Appanah R Appadu

List of Publications by Year
in descending order

53 papers	376 citations	759233 12 h-index	940533 16 g-index
55 all docs	55 docs citations	55 times ranked	155 citing authors

#	Article	IF	Citations
1	Numerical Solution of the 1D Advection-Diffusion Equation Using Standard and Nonstandard Finite Difference Schemes. Journal of Applied Mathematics, 2013, 2013, 1-14.	0.9	28
2	Comparative Study of Some Numerical Methods for the Burgersâ€“Huxley Equation. Symmetry, 2019, 11, 1333.	2.2	23
3	Control of numerical effects of dispersion and dissipation in numerical schemes for efficient shock-capturing through an optimal Courant number. Computers and Fluids, 2008, 37, 767-783.	2.5	20
4	Performance of UPFD scheme under some different regimes of advection, diffusion and reaction. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 1412-1429.	2.8	20
5	A computational study of three numerical methods for some advection-diffusion problems. Applied Mathematics and Computation, 2016, 272, 629-647.	2.2	18
6	On the numerical solution of Fisherâ€™s equation with coefficient of diffusion term much smaller than coefficient of reaction term. Advances in Difference Equations, 2019, 2019, .	3.5	18
7	Construction and analysis of some nonstandard finite difference methods for the <scp>FitzHughâ€“Nagumo</scp> equation. Numerical Methods for Partial Differential Equations, 2020, 36, 1145-1169.	3.6	18
8	Comparison of some forecasting methods for COVID-19. AEJ - Alexandria Engineering Journal, 2021, 60, 1565-1589.	6.4	17
9	The concept of minimized integrated exponential error for low dispersion and low dissipation schemes. International Journal for Numerical Methods in Fluids, 2011, 65, 578-601.	1.6	15
10	Computational study of three numerical methods for some linear and nonlinear advection-diffusion-reaction problems. Progress in Computational Fluid Dynamics, 2017, 17, 114.	0.2	14
11	On Semi-Analytical Solutions for Linearized Dispersive KdV Equations. Mathematics, 2020, 8, 1769.	2.2	14
12	Optimized Weighted Essentially Nonoscillatory Third-Order Schemes for Hyperbolic Conservation Laws. Journal of Applied Mathematics, 2013, 2013, 1-12.	0.9	13
13	Some applications of the concept of minimized integrated exponential error for low dispersion and low dissipation. International Journal for Numerical Methods in Fluids, 2012, 68, 244-268.	1.6	12
14	An explicit nonstandard finite difference scheme for the FitzHughâ€“Nagumo equations. International Journal of Computer Mathematics, 2019, 96, 1993-2009.	1.8	12
15	Investigating the shock-capturing properties of some composite numerical schemes for the 1-D linear advection equation. International Journal of Computer Applications in Technology, 2012, 43, 79.	0.5	10
16	Some optimised schemes for 1D Korteweg-de-Vries equation. Progress in Computational Fluid Dynamics, 2017, 17, 250.	0.2	10
17	Comparison of some optimisation techniques for numerical schemes discretising equations with advection terms. International Journal of Innovative Computing and Applications, 2012, 4, 12.	0.2	9
18	Performance of some finite difference methods for a 3D advectionâ€“diffusion equation. Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas, 2018, 112, 1179-1210.	1.2	7

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19	Comparison of modified ADM and classical finite difference method for some third-order and fifth-order KdV equations. Demonstratio Mathematica, 2021, 54, 377-409.	1.5	7
20	Optimised composite numerical schemes in 2â€Ð for hyperbolic conservation laws. International Journal for Numerical Methods in Fluids, 2012, 69, 1522-1549.	1.6	6
21	The technique of MIEELDLD as a measure of the shock-capturing property of numerical methods for hyperbolic conservation laws. Progress in Computational Fluid Dynamics, 2015, 15, 247.	0.2	6
22	Classical and Multisymplectic Schemes for Linearized KdV Equation: Numerical Results and Dispersion Analysis. Fluids, 2021, 6, 214.	1.7	6
23	1D Generalised Burgers-Huxley: Proposed Solutions Revisited and Numerical Solution Using FTCS and NSFD Methods. Frontiers in Applied Mathematics and Statistics, 2022, 7, .	1.3	6
24	Analysis of multilevel finite volume approximation of 2D convective Cahnâ€“Hilliard equation. Japan Journal of Industrial and Applied Mathematics, 2017, 34, 253-304.	0.9	5
25	Comparative study of some numerical methods for FitzHugh-Nagumo equation. AIP Conference Proceedings, 2019, , .	0.4	5
26	Some Finite Difference Methods to Model Biofilm Growth and Decay: Classical and Non-Standard. Computation, 2021, 9, 123.	2.0	5
27	The Technique of MIEELDLD in Computational Aeroacoustics. Journal of Applied Mathematics, 2012, 2012, 1-30.	0.9	4
28	Time-Splitting Procedures for the Numerical Solution of the 2D Advection-Diffusion Equation. Mathematical Problems in Engineering, 2013, 2013, 1-20.	1.1	4
29	Optimized composite finite difference schemes for atmospheric flow modeling. Numerical Methods for Partial Differential Equations, 2019, 35, 2171-2192.	3.6	4
30	On Semi-Classical Orthogonal Polynomials Associated with a Modified Sextic Freud-Type Weight. Mathematics, 2020, 8, 1250.	2.2	4
31	Efficient Shock-Capturing Numerical Schemes Using the Approach of Minimised Integrated Square Difference Error for Hyperbolic Conservation Laws. , 2007, , 774-789.		4
32	On the performance of some NSFD methods for a 2-D generalized Burgersâ€“Huxley equation. Journal of Difference Equations and Applications, 2021, 27, 1537-1573.	1.1	4
33	Unconditionally positive NSFD and classical finite difference schemes for biofilm formation on medical implant using Allen-Cahn equation. Demonstratio Mathematica, 2022, 55, 40-60.	1.5	4
34	Analysis of the unconditionally positive finite difference scheme for advection-diffusion-reaction equations with different regimes. AIP Conference Proceedings, 2016, , .	0.4	3
35	Comparative study of three numerical schemes for contaminant transport with Kinetic Langmuir Sorption. AIP Conference Proceedings, 2016, , .	0.4	2
36	Some novel numerical schemes for 1-D Korteweg-de-Vries Burgerâ€™s equation. AIP Conference Proceedings, 2017, , .	0.4	2

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37	Atmospheric flow modelling using some finite difference methods. AIP Conference Proceedings, 2018, , .	0.4	2
38	Comparison of some finite difference methods for the Black-Scholes equation. AIP Conference Proceedings, 2018, , .	0.4	2
39	Comparative Study of Some Numerical Methods for the Standard FitzHugh-Nagumo Equation. Forum for Interdisciplinary Mathematics, 2020, , 95-127.	1.6	2
40	Comparison of some numerical methods for the Burgers-Huxley equation. AIP Conference Proceedings, 2020, , .	0.4	2
41	A NSFD Discretization of Two-Dimensional Singularly Perturbed Semilinear Convection-Diffusion Problems. Frontiers in Applied Mathematics and Statistics, 2022, 8, .	1.3	2
42	Comparative study of some numerical methods to solve a 3D advection-diffusion equation. AIP Conference Proceedings, 2017, , .	0.4	1
43	Computational Study of Some Numerical Methods for the Generalized Burgers-Huxley Equation. Communications in Computer and Information Science, 2021, , 56-67.	0.5	1
44	On Certain Properties and Applications of the Perturbed Meixnerâ€“Pollaczek Weight. Mathematics, 2021, 9, 955.	2.2	1
45	CTCS Schemes for Second Order Wave Equation: Numerical Results and Spectral Analysis. International Journal of Engineering Research in Africa, 0, 55, 47-65.	0.7	1
46	A Comparative Study of Three Composite Schemes: Lax-Wendroff/Lax-Friedrichs, Mac-Cormack/Lax-Friedrichs and Corrected Lax-Friedrichs Lax-FriedrichS Schemes, Based on Conservation Laws. , 2006, , 823-824.		1
47	A priori analysis of multilevel finite volume approximation of 1D convective Cahnâ€“Hilliard equation. Afrika Matematika, 2017, 28, 1193-1233.	0.8	1
48	Solution of 3D linearized KdV equation using reduced differential transform method. AIP Conference Proceedings, 2022, , .	0.4	1
49	A computational study of some numerical schemes for a test case with steep boundary layers. AIP Conference Proceedings, 2015, , .	0.4	0
50	Optimized Low Dispersion and Low Dissipation Runge-Kutta Algorithms in Computational Aeroacoustics. Applied Mathematics and Information Sciences, 2014, 8, 57-68.	0.5	0
51	Applications and Spectral Analysis of some Optimized High Order Low Dispersion and Low Dissipation Schemes. Applied Mathematics and Information Sciences, 2014, 8, 993-1001.	0.5	0
52	On the numerical solution of 2D Burgers-Huxley equation using NSFD and classical methods. AIP Conference Proceedings, 2022, , .	0.4	0
53	Convergence Analysis and Approximate Optimal Temporal Step Sizes for Some Finite Difference Methods Discretising Fisher's Equation. Frontiers in Applied Mathematics and Statistics, 0, 8, .	1.3	0