55, 529-556.	1.9	16
42	Error estimates for the regularization of least squares problems. Numerical Algorithms, 2009, 51, 61-76.	1.9	51
43	Error estimates for large-scale ill-posed problems. Numerical Algorithms, 2009, 51, 341-361.	1.9	28
44	Error estimates for linear systems with applications to regularization. Numerical Algorithms, 2008, 49, 85-104.	1.9	57
45	An adaptive pruning algorithm for the discrete L-curve criterion. Journal of Computational and Applied Mathematics, 2007, 198, 483-492.	2.0	141
46	Fast Solution of Toeplitzâ€•and Cauchyâ€Like Leastâ€Squares Problems. SIAM Journal on Matrix Analysis and Applications, 2006, 28, 724-748.	1.4	14
47	Fast superoptimal preconditioning of multiindex Toeplitz matrices. Linear Algebra and Its Applications, 2006, 418, 576-590.	0.9	4
48	Fast computation of two-level circulant preconditioners. Numerical Algorithms, 2006, 41, 275-295.	1.9	4
49	An Algorithm for Solving Toeplitz Systems by Embedding in Infinite Systems. , 2005, , 383-401.		0
50	A New Technique for Ill-Conditioned Linear Systems. Numerical Algorithms, 2003, 33, 433-442.	1.9	14
51	Multi-parameter regularization techniques for ill-conditioned linear systems. Numerische Mathematik, 2003, 94, 203-228.	1.9	76
52	Semi-infinite multi-index perturbed block Toeplitz systems. Linear Algebra and Its Applications, 2003, 366, 459-482.	0.9	3
53	Spectral factorization of bi-infinite multi-index block Toeplitz matrices. Linear Algebra and Its Applications, 2002, 343-344, 355-380.	0.9	9
54	On the Cholesky Factorization of the Gram Matrix of Multivariate Functions. SIAM Journal on Matrix Analysis and Applications, 2000, 22, 501-526.	1.4	12

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55	Extrapolation techniques for ill-conditioned linear systems. Numerische Mathematik, 1998, 81, 1-29.	1.9	40
56	On the limiting profile arising from orthonormalizing shifts of exponentially decaying functions. IMA Journal of Numerical Analysis, 1998, 18, 331-354.	2.9	8
57	Spectral factorization of Laurent polynomials. Advances in Computational Mathematics, 1997, 7, 429-454.	1.6	55
58	LDU factorization results for bi-infinite and semi-infinite scalar and block Toeplitz matrices. Calcolo, 1996, 33, 307-335.	1.1	12
59	On the Cholesky factorization of the Gram matrix of locally supported functions. BIT Numerical Mathematics, 1995, 35, 233-257.	2.0	12
60	Orthogonal splines based on B-splines â€" with applications to least squares, smoothing and regularisation problems. Numerical Algorithms, 1993, 5, 25-40.	1.9	18
61	Approximation methods for the finite moment problem. Numerical Algorithms, 1993, 5, 391-405.	1.9	3
62	On the numerical inversion of the Laplace transform in reproducing kernel Hilbert spaces. IMA Journal of Numerical Analysis, 1993, 13, 463-475.	2.9	8
63	On the solution of the finite moment problem. Journal of Mathematical Analysis and Applications, 1992, 171, 321-333.	1.0	5
64	On the numerical inversion of the Laplace transform with boundary constraints. , 1992, , 155-165.		2
65	An algorithm for computing minimum norm solutions of finite moment problem. , 1990, , 361-368.		2
66	Numerical solution of the finite moment problem in a reproducing kernel Hilbert space. Journal of Computational and Applied Mathematics, 1990, 33, 233-244.	2.0	12
67	Numerical solution of the finite moment problem in a reproducing kernel Hilbert space. Journal of Computational and Applied Mathematics, 1990, 3, 233-244.	2.0	1
68	Image segmentation by texture analysis. , 0, , .		0
69	Identifying the magnetic permeability in multi-frequency EM data inversion. Electronic Transactions on Numerical Analysis, 0, 27, 1-17.	0.0	9
70	The minimal-norm Gauss-Newton method and some of its regularized variants. Electronic Transactions on Numerical Analysis, 0, 53, 459-480.	0.0	11