Hariharan G

List of Publications by Year
in descending order

57 papers	**654** citations	687220 **13** h-index	610775 **24** g-index
58 all docs	**58** docs citations	**58** times ranked	**359** citing authors

#	Article	IF	Citations
1	Haar wavelet method for solving Fisher's equation. Applied Mathematics and Computation, 2009, 211, 284-292.	1.4	121
2	Review of wavelet methods for the solution of reaction–diffusion problems in science and engineering. Applied Mathematical Modelling, 2014, 38, 799-813.	2.2	84
3	Haar wavelet method for solving some nonlinear Parabolic equations. Journal of Mathematical Chemistry, 2010, 48, 1044-1061.	0.7	61
4	Haar wavelet in estimating depth profile of soil temperature. Applied Mathematics and Computation, 2009, 210, 119-125.	1.4	42
5	A Comparative Study of a Haar Wavelet Method and a Restrictive Taylor's Series Method for Solving Convection-diffusion Equations. International Journal for Computational Methods in Engineering Science and Mechanics, 2010, 11, 173-184.	1.4	40
6	The wavelet methods to linear and nonlinear reaction–diffusion model arising in mathematical chemistry. Journal of Mathematical Chemistry, 2013, 51, 2361-2385.	0.7	27
7	A new coupled wavelet-based method applied to the nonlinear reaction–diffusion equation arising in mathematical chemistry. Journal of Mathematical Chemistry, 2013, 51, 2386-2400.	0.7	26
8	An Efficient Legendre Wavelet-Based Approximation Method for a Few Newell–Whitehead and Allen–Cahn Equations. Journal of Membrane Biology, 2014, 247, 371-380.	1.0	26
9	The homotopy analysis method applied to the Kolmogorov–Petrovskii–Piskunov (KPP) and fractional KPP equations. Journal of Mathematical Chemistry, 2013, 51, 992-1000.	0.7	24
10	An efficient wavelet based approximation method to water quality assessment model in a uniform channel. Ain Shams Engineering Journal, 2014, 5, 525-532.	3.5	22
11	An efficient wavelet based spectral method to singular boundary value problems. Journal of Mathematical Chemistry, 2015, 53, 2095-2113.	0.7	19
12	An Optimization Wavelet Method for Multi Variable-order Fractional Differential Equations. Fundamenta Informaticae, 2017, 151, 255-273.	0.3	18
13	Numerical Solution for Nonlinear Klein–Gordon Equation via Operational Matrix by Clique Polynomial of Complete Graphs. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	0.9	15
14	An efficient wavelet based approximation method to time fractional Black-Scholes European option pricing problem arising in financial market. Applied Mathematical Sciences, 0, 7, 3445-3456.	0.0	13
15	Wavelet Method for a Class of Fractional Klein-Gordon Equations. Journal of Computational and Nonlinear Dynamics, 2013, 8, .	0.7	10
16	An Efficient Wavelet-Based Approximation Method to Gene Propagation Model Arising in Population Biology. Journal of Membrane Biology, 2014, 247, 561-570.	1.0	10
17	Wavelet method to film-pore diffusion model for methylene blue adsorption onto plant leaf powders. Journal of Mathematical Chemistry, 2012, 50, 2775-2785.	0.7	8
18	Parameter identification for nonlinear damping coefficient from large-amplitude ship roll motion using wavelets. Beni-Suef University Journal of Basic and Applied Sciences, 2017, 6, 138-144.	0.8	7

#	Article	IF	Citations
19	Two reliable wavelet methods to Fitzhughâ€"Nagumo (FN) and fractional FN equations. Journal of Mathematical Chemistry, 2013, 51, 2432-2454.	0.7	6
20	Efficient spectral methods for a class of unsteady-state free-surface ship models using wavelets. Zeitschrift Fur Angewandte Mathematik Und Physik, 2017, 68, 1.	0.7	6
21	An Efficient Wavelet Based Approximation Method to Steady State Reactionâ€"Diffusion Model Arising in Mathematical Chemistry. Journal of Membrane Biology, 2014, 247, 263-271.	1.0	5
22	Wavelet-Based Analytical Algorithm for Solving Steady-State Concentration in Immobilized Glucose Isomerase of Packed-Bed Reactor Model. Journal of Membrane Biology, 2016, 249, 559-568.	1.0	5
23	A homotopy analysis method for the nonlinear partial differential equations arising in engineering. International Journal for Computational Methods in Engineering Science and Mechanics, 2017, 18, 191-200.	1.4	5
24	Wavelet based spectral approach for solving surface coverage model in an electrochemical arsenic sensor - An operational matrix approach. Electrochimica Acta, 2018, 266, 27-33.	2.6	5
25	An efficient operational matrix approach for the solutions of Burgers' and fractional Burgers' equations using wavelets. Journal of Mathematical Chemistry, 2021, 59, 554-573.	0.7	5
26	Chebyshev wavelet based approximation method to some non-linear differential equations arising in engineering. International Journal of Mathematical Analysis, 0, 9, 993-1010.	0.3	5
27	An Efficient Wavelet Analysis Method to Filmâ€"Pore Diffusion Model Arising in Mathematical Chemistry. Journal of Membrane Biology, 2014, 247, 339-343.	1.0	4
28	An efficient wavelet-based optimization algorithm for the solutions of reaction-diffusion equations in biomedicine. Computer Methods and Programs in Biomedicine, 2020, 186, 105218.	2.6	4
29	Wavelet method for a class of space and time fractional telegraph equations. International Journal of Physical Sciences, 2012, 7, .	0.1	3
30	Wavelet based spectral algorithm for nonlinear dynamical systems arising in ship dynamics. Ocean Engineering, 2016, 126, 321-328.	1.9	3
31	An efficient Chebyshev wavelet based analytical algorithm to steady state reactionâ€"diffusion models arising in mathematical chemistry. Journal of Mathematical Chemistry, 2016, 54, 269-285.	0.7	3
32	Wavelet Based Analytical Expressions to Steady State Biofilm Model Arising in Biochemical Engineering. Journal of Membrane Biology, 2016, 249, 221-228.	1.0	2
33	A New Spectral Approach on Steady-State Concentration of Species in Porous Catalysts Using Wavelets. Journal of Membrane Biology, 2017, 250, 163-169.	1.0	2
34	A Reliable Spectral Method to Reactionâ€"Diffusion Equations in Entrapped-Cell Photobioreactor Packed with Gel Granules Using Chebyshev Wavelets. Journal of Membrane Biology, 2017, 250, 663-670.	1.0	2
35	A new spectral method applied to immobilized biocatalyst model arising in biochemical engineering. Contemporary Engineering Sciences, 0, 10, 291-304.	0.2	2
36	A novel wavelet approximation method for the solution of nonlinear differential equations with variable coefficients arising in astrophysics. Astrophysics and Space Science, 2018, 363, 1.	0.5	2

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37	Two reliable computational methods pertaining to steady state substrate concentration of an immobilized enzyme system. AEJ - Alexandria Engineering Journal, 2018, 57, 2377-2385.	3.4	2
38	Analytical expressions of amperometric enzyme kinetics pertaining to the substrate concentration using wavelets. Journal of Mathematical Chemistry, 2019, 57, 1191-1200.	0.7	2
39	An efficient wavelet-based method for the numerical solutions of nonlinear coupled reactionâ€"diffusion equations in biochemical engineering. Journal of Mathematical Chemistry, 2019, 57, 1154-1168.	0.7	2
40	Homotopy analysis method to water quality model in a uniform channel. Applied Mathematical Sciences, 0, 7, 1057-1066.	0.0	2
41	Analytical Expressions Pertaining to the Steady State Concentrations of Glucose, Oxygen and Gluconic Acid in a Composite Membrane Using Genocchi Polynomials. Arabian Journal for Science and Engineering, 2018, 43, 3529-3539.	1.7	1
42	An Efficient Wavelet Based Approximation Method to Film-Pore Diffusion Model Arising in Chemical Engineering. Springer Proceedings in Mathematics and Statistics, 2014, , 491-500.	0.1	1
43	Two Reliable Wavelet Methods to Fitzhughâ€"Nagumo (FN) and Fractional FN Equations. Forum for Interdisciplinary Mathematics, 2019, , 135-146.	0.8	1
44	Wavelet Analysisâ€"An Overview. Forum for Interdisciplinary Mathematics, 2019, , 15-31.	0.8	1
45	A New Wavelet-Based Hybrid Method for Fisher Type Equation. Springer Proceedings in Mathematics and Statistics, 2014, , 501-508.	0.1	0
46	An Efficient Operational Matrix Method for a Few Nonlinear Differential Equations Using Wavelets. International Journal of Applied and Computational Mathematics, 2019, 5, 1.	0.9	0
47	Wavelet-Based Approximation Algorithms for Some Nonlinear Oscillator Equations Arising in Engineering. Journal of the Institution of Engineers (India): Series C, 2020, 101, 185-192.	0.7	0
48	Wavelet method for steady state immobilized enzyme kinetic model: an operational matrix approach. Journal of Mathematical Chemistry, 2021, 59, 1994-2008.	0.7	0
49	Reliable Wavelet based Approximation Method for Some Nonlinear Differential Equations. Applied Mathematics and Information Sciences, 2016, 10, 719-727.	0.7	0
50	Wavelet-Based Analytical Expressions to Steady-State Biofilm Model Arising in Biochemical Engineering. Forum for Interdisciplinary Mathematics, 2019, , 163-177.	0.8	0
51	A New Coupled Wavelet-Based Method Applied to the Nonlinear Reactionâ€"Diffusion Equation Arising in Mathematical Chemistry. Forum for Interdisciplinary Mathematics, 2019, , 147-161.	0.8	0
52	An Efficient Wavelet-Based Spectral Method to Singular Boundary Value Problems. Forum for Interdisciplinary Mathematics, 2019, , 63-91.	0.8	0
53	Wavelet Method to Filmâ€"Pore Diffusion Model for Methylene Blue Adsorption onto Plant Leaf Powders. Forum for Interdisciplinary Mathematics, 2019, , 51-61.	0.8	0
54	Haar Wavelet Method for Solving Some Nonlinear Parabolic Equations. Forum for Interdisciplinary Mathematics, 2019, , 103-117.	0.8	0

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55	Shifted Chebyshev Wavelets and Shifted Legendre Waveletsâ€"Preliminaries. Forum for Interdisciplinary Mathematics, 2019, , 33-50.	0.8	0
56	An Efficient Wavelet-Based Approximation Method to Gene Propagation Model Arising in Population Biology. Forum for Interdisciplinary Mathematics, 2019, , 119-134.	0.8	0
57	Parametric Identification for the Biased Ship Roll Motion Model Using Genocchi Polynomials. Journal of Mathematics, 2022, 2022, 1-9.	0.5	0