Rajesh K Pandey

List of Publications by Year
in descending order

54 papers	**969** citations	471509 **17** h-index	477307 **29** g-index
54 all docs	**54** docs citations	**54** times ranked	**541** citing authors

#	Article	IF	Citations
1	An analytic algorithm of Laneâ€"Emden type equations arising in astrophysics using modified Homotopy analysis method. Computer Physics Communications, 2009, 180, 1116-1124.	7.5	90
2	Solution of Laneâ€"Emden type equations using Bernstein operational matrix of differentiation. New Astronomy, 2012, 17, 303-308.	1.8	78
3	Comparative study of three numerical schemes for fractional integro-differential equations. Journal of Computational and Applied Mathematics, 2017, 315, 287-302.	2.0	63
4	Solution of Laneâ€"Emden type equations using Legendre operational matrix of differentiation. Applied Mathematics and Computation, 2012, 218, 7629-7637.	2.2	60
5	A fractional filter based efficient algorithm for retinal blood vessel segmentation. Biomedical Signal Processing and Control, 2020, 59, 101883.	5.7	48
6	Numerical approximations of Atanganaâ€"Baleanu Caputo derivative and its application. Chaos, Solitons and Fractals, 2019, 118, 58-64.	5.1	44
7	Solving Non-Linear Fractional Variational Problems Using Jacobi Polynomials. Mathematics, 2019, 7, 224.	2.2	39
8	A stable numerical inversion of Abel's integral equation using almost Bernstein operational matrix. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 245-252.	2.3	35
9	Efficient algorithms to solve singular integral equations of Abel type. Computers and Mathematics With Applications, 2009, 57, 664-676.	2.7	33
10	A stable algorithm for Hankel transforms using hybrid of Block-pulse and Legendre polynomials. Computer Physics Communications, 2010, 181, 1-10.	7.5	33
11	Numerical schemes for a class of tempered fractional integro-differential equations. Applied Numerical Mathematics, 2020, 157, 110-134.	2.1	33
12	ECG Signal Compression using Optimum Wavelet Filter Bank Based on Kaiser Window. Procedia Engineering, 2012, 38, 2889-2902.	1.2	26
13	Numerical evaluation of the Hankel transform by using linear Legendre multi-wavelets. Computer Physics Communications, 2008, 179, 424-429.	7.5	24
14	Generalized Fractional Filter-Based Algorithm for Image Denoising. Circuits, Systems, and Signal Processing, 2020, 39, 363-390.	2.0	24
15	Stable Numerical Approach for Fractional Delay Differential Equations. Few-Body Systems, 2017, 58, 1.	1.5	23
16	A reliable numerical algorithm for fractional advectionâ€"dispersion equation arising in contaminant transport through porous media. Physica A: Statistical Mechanics and Its Applications, 2019, 527, 121077.	2.6	22
17	Approximations of fractional integrals and Caputo derivatives with application in solving Abelâ€™s integral equations. Journal of King Saud University - Science, 2019, 31, 692-700.	3.5	21
18	Numerical approximation of fractional burgers equation with Atanganaâ€"Baleanu derivative in Caputo sense. Chaos, Solitons and Fractals, 2020, 133, 109630.	5.1	18

#	Article	IF	Citations
19	Solution of the Lane-Emden Equation Using the Bernstein Operational Matrix of Integration. ISRN Astronomy and Astrophysics, 2011, 2011, 1-7.	0.2	17
20	An approximate method for Abel inversion using Chebyshev polynomials. Applied Mathematics and Computation, 2014, 237, 120-132.	2.2	16
21	Efficient algorithms to compute Hankel transforms using wavelets. Computer Physics Communications, 2008, 179, 812-818.	7.5	15
22	Collocation method for Generalized Abel's integral equations. Journal of Computational and Applied Mathematics, 2016, 302, 118-128.	2.0	14
23	Collocation method with convergence for generalized fractional integro-differential equations. Journal of Computational and Applied Mathematics, 2018, 342, 419-430.	2.0	14
24	Finite difference scheme for a fractional telegraph equation with generalized fractional derivative terms. Physica A: Statistical Mechanics and Its Applications, 2019, 535, 122271.	2.6	12
25	An efficient computational approach for fractional Bratu's equation arising in electrospinning process. Mathematical Methods in the Applied Sciences, 2021, 44, 10225-10238.	2.3	12
26	An Approximate Method for Solving Fractional Delay Differential Equations. International Journal of Applied and Computational Mathematics, 2017, 3, 1395-1405.	1.6	11
27	A Convergent Collocation Approach for Generalized Fractional Integro-Differential Equations Using Jacobi Poly-Fractonomials. Mathematics, 2021, 9, 979.	2.2	11
28	A Novel Non-Invasive Method for Extraction of Geometrical and Texture Features of Wood. Research in Nondestructive Evaluation, 2017, 28, 150-167.	1.1	9
29	Galerkin and Collocation Methods for Weakly Singular Fractional Integro-differential Equations. Iranian Journal of Science and Technology, Transaction A: Science, 2019, 43, 1649-1656.	1.5	9
30	Numerical scheme with convergence for a generalized time–fractional Telegraph–type equation. Numerical Methods for Partial Differential Equations, 2019, 35, 1164-1183.	3.6	9
31	High-order approximation for generalized fractional derivative and its application. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 3515-3534.	2.8	9
32	Numerical approximation of tempered fractional Sturm–Liouville problem with application in fractional diffusion equation. International Journal for Numerical Methods in Fluids, 2021, 93, 610-627.	1.6	9
33	Numerical schemes with convergence for generalized fractional integro-differential equations. Journal of Computational and Applied Mathematics, 2021, 388, 113318.	2.0	9
34	A reliable numerical approach for nonlinear fractional optimal control problems. International Journal of Nonlinear Sciences and Numerical Simulation, 2020, .	1.0	9
35	Comparison of Four Numerical Schemes for Isoperimetric Constraint Fractional Variational Problems With A-Operator. , 2015, , .		8
36	Adaptive fractional masks and super resolution based approach for image enhancement. Multimedia Tools and Applications, 2021, 80, 30213-30236.	3.9	8

#	Article	IF	Citations
37	Numerical Scheme for a Quadratic Type Generalized Isoperimetric Constraint Variational Problems With A-Operator. Journal of Computational and Nonlinear Dynamics, 2015, 10, .	1.2	7
38	Variational Approach for Tempered Fractional Sturmâ€"Liouville Problem. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	1.6	7
39	Variational Approximation for Fractional Sturmâ€"Liouville Problem. Fractional Calculus and Applied Analysis, 2020, 23, 861-874.	2.2	7
40	Finite Differenceâ€"Collocation Method for the Generalized Fractional Diffusion Equation. Fractal and Fractional, 2022, 6, 387.	3.3	6
41	A stable algorithm for numerical evaluation of Hankel transforms using Haar wavelets. Numerical Algorithms, 2010, 53, 451-466.	1.9	5
42	Approximation of Caputoâ€Prabhakar derivative with application in solving time fractional advectionâ€diffusion equation. International Journal for Numerical Methods in Fluids, 2022, 94, 896-919.	1.6	5
43	Numerical solution of system of Volterra integral equations using Bernstein polynomials. International Journal of Nonlinear Sciences and Numerical Simulation, 2009, 10, .	1.0	3
44	Laguerre Polynomials Based Numerical Method to Solve a System of Generalized Abel Integral Equations. Procedia Engineering, 2012, 38, 1675-1682.	1.2	3
45	An Analytical Method for Solving Singular Integral Equations of Abel Type. Procedia Engineering, 2012, 38, 2726-2738.	1.2	2
46	Numerical Schemes for the Generalized Abelâ€™s Integral Equations. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	1.6	2
47	Adaptive Huber Scheme for Weakly Singular Fractional Integro-differential Equations. Differential Equations and Dynamical Systems, 2020, 28, 527-538.	1.0	2
48	Numerical evaluation of Hankel transforms using Haar wavelets. International Journal of Computer Mathematics, 2010, 87, 2568-2573.	1.8	1
49	Numerical Scheme for Generalized Isoparametric Constraint Variational Problems With A-Operator. , 2013, , .		1
50	Fractional order differentiator using legendre polynomials. , 2014, , .		1
51	A Fully Finite Difference Scheme for Time-Fractional Telegraph Equation Involving Atangana Baleanu Caputo Fractional Derivative. International Journal of Applied and Computational Mathematics, 2022, 8, .	1.6	1
52	Numerical approximation of fractional variational problems with several dependent variables using Jacobi poly-fractonomials. Mathematics and Computers in Simulation, 2023, 203, 28-43.	4.4	1
53	A comparative study of three numerical schemes for solving Atanganaâ€"Baleanu fractional integro-differential equation defined in Caputo sense. Engineering With Computers, 2020, , 1.	6.1	0
54	Twoâ€dimensional collocation method for generalized partial integroâ€differential equations of fractional order with applications. Mathematical Methods in the Applied Sciences, 0, , .	2.3	0