Neville Ford

List of Publications by Year
in descending order

52 papers	6,559 citations	236612 25 h-index	182168 51 g-index
55 all docs	55 docs citations	55 times ranked	2842 citing authors

#	Article	IF	Citations
1	A Predictor-Corrector Approach for the Numerical Solution of Fractional Differential Equations. Nonlinear Dynamics, 2002, 29, 3-22.	2.7	1,743
2	Analysis of Fractional Differential Equations. Journal of Mathematical Analysis and Applications, 2002, 265, 229-248.	0.5	1,390
3	Detailed Error Analysis for a Fractional Adams Method. Numerical Algorithms, 2004, 36, 31-52.	1.1	724
4	Algorithms for the fractional calculus: A selection of numerical methods. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 743-773.	3.4	537
5	Multi-order fractional differential equations and their numerical solution. Applied Mathematics and Computation, 2004, 154, 621-640.	1.4	239
6	The numerical solution of fractional differential equations: Speed versus accuracy. Numerical Algorithms, 2001, 26, 333-346.	1.1	200
7	A finite element method for time fractional partial differential equations. Fractional Calculus and Applied Analysis, 2011, 14, 454-474.	1.2	174
8	Numerical analysis for distributed-order differential equations. Journal of Computational and Applied Mathematics, 2009, 225, 96-104.	1.1	173
9	The numerical solution of linear multi-term fractional differential equations: systems of equations. Journal of Computational and Applied Mathematics, 2002, 148, 401-418.	1.1	154
10	Pitfalls in fast numerical solvers for fractional differential equations. Journal of Computational and Applied Mathematics, 2006, 186, 482-503.	1.1	116
11	Analysis and numerical methods for fractional differential equations with delay. Journal of Computational and Applied Mathematics, 2013, 252, 159-168.	1.1	115
12	Fractional boundary value problems: Analysis and numerical methods. Fractional Calculus and Applied Analysis, 2011, 14, 554-567.	1.2	76
13	Higher order numerical methods for solving fractional differential equations. BIT Numerical Mathematics, 2014, 54, 555-584.	1.0	75
14	Nonpolynomial collocation approximation of solutions to fractional differential equations. Fractional Calculus and Applied Analysis, 2013, 16, 874-891.	1.2	65
15	Collocation methods for fractional integro-differential equations with weakly singular kernels. Numerical Algorithms, 2014, 65, 723-743.	1.1	64
16	Distributed order equations as boundary value problems. Computers and Mathematics With Applications, 2012, 64, 2973-2981.	1.4	53
17	Determining control parameters for dendritic cell-cytotoxic T lymphocyte interaction. European Journal of Immunology, 2004, 34, 2407-2418.	1.6	51
18	A genetic-algorithm approach to simulating human immunodeficiency virus evolution reveals the strong impact of multiply infected cells and recombination. Journal of General Virology, 2005, 86, 3109-3118.	1.3	50

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19	Systems-based decomposition schemes for the approximate solution of multi-term fractional differential equations. Journal of Computational and Applied Mathematics, 2009, 229, 382-391.	1.1	50
20	Numerical solution for diffusion equations with distributed order in time using a Chebyshev collocation method. Applied Numerical Mathematics, 2017, 114, 108-123.	1.2	46
21	Fractional Pennes' Bioheat Equation: Theoretical and Numerical Studies. Fractional Calculus and Applied Analysis, 2015, 18, 1080-1106.	1.2	45
22	Stability properties of a scheme for the approximate solution of a delay-integro-differential equation. Applied Numerical Mathematics, 1992, 9, 357-370.	1.2	42
23	Mixed-type functional differential equations: A numerical approach. Journal of Computational and Applied Mathematics, 2009, 229, 471-479.	1.1	31
24	Numerical analysis of a two-parameter fractional telegraph equation. Journal of Computational and Applied Mathematics, 2013, 249, 95-106.	1.1	30
25	A numerical method for the fractional Schrödinger type equation of spatial dimension two. Fractional Calculus and Applied Analysis, 2013, 16, .	1.2	26
26	A nonpolynomial collocation method for fractional terminal value problems. Journal of Computational and Applied Mathematics, 2015, 275, 392-402.	1.1	26
27	High Order Numerical Methods for Fractional Terminal Value Problems. Computational Methods in Applied Mathematics, 2014, 14, 55-70.	0.4	25
28	Error estimates of a high order numerical method for solving linear fractional differential equations. Applied Numerical Mathematics, 2017, 114, 201-220.	1.2	23
29	New approach to the numerical solution of forward-backward equations. Frontiers of Mathematics in China, 2009, 4, 155-168.	0.4	21
30	Analytical and numerical investigation of mixed-type functional differential equations. Journal of Computational and Applied Mathematics, 2010, 234, 2826-2837.	1.1	20
31	Numerical methods for a Volterra integral equation with non-smooth solutions. Journal of Computational and Applied Mathematics, 2006, 189, 412-423.	1.1	19
32	Finite element solution of a linear mixed-type functional differential equation. Numerical Algorithms, 2010, 55, 301-320.	1.1	18
33	Some Applications of the Boundary-Locus Method and the Method of D-Partitions. IMA Journal of Numerical Analysis, 1991, 11, 143-158.	1.5	14
34	Nonlinear Volterra Integro-Differential Equations Stability and Numerical Stability of θ-Methods. Journal of Integral Equations and Applications, 1998, 10, 397.	0.2	13
35	Mathematical modelling of plant species interactions in a harsh climate. Journal of Computational and Applied Mathematics, 2010, 234, 2732-2744.	1.1	13
36	The numerical solution of forward–backward differential equations: Decomposition and related issues. Journal of Computational and Applied Mathematics, 2010, 234, 2745-2756.	1.1	13

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37	Boundedness and stability of solutions to difference equations. Journal of Computational and Applied Mathematics, 2002, 140, 275-289.	1.1	11
38	On the Decay of the Elements of Inverse Triangular Toeplitz Matrices. SIAM Journal on Matrix Analysis and Applications, 2014, 35, 1288-1302.	0.7	11
39	How do numerical methods perform for delay differential equations undergoing a Hopf bifurcation?. Journal of Computational and Applied Mathematics, 2000, 125, 277-285.	1.1	10
40	Numerical analysis of a singular integral equation. Applied Mathematics and Computation, 2005, 167, 372-382.	1.4	9
41	Computational methods for a mathematical model of propagation of nerve impulses in myelinated axons. Applied Numerical Mathematics, 2014, 85, 38-53.	1.2	9
42	BIFURCATIONS IN APPROXIMATE SOLUTIONS OF STOCHASTIC DELAY DIFFERENTIAL EQUATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 2999-3021.	0.7	8
43	Characterising small solutions in delay differential equations through numerical approximations. Applied Mathematics and Computation, 2002, 131, 253-270.	1.4	5
44	High-Order Methods for Systems of Fractional Ordinary Differential Equations and Their Application to Time-Fractional Diffusion Equations. Mathematics in Computer Science, 2021, 15, 535.	0.2	5
45	Flexible parallelization of fast wavelet transforms. International Journal of Parallel, Emergent and Distributed Systems, 2003, 18, 155-169.	0.4	4
46	BIFURCATIONS IN NUMERICAL METHODS FOR VOLTERRA INTEGRO-DIFFERENTIAL EQUATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 3255-3271.	0.7	4
47	Analytical and numerical treatment of oscillatory mixed differential equations with differentiable delays and advances. Journal of Computational and Applied Mathematics, 2011, 235, 5112-5130.	1.1	4
48	Numerical investigation of noise induced changes to the solution behaviour of the discrete FitzHugh–Nagumo equation. Applied Mathematics and Computation, 2017, 293, 448-460.	1.4	2
49	An algorithm to detect small solutions in linear delay differential equations. Journal of Computational and Applied Mathematics, 2006, 193, 121-139.	1.1	1
50	Numerical modelling of qualitative behaviour of solutions to convolution integral equations. Journal of Computational and Applied Mathematics, 2007, 205, 849-858.	1.1	1
51	Noise-induced changes to the behaviour of semi-implicit Euler methods for stochastic delay differential equations undergoing bifurcation. Journal of Computational and Applied Mathematics, 2009, 229, 462-470.	1.1	1
52	Special issue on evolutionary problems. Journal of Computational and Applied Mathematics, 2007, 205, 667-668.	1.1	0