

Luca Dieci

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4128474/publications.pdf>

Version: 2024-02-01

59
papers

1,380
citations

361413

20
h-index

345221

36
g-index

62
all docs

62
docs citations

62
times ranked

662
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Computation of Lyapunov Exponents for Continuous Dynamical Systems. SIAM Journal on Numerical Analysis, 1997, 34, 402-423.	2.3	162
2	On Smooth Decompositions of Matrices. SIAM Journal on Matrix Analysis and Applications, 1999, 20, 800-819.	1.4	149
3	Sliding Motion in Filippov Differential Systems: Theoretical Results and a Computational Approach. SIAM Journal on Numerical Analysis, 2009, 47, 2023-2051.	2.3	81
4	Lyapunov Spectral Intervals: Theory and Computation. SIAM Journal on Numerical Analysis, 2002, 40, 516-542.	2.3	75
5	A survey of numerical methods for IVPs of ODEs with discontinuous right-hand side. Journal of Computational and Applied Mathematics, 2012, 236, 3967-3991.	2.0	74
6	Numerical Calculation of Invariant Tori. SIAM Journal on Scientific and Statistical Computing, 1991, 12, 607-647.	1.5	59
7	Computational Techniques for Real Logarithms of Matrices. SIAM Journal on Matrix Analysis and Applications, 1996, 17, 570-593.	1.4	56
8	Lyapunov and Sacker's Spectral Intervals. Journal of Dynamics and Differential Equations, 2007, 19, 265-293.	1.9	53
9	Sliding motion on discontinuity surfaces of high co-dimension. A construction for selecting a Filippov vector field. Numerische Mathematik, 2011, 117, 779-811.	1.9	50
10	Computation of Invariant Tori by the Method of Characteristics. SIAM Journal on Numerical Analysis, 1995, 32, 1436-1474.	2.3	49
11	On the error in computing Lyapunov exponents by QR Methods. Numerische Mathematik, 2005, 101, 619-642.	1.9	38
12	Padé approximation for the exponential of a block triangular matrix. Linear Algebra and Its Applications, 2000, 308, 183-202.	0.9	36
13	Perturbation Theory for Approximation of Lyapunov Exponents by QR Methods. Journal of Dynamics and Differential Equations, 2006, 18, 815-840.	1.9	34
14	Exponential dichotomy on the real line: SVD and QR methods. Journal of Differential Equations, 2010, 248, 287-308.	2.2	27
15	Computation of orthonormal factors for fundamental solution matrices. Numerische Mathematik, 1999, 83, 599-620.	1.9	26
16	Smoothness and Periodicity of Some Matrix Decompositions. SIAM Journal on Matrix Analysis and Applications, 2001, 22, 772-792.	1.4	25
17	Jacobian Free Computation of Lyapunov Exponents. Journal of Dynamics and Differential Equations, 2002, 14, 697-717.	1.9	25
18	On the Error in QR Integration. SIAM Journal on Numerical Analysis, 2008, 46, 1166-1189.	2.3	23

#	ARTICLE	IF	CITATIONS
19	The Moments Sliding Vector Field on the Intersection of Two Manifolds. Journal of Dynamics and Differential Equations, 2017, 29, 169-201.	1.9	22
20	Numerical Techniques for Approximating Lyapunov Exponents and Their Implementation. Journal of Computational and Nonlinear Dynamics, 2011, 6, .	1.2	21
21	A comparison of Filippov sliding vector fields in codimension 2. Journal of Computational and Applied Mathematics, 2014, 262, 161-179.	2.0	19
22	Detecting exponential dichotomy on the real line: SVD and QR algorithms. BIT Numerical Mathematics, 2011, 51, 555-579.	2.0	18
23	Numerical solution of discontinuous differential systems: Approaching the discontinuity surface from one side. Applied Numerical Mathematics, 2013, 67, 98-110.	2.1	18
24	Point-to-Periodic and Periodic-to-Periodic Connections. BIT Numerical Mathematics, 2004, 44, 41-62.	2.0	17
25	Block M-Matrices and Computation of Invariant Tori. SIAM Journal on Scientific and Statistical Computing, 1992, 13, 885-903.	1.5	16
26	Regularizing Piecewise Smooth Differential Systems: Co-Dimension 2 Discontinuity Surface. Journal of Dynamics and Differential Equations, 2013, 25, 71-94.	1.9	15
27	Preserving monotonicity in the numerical solution of Riccati differential equations. Numerische Mathematik, 1996, 74, 35-47.	1.9	14
28	Lyapunov-type numbers and torus breakdown: numerical aspects and a case study. Numerical Algorithms, 1997, 14, 79-102.	1.9	13
29	Singular values of two-parameter matrices: an algorithm to accurately find their intersections. Mathematics and Computers in Simulation, 2008, 79, 1255-1269.	4.4	13
30	Two-Parameter SVD: Coalescing Singular Values and Periodicity. SIAM Journal on Matrix Analysis and Applications, 2009, 31, 375-403.	1.4	13
31	Solution of the Systems Associated with Invariant Tori Approximation. II: Multigrid Methods. SIAM Journal of Scientific Computing, 1994, 15, 1375-1400.	2.8	11
32	Hermitian matrices depending on three parameters: Coalescing eigenvalues. Linear Algebra and Its Applications, 2012, 436, 4120-4142.	0.9	10
33	One-sided direct event location techniques in the numerical solution of discontinuous differential systems. BIT Numerical Mathematics, 2015, 55, 987-1003.	2.0	10
34	Conditioning of the Exponential of a Block Triangular Matrix. Numerical Algorithms, 2001, 28, 137-150.	1.9	9
35	Approximating Coalescing Points for Eigenvalues of Hermitian Matrices of Three Parameters. SIAM Journal on Matrix Analysis and Applications, 2013, 34, 519-541.	1.4	9
36	On real logarithms of nearby matrices and structured matrix interpolation. Applied Numerical Mathematics, 1999, 29, 145-165.	2.1	8

#	ARTICLE	IF	CITATIONS
37	A geometrical method for the approximation of invariant tori. Journal of Computational and Applied Mathematics, 2008, 216, 388-412.	2.0	8
38	The boundary method for semi-discrete optimal transport partitions and Wasserstein distance computation. Journal of Computational and Applied Mathematics, 2019, 353, 318-344.	2.0	8
39	Real hamiltonian logarithm of a symplectic matrix. Linear Algebra and Its Applications, 1998, 281, 227-246.	0.9	7
40	Entropy Dissipation Semi-Discretization Schemes for Fokker-Planck Equations. Journal of Dynamics and Differential Equations, 2019, 31, 765-792.	1.9	7
41	Piecewise smooth systems near a co-dimension 2 discontinuity manifold: Can one say what should happen?. Discrete and Continuous Dynamical Systems - Series S, 2016, 9, 1039-1068.	1.1	7
42	A new model for realistic random perturbations of stochastic oscillators. Journal of Differential Equations, 2016, 261, 2502-2527.	2.2	6
43	Continuation of Singular Value Decompositions. Mediterranean Journal of Mathematics, 2005, 2, 179-203.	0.8	4
44	Lyapunov Exponents: Computation. , 2015, , 834-838.		4
45	Locating coalescing singular values of large two-parameter matrices. Mathematics and Computers in Simulation, 2011, 81, 996-1005.	4.4	3
46	On the Inverse of Some Sign Matrices and on the Moments Sliding Vector Field on the Intersection of Several Manifolds: Nodally Attractive Case. Journal of Dynamics and Differential Equations, 2017, 29, 1355-1381.	1.9	3
47	A study of deformation localization in nonlinear elastic square lattices under compression. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170140.	3.4	3
48	Minimum variation solutions for sliding vector fields on the intersection of two surfaces in \mathbb{R}^3 . Journal of Computational and Applied Mathematics, 2016, 292, 732-745.	2.0	2
49	Coalescing points for eigenvalues of banded matrices depending on parameters with application to banded random matrix functions. Numerical Algorithms, 2019, 80, 1241-1266.	1.9	2
50	Sliding integration with no projection. Applied Numerical Mathematics, 2020, 155, 3-15.	2.1	2
51	Smoothness of Hessenberg and Bidiagonal Forms. Mediterranean Journal of Mathematics, 2008, 5, 21-31.	0.8	1
52	A real-valued auction algorithm for optimal transport. Statistical Analysis and Data Mining, 2019, 12, 514-533.	2.8	1
53	Takagi Factorization of Matrices Depending on Parameters and Locating Degeneracies of Singular Values. SIAM Journal on Matrix Analysis and Applications, 2022, 43, 1148-1161.	1.4	1
54	Codes for Approximating Lyapunov Exponents. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
55	Hermitian matrices of three parameters: perturbing coalescing eigenvalues and a numerical method. <i>Mathematics of Computation</i> , 2015, 84, 2763-2790.	2.1	0
56	Double descent and intermittent color diffusion for landscape exploration. <i>Numerical Algorithms</i> , 2020, 85, 145-169.	1.9	0
57	On Filippov and Utkin Sliding Solution of Discontinuous Systems. , 2009, , .		0
58	Continuous Decompositions and Coalescing Eigenvalues for Matrices Depending on Parameters. <i>Lecture Notes in Mathematics</i> , 2014, , 173-264.	0.2	0
59	Decompositions and coalescing eigenvalues of symmetric definite pencils depending on parameters. <i>Numerical Algorithms</i> , 0, , .	1.9	0