

Lloyd N Trefethen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8380034/publications.pdf>

Version: 2024-02-01

39
papers

6,009
citations

377584

21
h-index

371746

37
g-index

41
all docs

41
docs citations

41
times ranked

4125
citing authors

#	ARTICLE	IF	CITATIONS
1	Lightning Stokes Solver. SIAM Journal of Scientific Computing, 2022, 44, A1205-A1226.	1.3	5
2	Vandermonde with Arnoldi. SIAM Review, 2021, 63, 405-415.	4.2	21
3	Exponential node clustering at singularities for rational approximation, quadrature, and PDEs. Numerische Mathematik, 2021, 147, 227-254.	0.9	13
4	Log-lightning computation of capacity and Green's function. Maple Transactions, 2021, 1, .	0.0	3
5	Reciprocal-Log Approximation and Planar PDE Solvers. SIAM Journal on Numerical Analysis, 2021, 59, 2801-2822.	1.1	6
6	Numerical Conformal Mapping with Rational Functions. Computational Methods and Function Theory, 2020, 20, 369-387.	0.8	21
7	Quantifying the ill-conditioning of analytic continuation. BIT Numerical Mathematics, 2020, 60, 901-915.	1.0	12
8	An Algorithm for Real and Complex Rational Minimax Approximation. SIAM Journal of Scientific Computing, 2020, 42, A3157-A3179.	1.3	19
9	Solving Laplace Problems with Corner Singularities via Rational Functions. SIAM Journal on Numerical Analysis, 2019, 57, 2074-2094.	1.1	31
10	Representation of conformal maps by rational functions. Numerische Mathematik, 2019, 142, 359-382.	0.9	23
11	New Laplace and Helmholtz solvers. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10223-10225.	3.3	16
12	Approximation Theory and Approximation Practice, Extended Edition. , 2019, , .		121
13	SERIES SOLUTION OF LAPLACE PROBLEMS. ANZIAM Journal, 2018, 60, 1-26.	0.3	18
14	The AAA Algorithm for Rational Approximation. SIAM Journal of Scientific Computing, 2018, 40, A1494-A1522.	1.3	197
15	Rational Minimax Approximation via Adaptive Barycentric Representations. SIAM Journal of Scientific Computing, 2018, 40, A2427-A2455.	1.3	34
16	Chopping a Chebyshev Series. ACM Transactions on Mathematical Software, 2017, 43, 1-21.	1.6	25
17	Euler's Maclaurin and Gregory interpolants. Numerische Mathematik, 2016, 132, 201-216.	0.9	7
18	Continuous analogues of matrix factorizations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140585.	1.0	33

#	ARTICLE	IF	CITATIONS
19	Computing numerically with functions instead of numbers. <i>Communications of the ACM</i> , 2015, 58, 91-97.	3.3	10
20	Numerical Algorithms Based on Analytic Function Values at Roots of Unity. <i>SIAM Journal on Numerical Analysis</i> , 2014, 52, 1795-1821.	1.1	49
21	The Exponentially Convergent Trapezoidal Rule. <i>SIAM Review</i> , 2014, 56, 385-458.	4.2	334
22	Robust Padé Approximation via SVD. <i>SIAM Review</i> , 2013, 55, 101-117.	4.2	79
23	Chebfun and numerical quadrature. <i>Science China Mathematics</i> , 2012, 55, 1749-1760.	0.8	28
24	A Sinc Function Analogue of Chebfun. <i>SIAM Journal of Scientific Computing</i> , 2011, 33, 2519-2535.	1.3	20
25	Impossibility of Fast Stable Approximation of Analytic Functions from Equispaced Samples. <i>SIAM Review</i> , 2011, 53, 308-318.	4.2	102
26	A robust implementation of the Carathéodory-Fejér method for rational approximation. <i>BIT Numerical Mathematics</i> , 2011, 51, 1039-1050.	1.0	10
27	Is Gauss Quadrature Better than Clenshaw-Curtis?. <i>SIAM Review</i> , 2008, 50, 67-87.	4.2	451
28	Computing the Gamma Function Using Contour Integrals and Rational Approximations. <i>SIAM Journal on Numerical Analysis</i> , 2007, 45, 558-571.	1.1	34
29	Barycentric Lagrange Interpolation. <i>SIAM Review</i> , 2004, 46, 501-517.	4.2	846
30	An Extension of MATLAB to Continuous Functions and Operators. <i>SIAM Journal of Scientific Computing</i> , 2004, 25, 1743-1770.	1.3	181
31	The CF table. <i>Constructive Approximation</i> , 1990, 6, 195-223.	1.8	30
32	Square blocks and equioscillation in the Padé, walsh, and cf tables. <i>Lecture Notes in Mathematics</i> , 1984, , 170-181.	0.1	12
33	Nonuniqueness of best rational Chebyshev approximations on the unit disk. <i>Journal of Approximation Theory</i> , 1983, 39, 275-288.	0.5	15
34	The Carathéodory-Fejér Method for Real Rational Approximation. <i>SIAM Journal on Numerical Analysis</i> , 1983, 20, 420-436.	1.1	58
35	Chebyshev Approximation on the Unit Disk. , 1983, , 309-323.		17
36	Real Polynomial Chebyshev Approximation by the Carathéodory-Fejér method. <i>SIAM Journal on Numerical Analysis</i> , 1982, 19, 358-371.	1.1	25

#	ARTICLE	IF	CITATIONS
37	Rational Chebyshev approximation on the unit disk. <i>Numerische Mathematik</i> , 1981, 37, 297-320.	0.9	78
38	Near-circularity of the error curve in complex Chebyshev approximation. <i>Journal of Approximation Theory</i> , 1981, 31, 344-367.	0.5	74
39	Numerical Computation of the Schwarz-Christoffel Transformation. <i>SIAM Journal on Scientific and Statistical Computing</i> , 1980, 1, 82-102.	1.5	216