

# Charis Harley

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

322  
citations

933447

10  
h-index

940533

16  
g-index

48  
all docs

48  
docs citations

48  
times ranked

229  
citing authors

#	ARTICLE	IF	CITATIONS
1	Approximate implicit solution of a Lane-Emden equation. <i>New Astronomy</i> , 2006, 11, 520-526.	1.8	72
2	Transient heat transfer in longitudinal fins of various profiles with temperature-dependent thermal conductivity and heat transfer coefficient. <i>Pramana - Journal of Physics</i> , 2011, 77, 519-532.	1.8	26
3	An implicit series solution for a boundary value problem modelling a thermal explosion. <i>Mathematical and Computer Modelling</i> , 2011, 53, 249-260.	2.0	21
4	First integrals and bifurcations of a Lane-Emden equation of the second kind. <i>Journal of Mathematical Analysis and Applications</i> , 2008, 344, 757-764.	1.0	16
5	Numerical investigation of the temperature profile in a rectangular longitudinal fin. <i>Nonlinear Analysis: Real World Applications</i> , 2012, 13, 2343-2351.	1.7	16
6	Hopscotch method: The numerical solution of the Frank-Kamenetskii partial differential equation. <i>Applied Mathematics and Computation</i> , 2010, 217, 4065-4075.	2.2	15
7	Reversal of flow of a non-Newtonian fluid in an expanding channel. <i>International Journal of Non-Linear Mechanics</i> , 2018, 101, 44-55.	2.6	13
8	Numerical simulation of unsteady triple diffusive mixed convection in NaCl-water and Sucrose-water solutions. <i>International Journal of Heat and Mass Transfer</i> , 2018, 126, 147-155.	4.8	13
9	Nonstandard Finite Difference Method Applied to a Linear Pharmacokinetics Model. <i>Bioengineering</i> , 2017, 4, 40.	3.5	12
10	STEADY STATE SOLUTIONS FOR A THERMAL EXPLOSION IN A CYLINDRICAL VESSEL. <i>Modern Physics Letters B</i> , 2007, 21, 831-841.	1.9	10
11	Instability of invariant boundary conditions of a generalized Lane-Emden equation of the second-kind. <i>Applied Mathematics and Computation</i> , 2008, 198, 621-633.	2.2	10
12	Alternate Derivation of the Critical Value of the Frank-Kamenetskii Parameter in Cylindrical Geometry. <i>Journal of Nonlinear Mathematical Physics</i> , 2008, 15, 69.	1.3	9
13	Asymptotic and Dynamical Analyses of Heat Transfer through a Rectangular Longitudinal Fin. <i>Journal of Applied Mathematics</i> , 2013, 2013, 1-8.	0.9	9
14	Two Hybrid Methods for Solving Two-Dimensional Linear Time-Fractional Partial Differential Equations. <i>Abstract and Applied Analysis</i> , 2014, 2014, 1-10.	0.7	9
15	Application of Nonlinear Time-Fractional Partial Differential Equations to Image Processing via Hybrid Laplace Transform Method. <i>Journal of Mathematics</i> , 2018, 2018, 1-9.	1.0	8
16	Generalized forms of fractional Euler and Runge-Kutta methods using non-uniform grid. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2023, 24, 2089-2111.	1.0	7
17	Efficient Boundary Value Problem Solution for a Lane-Emden Equation. <i>Mathematical and Computational Applications</i> , 2010, 15, 613-620.	1.3	6
18	Heat as a hydraulic tracer for horizontal subsurface flow constructed wetlands. <i>Journal of Water Process Engineering</i> , 2017, 16, 183-192.	5.6	6

#	ARTICLE	IF	CITATIONS
19	Peacemanâ€Rachford ADI scheme for the two dimensional flow of a secondâ€grade fluid. International Journal of Numerical Methods for Heat and Fluid Flow, 2012, 22, 228-242.	2.8	5
20	Steady Thermal Analysis of Two-Dimensional Cylindrical Pin Fin with a Nonconstant Base Temperature. Mathematical Problems in Engineering, 2011, 2011, 1-17.	1.1	4
21	A Numerical Well-Balanced Scheme for One-Dimensional Heat Transfer in Longitudinal Triangular Fins. Mathematical Problems in Engineering, 2013, 2013, 1-9.	1.1	4
22	Heat Transfer in a Porous Radial Fin: Analysis of Numerically Obtained Solutions. Advances in Mathematical Physics, 2017, 2017, 1-20.	0.8	4
23	FIRST INTEGRALS OF FIN EQUATIONS FOR STRAIGHT FINS. Modern Physics Letters B, 2009, 23, 3659-3666.	1.9	3
24	Numerical investigation of the generalized lubrication equation. Applied Mathematics and Computation, 2010, 217, 2631-2638.	2.2	3
25	Noether Symmetry Analysis of the Dynamic Euler-Bernoulli Beam Equation. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2016, 71, 447-456.	1.5	3
26	Two-dimensional nonlinear stress and displacement waves for a new class of constitutive equations. Wave Motion, 2018, 77, 156-185.	2.0	3
27	Numerical Investigation of the Steady State of a Driven Thin Film Equation. Journal of Applied Mathematics, 2013, 2013, 1-6.	0.9	2
28	Mean action time as a measure for fin performance in one dimensional fins of exponential profiles. Applied Mathematics and Computation, 2014, 238, 319-328.	2.2	2
29	Elastic waves in a circular cylinder and cylindrical annulus for a subclass of implicit constitutive equations. Mathematics and Mechanics of Solids, 2020, 25, 201-233.	2.4	2
30	STOKES'S FIRST PROBLEM FOR A ROTATING SISO FLUID WITH POROUS SPACE. Journal of Porous Media, 2012, 15, 1079-1091.	1.9	2
31	Numerical investigation of the parabolic mixed derivative diffusion equation via Alternating Direction Implicit methods. Computers and Mathematics With Applications, 2013, 66, 1452-1465.	2.7	1
32	On the Use of Backward Difference Formulae to Improve the Prediction of Direction in Market Related Data. Mathematical Problems in Engineering, 2013, 2013, 1-5.	1.1	1
33	A comparison of two hybrid methods for applying the time-fractional heat equation to a two dimensional function. AIP Conference Proceedings, 2013, , .	0.4	1
34	Testing of mathematica in the computation of two-phase flow equations. AIP Conference Proceedings, 2018, , .	0.4	1
35	Preface to special issue of selected papers from the 13th International Symposium on Numerical Analysis of Fluid Flow, Heat and Mass Transfer â€ Numerical Fluids 2018. Computers and Mathematics With Applications, 2021, 83, 1-3.	2.7	1
36	Models and muddles in the COVID-19 pandemic. South African Journal of Science, 2021, 117, .	0.7	1

#	ARTICLE	IF	CITATIONS
37	Peaceman-Rachford ADI Scheme for the Two-Dimensional Flow of a Second-Grade Fluid. , 2009, , .		0
38	Unsteady heat transfer through a longitudinal fin: An investigation into the effects of key parameters. , 2012, , .		0
39	Numerical Simulation of the Frank-Kamenetskii PDE: GPU vs. CPU Computing. , 2012, , .		0
40	Well-balancing and relaxation schemes for the numerical investigation of heat transfer in one dimensional triangular fins. , 2013, , .		0
41	Error bounds in approximating the Riemann-Stieltjes integral of $\sin t$ . overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/co	2.2	0
42	On the relation of isothermal collapse to steady Bondi-accretion. AIP Conference Proceedings, 2017, , .	0.4	0
43	Conservation laws and conserved quantities for (1+1)D linearized Boussinesq equations. Communications in Nonlinear Science and Numerical Simulation, 2017, 46, 37-48.	3.3	0
44	Numerical simulations of early star formation with $\epsilon$ -equations of state. AIP Conference Proceedings, 2018, , .	0.4	0
45	Numerical simulations describing inhomogeneous non-unidirectional deformations of an elastic wedge. AIP Conference Proceedings, 2019, , .	0.4	0
46	Inhomogeneous non-unidirectional deformations of an elastic wedge. Quarterly Journal of Mechanics and Applied Mathematics, 2019, 72, 1-23.	1.3	0
47	Numerical Convergence Analysis of the Frank-Kamenetskii Equation. Entropy, 2020, 22, 84.	2.2	0