Sunil Kumar

List of Publications by Year in descending order

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157 papers 6,447 citations

71061 41 h-index 72 g-index

157 all docs

157 docs citations

times ranked

157

2090 citing authors

#	Article	IF	CITATIONS
1	A study of behaviour for immune and tumor cells in immunogenetic tumour model with non-singular fractional derivative. Chaos, Solitons and Fractals, 2020, 133, 109619.	2.5	283
2	A theoretical study of the Caputo–Fabrizio fractional modeling for hearing loss due to Mumps virus with optimal control. Chaos, Solitons and Fractals, 2021, 144, 110668.	2.5	264
3	Fractional-order Legendre functions for solving fractional-order differential equations. Applied Mathematical Modelling, 2013, 37, 5498-5510.	2.2	259
4	A study of fractional Lotkaâ€Volterra population model using Haar wavelet and Adamsâ€Bashforthâ€Moulton methods. Mathematical Methods in the Applied Sciences, 2020, 43, 5564-5578.	1.2	254
5	A new analytical modelling for fractional telegraph equation via Laplace transform. Applied Mathematical Modelling, 2014, 38, 3154-3163.	2.2	235
6	Chaotic behaviour of fractional predator-prey dynamical system. Chaos, Solitons and Fractals, 2020, 135, 109811.	2.5	220
7	An analysis for heat equations arises in diffusion process using new Yangâ€Abdelâ€Atyâ€Cattani fractional operator. Mathematical Methods in the Applied Sciences, 2020, 43, 6062-6080.	1.2	169
8	Two analytical methods for time-fractional nonlinear coupled Boussinesq–Burger's equations arise in propagation of shallow water waves. Nonlinear Dynamics, 2016, 85, 699-715.	2.7	164
9	Similarities in a fifth-order evolution equation with and with no singular kernel. Chaos, Solitons and Fractals, 2020, 130, 109467.	2.5	155
10	A wavelet based numerical scheme for fractional order <scp>SEIR</scp> epidemic of measles by using Genocchi polynomials. Numerical Methods for Partial Differential Equations, 2021, 37, 1250-1268.	2.0	146
11	An Efficient Numerical Method for Fractional SIR Epidemic Model of Infectious Disease by Using Bernstein Wavelets. Mathematics, 2020, 8, 558.	1.1	145
12	A chaos study of tumor and effector cells in fractional tumor-immune model for cancer treatment. Chaos, Solitons and Fractals, 2020, 141, 110321.	2.5	143
13	New analytical method for gas dynamics equation arising in shock fronts. Computer Physics Communications, 2014, 185, 1947-1954.	3.0	133
14	Analytical solution of fractional Navier–Stokes equation by using modified Laplace decomposition method. Ain Shams Engineering Journal, 2014, 5, 569-574.	3.5	116
15	A new Rabotnov fractionalâ€exponential functionâ€based fractional derivative for diffusion equation under external force. Mathematical Methods in the Applied Sciences, 2020, 43, 4460.	1.2	107
16	A fractional model for propagation of classical optical solitons by using nonsingular derivative. Mathematical Methods in the Applied Sciences, 0 , , .	1.2	98
17	Generalization of Caputo-Fabrizio Fractional Derivative and Applications to Electrical Circuits. Frontiers in Physics, 2020, 8, . An efficient numerical scheme for fractional model of HIV-1 infection of <mml:math< td=""><td>1.0</td><td>98</td></mml:math<>	1.0	98

An efficient numerical scheme for fractional model of HIV-1 infection of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si40.svg"><mml:mrow><mml:mi mathvariant="italic">CD</mml:mi><mml:msup><mml:mrow><mml:mn>4</mml:mn></mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow

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19	A study on fractional host–parasitoid population dynamical model to describe insect species. Numerical Methods for Partial Differential Equations, 2021, 37, 1673-1692.	2.0	84
20	A robust study on 2019-nCOV outbreaks through non-singular derivative. European Physical Journal Plus, 2021, 136, 168.	1.2	84
21	Numerical computation of fractional Black–Scholes equation arising in financial market. Egyptian Journal of Basic and Applied Sciences, 2014, 1, 177-183.	0.2	74
22	Solitary solutions for time-fractional nonlinear dispersive PDEs in the sense of conformable fractional derivative. Chaos, 2019, 29, 093102.	1.0	74
23	Numerical investigations on <scp>COVID</scp> â€19 model through singular and nonâ€singular fractional operators. Numerical Methods for Partial Differential Equations, 2024, 40, .	2.0	73
24	A new fractional modeling arising in engineering sciences and its analytical approximate solution. AEJ - Alexandria Engineering Journal, 2013, 52, 813-819.	3.4	72
25	A nonlinear fractional model to describe the population dynamics of two interacting species. Mathematical Methods in the Applied Sciences, 2017, 40, 4134-4148.	1.2	71
26	Analytical approach for time fractional wave equations in the sense of Yang-Abdel-Aty-Cattani via the homotopy perturbation transform method. AEJ - Alexandria Engineering Journal, 2020, 59, 2859-2863.	3.4	68
27	Numerical solutions of nonlinear fractional model arising in the appearance of the strip patterns in two-dimensional systems. Advances in Difference Equations, 2019, 2019, .	3.5	65
28	Numerical solution for generalized nonlinear fractional integro-differential equations with linear functional arguments using Chebyshev series. Advances in Difference Equations, 2020, 2020, .	3.5	64
29	Residual Power Series Method for Fractional Diffusion Equations. Fundamenta Informaticae, 2017, 151, 213-230.	0.3	62
30	A Robust Computational Algorithm of Homotopy Asymptotic Method for Solving Systems of Fractional Differential Equations. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	0.7	62
31	A numerical study based on an implicit fully discrete local discontinuous Galerkin method for the time-fractional coupled Schrödinger system. Computers and Mathematics With Applications, 2012, 64, 2603-2615.	1.4	61
32	A mathematical analysis of ongoing outbreak <scp>COVID</scp> â€19 in India through nonsingular derivative. Numerical Methods for Partial Differential Equations, 2021, 37, 1282-1298.	2.0	56
33	A model for describing the velocity of a particle in Brownian motion by Robotnov function based fractional operator. AEJ - Alexandria Engineering Journal, 2020, 59, 1435-1449.	3.4	54
34	Residual power series method for time-fractional Schr \tilde{A} \P dinger equations. Journal of Nonlinear Science and Applications, 2016, 09, 5821-5829.	0.4	53
35	A new analysis for the Keller-Segel model of fractional order. Numerical Algorithms, 2017, 75, 213-228.	1.1	52
36	A comparison study of two modified analytical approach for the solution of nonlinear fractional shallow water equations in fluid flow. AIMS Mathematics, 2020, 5, 3035-3055.	0.7	51

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37	New treatment of fractional Fornberg–Whitham equation via Laplace transform. Ain Shams Engineering Journal, 2013, 4, 557-562.	3.5	50
38	A Fractional Model of Gas Dynamics Equations and its Analytical Approximate Solution Using Laplace Transform. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2012, 67, 389-396.	0.7	49
39	Two-dimensional time fractional-order biological population model and its analytical solution. Egyptian Journal of Basic and Applied Sciences, 2014, 1, 71-76.	0.2	48
40	An efficient computational method for local fractional transport equation occurring in fractal porous media. Computational and Applied Mathematics, 2020, 39, 1.	1.0	48
41	The unified method for abundant soliton solutions of local time fractional nonlinear evolution equations. Results in Physics, 2021, 22, 103979.	2.0	48
42	An efficient computational approach for time-fractional Rosenau–Hyman equation. Neural Computing and Applications, 2018, 30, 3063-3070.	3.2	47
43	Numerical computation of Klein–Gordon equations arising in quantum field theory by using homotopy analysis transform method. AEJ - Alexandria Engineering Journal, 2014, 53, 469-474.	3.4	46
44	A modified analytical approach with existence and uniqueness for fractional Cauchy reaction–diffusion equations. Advances in Difference Equations, 2020, 2020, .	3.5	46
45	A fractional model for population dynamics of two interacting species by using spectral and Hermite wavelets methods. Numerical Methods for Partial Differential Equations, 2021, 37, 1652-1672.	2.0	42
46	A fractional derivative with two singular kernels and application to a heat conduction problem. Advances in Difference Equations, 2020, 2020, .	3.5	41
47	New homotopy analysis transform algorithm to solve volterra integral equation. Ain Shams Engineering Journal, 2014, 5, 243-246.	3.5	40
48	Numerical approximation for HIV infection of CD4+ T cells mathematical model. Ain Shams Engineering Journal, 2014, 5, 625-629.	3.5	40
49	A new analytical solution procedure for nonlinear integral equations. Mathematical and Computer Modelling, 2012, 55, 1892-1897.	2.0	39
50	Analytical approximations of two and three dimensional time-fractional telegraphic equation by reduced differential transform method. Egyptian Journal of Basic and Applied Sciences, 2014, 1, 60-66.	0.2	39
51	A modified homotopy analysis method for solution of fractional wave equations. Advances in Mechanical Engineering, 2015, 7, 168781401562033.	0.8	38
52	Synthesis and Use of Low-Band-Gap ZnO Nanoparticles for Water Treatment. Arabian Journal for Science and Engineering, 2016, 41, 2393-2398.	1.1	37
53	A study on the convergence conditions of generalized differential transform method. Mathematical Methods in the Applied Sciences, 2017, 40, 40-48.	1.2	36
54	Residual power series method for fractional Sharma-Tasso-Olever equation. Communications in Numerical Analysis, 2016, 2016, 1-10.	0.1	36

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55	Numerical computation of nonlinear shock wave equation of fractional order. Ain Shams Engineering Journal, 2015, 6, 605-611.	3.5	35
56	Synthesis of ultra small iron oxide and doped iron oxide nanostructures and their antimicrobial activities. Journal of Taibah University for Science, 2019, 13, 280-285.	1.1	35
57	Numerical computation of nonlinear fractional Zakharov–Kuznetsov equation arising in ion-acoustic waves. Journal of the Egyptian Mathematical Society, 2014, 22, 373-378.	0.6	34
58	A study on fractional COVIDâ€19 disease model by using Hermite wavelets. Mathematical Methods in the Applied Sciences, 2023, 46, 7671-7687.	1.2	34
59	New homotopy analysis transform method for solving the discontinued problems arising in nanotechnology. Chinese Physics B, 2013, 22, 110201.	0.7	33
60	Fractional modelling arising in unidirectional propagation of long waves in dispersive media. Advances in Nonlinear Analysis, 2016, 5, 383-394.	1.3	33
61	Fractional time-delay mathematical modeling of Oncolytic Virotherapy. Chaos, Solitons and Fractals, 2021, 150, 111123.	2.5	33
62	Numerical Inversion of the Abel Integral Equation using Homotopy Perturbation Method. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2010, 65, 677-682.	0.7	32
63	A fractional model of Navier–Stokes equation arising in unsteady flow of a viscous fluid. Journal of the Association of Arab Universities for Basic and Applied Sciences, 2015, 17, 14-19.	1.0	32
64	Analytical solutions of the Keller-Segel chemotaxis model involving fractional operators without singular kernel. European Physical Journal Plus, 2018, 133, 1.	1.2	32
65	A Modified Analytical Approach for Fractional Discrete KdV Equations Arising in Particle Vibrations. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 2018, 88, 95-106.	0.8	31
66	Molar volume, viscosity and conductance studies of some alkali metal chlorides in aqueous ascorbic acid. Journal of Molecular Liquids, 2009, 150, 39-42.	2.3	30
67	A mathematical modeling arising in the chemical systems and its approximate numerical solution. Asia-Pacific Journal of Chemical Engineering, 2012, 7, 835-840.	0.8	30
68	Exact traveling wave solutions of Chaffee–Infante equation in (2Â+Â1)â€dimensions and dimensionless Zakharov equation. Mathematical Methods in the Applied Sciences, 2021, 44, 1500-1513.	1.2	30
69	Synthesis of reduced graphene oxide (rGO) via chemical reduction. AIP Conference Proceedings, 2015, ,	0.3	29
70	A Numerical Study for the Solution of Time Fractional Nonlinear Shallow Water Equation in Oceans. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2013, 68, 547-553.	0.7	28
71	Reduced differential transform method for solving $(1+\langle i\rangle n\langle i\rangle)$ $\hat{a}\in$ Dimensional Burgers' equation. Egyptian Journal of Basic and Applied Sciences, 2014, 1, 115-119.	0.2	26
72	Nonlinear Dynamics of Cattaneo–Christov Heat Flux Model for Third-Grade Power-Law Fluid. Journal of Computational and Nonlinear Dynamics, 2020, 15, .	0.7	26

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73	A fractional model to describe the Brownian motion of particles and its analytical solution. Advances in Mechanical Engineering, 2015, 7, 168781401561887.	0.8	25
74	A new approximate analytical technique for dual solutions of nonlinear differential equations arising in mixed convection heat transfer in a porous medium. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 486-503.	1.6	25
75	A robust study on the listeriosis disease by adopting fractal-fractional operators. AEJ - Alexandria Engineering Journal, 2022, 61, 2016-2028.	3.4	25
76	Analytical solution of Abel integral equation arising in astrophysics via Laplace transform. Journal of the Egyptian Mathematical Society, 2015, 23, 102-107.	0.6	24
77	Mathematical analysis of the influence of prey escaping from prey herd on three species fractional predator-prey interaction model. Physica A: Statistical Mechanics and Its Applications, 2021, 572, 125840.	1.2	24
78	A fractional model of Harry Dym equation and its approximate solution. Ain Shams Engineering Journal, 2013, 4, 111-115.	3.5	23
79	An accurate numerical method for solving the linear fractional Klein–Gordon equation. Mathematical Methods in the Applied Sciences, 2014, 37, 2972-2979.	1.2	23
80	Resource Efficient Clustering and Next Hop Knowledge Based Routing in Multiple Heterogeneous Wireless Sensor Networks. International Journal of Grid and High Performance Computing, 2017, 9, 1-20.	0.7	23
81	Effects of Alkaline Earth Metal Ions on Thermodynamic and Ultrasonic Properties of Ascorbic Acid. Journal of Chemical & Engineering Data, 2013, 58, 1294-1300.	1.0	22
82	A New Fractional Modelling on Susceptible-Infected-Recovered Equations with Constant Vaccination Rate. Nonlinear Engineering, 2014, 3, 11-19.	1.4	22
83	Numerical Computation of Time-Fractional Fokker–Planck Equation Arising in Solid State Physics and Circuit Theory Numerical Computation of Time-Fractional Fokker–Planck Equation Arising in Solid State Physics and Circuit Theory. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2013, 68, 777-784.	0.7	21
84	A new financial chaotic model in Atangana-Baleanu stochastic fractional differential equations. AEJ - Alexandria Engineering Journal, 2021, 60, 5193-5204.	3.4	21
85	A study on transmission dynamics of HIV/AIDS model through fractional operators. Results in Physics, 2021, 22, 103855.	2.0	20
86	Fractional modelling for BBM-Burger equation by using new homotopy analysis transform method. Journal of the Association of Arab Universities for Basic and Applied Sciences, 2014, 16, 16-20.	1.0	18
87	A study on eco-epidemiological model with fractional operators. Chaos, Solitons and Fractals, 2022, 156, 111697.	2.5	18
88	Analytical expression for concentration and sensitivity of a thin film semiconductor gas sensor. Ain Shams Engineering Journal, 2014, 5, 885-893.	3.5	17
89	A spectral collocation method for fractional chemical clock reactions. Computational and Applied Mathematics, 2020, 39, 1.	1.0	17
90	A study on fractional predator–prey–pathogen model with <scp>Mittag–Leffler</scp> kernelâ€based operators. Numerical Methods for Partial Differential Equations, 2024, 40, .	2.0	17

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91	On the approximate solution of nonlinear time-fractional KdV equation via modified homotopy analysis Laplace transform method. Journal of Nonlinear Science and Applications, 2016, 09, 5463-5470.	0.4	17
92	The Extended Fractional Subequation Method for Nonlinear Fractional Differential Equations. Mathematical Problems in Engineering, 2012, 2012, 1-11.	0.6	16
93	Spatial patterns in a vegetation model with internal competition and feedback regulation. European Physical Journal Plus, 2021, 136, 1.	1.2	16
94	A study on fractional HIVâ€AIDs transmission model with awareness effect. Mathematical Methods in the Applied Sciences, 2023, 46, 8334-8348.	1.2	16
95	A New Fractional Model of Nonlinear Shock Wave Equation Arising in Flow of Gases. Nonlinear Engineering, 2014, 3, 43-50.	1.4	15
96	Numerical computation of fractional multi-dimensional diffusion equations by using a modified homotopy perturbation method. Journal of the Association of Arab Universities for Basic and Applied Sciences, 2015, 17, 20-26.	1.0	15
97	Residual power series method for fractional Burger types equations. Nonlinear Engineering, 2016, 5, .	1.4	15
98	Monotone Convergence of Extended Iterative Methods and Fractional Calculus with Applications. Fundamenta Informaticae, 2017, 151, 241-253.	0.3	15
99	Chebyshev Operational Matrix Method for Lane-Emden Problem. Nonlinear Engineering, 2019, 8, 1-9.	1.4	15
100	An analytical algorithm for nonlinear fractional Fornberg–Whitham equation arising in wave breaking based on a new iterative method. AEJ - Alexandria Engineering Journal, 2014, 53, 225-231.	3.4	13
101	EMEEDP: Enhanced Multi-hop Energy Efficient Distributed Protocol for Heterogeneous Wireless Sensor Network. , 2015, , .		13
102	An NS3 Implementation of Physical Layer Based on 802.11 for Utility Maximization of WSN., 2015,,.		12
103	Fractional differential equation pertaining to an integral operator involving incomplete H â€function in the kernel. Mathematical Methods in the Applied Sciences, 2020, , .	1.2	12
104	Energy Aware Distributed Protocol for Heterogeneous Wireless Sensor Network. International Journal of Control and Automation, 2015, 8, 421-430.	0.3	12
105	Hopf bifurcation analysis in an age-structured heroin model. European Physical Journal Plus, 2021, 136, 1.	1.2	11
106	A comparative study for fractional chemical kinetics and carbon dioxide <i>CO</i> ₂ absorbed into phenyl glycidyl ether problems. AIMS Mathematics, 2020, 5, 3201-3222.	0.7	11
107	A stable numerical inversion of generalized Abel $\hat{E}\frac{1}{4}$ s integral equation. Applied Numerical Mathematics, 2012, 62, 567-579.	1.2	10
108	Energy optimization technique for distributed localized wireless sensor network., 2014,,.		10

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109	Mathematical modeling of gas phase and biofilm phase biofilter performance. Egyptian Journal of Basic and Applied Sciences, 2016, 3, 94-105.	0.2	10
110	An efficient approach for fractional nonlinear chaotic model with Mittag-Leffler law. Journal of King Saud University - Science, 2021, 33, 101347.	1.6	10
111	Sumudu transform series expansion method for solving the local fractional Laplace equation in fractal thermal problems. Thermal Science, 2016, 20, 739-742.	0.5	10
112	Analytical modeling for fractional multi-dimensional diffusion equations by using Laplace transform. Communications in Numerical Analysis, 2015, 2015, 16-29.	0.1	10
113	Surface Functionalization of Sisal Fibers Using Peroxide Treatment Followed by Grafting of Poly(ethyl acrylate) and Copolymers. International Journal of Polymer Analysis and Characterization, 2013, 18, 596-607.	0.9	9
114	Shallow Water Wave Models with and without Singular Kernel: Existence, Uniqueness, and Similarities. Mathematical Problems in Engineering, 2017, 2017, 1-9.	0.6	9
115	Numerical investigation of MHD stagnation-point flow and heat transfer of sodium alginate non-Newtonian nanofluid. Nonlinear Engineering, 2019, 8, 179-192.	1.4	9
116	A numerical analysis for fractional model of the spread of pests in tea plants. Numerical Methods for Partial Differential Equations, 2020, , .	2.0	9
117	Energy Efficient Multichannel MAC Protocol for High Traffic Applications in Heterogeneous Wireless Sensor Networks. Recent Advances in Electrical and Electronic Engineering, 2017, 10, .	0.2	9
118	Energy Efficient Resource Migration Based Load Balance Mechanism for High Traffic Applications IoT. Wireless Personal Communications, 2022, 127, 385-403.	1.8	8
119	A chaos study of fractional SIR epidemic model of childhood diseases. Results in Physics, 2021, 27, 104422.	2.0	8
120	A study on fractional HBV model through singular and non-singular derivatives. European Physical Journal: Special Topics, 2022, 231, 1885-1904.	1.2	8
121	Parametric Analysis of Entropy Generation in Off-centered Stagnation Flow Towards a Rotating Disc. Nonlinear Engineering, 2014, 3, 27-41.	1.4	7
122	Atangana–Baleanu Derivative with Fractional Order Applied to the Gas Dynamics Equations. Studies in Systems, Decision and Control, 2019, , 235-251.	0.8	7
123	Threshold dynamics of difference equations for SEIR model with nonlinear incidence function and infinite delay. European Physical Journal Plus, 2021, 136, 587.	1.2	7
124	Analytical solution for mixed convection and MHD flow of electrically conducting non-Newtonian nanofluid with different nanoparticles: A comparative study. International Journal of Heat and Technology, 2018, 36, 987-996.	0.3	7
125	A new mathematical model for effectiveness factors in biofilm under toxic conditions. AEJ - Alexandria Engineering Journal, 2014, 53, 917-928.	3.4	6
126	A numerical study on fractional differential equation with population growth model. Numerical Methods for Partial Differential Equations, 2024, 40, .	2.0	6

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127	Bright, dark, and singular optical soliton solutions for perturbed Gerdjikov-Ivanov equation. Thermal Science, 2021, 25, 151-156.	0.5	6
128	Peakon–antipeakon interaction in the Dullin–Gottwald–Holm equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 1233-1238.	0.9	5
129	Analytical study for singular system of transistor circuits. AEJ - Alexandria Engineering Journal, 2014, 53, 445-448.	3.4	5
130	A numerical algorithm for solving an inverse semilinear wave problem. International Journal of Computing Science and Mathematics, 2014, 5, 1.	0.2	5
131	Homotopy analysis transform algorithm to solve time-fractional foam drainage equation. Nonlinear Engineering, 2016, 5, .	1.4	5
132	Spectral approximation methods for non equilibrium transport in turbulent channel flows using fADE. Applied Numerical Mathematics, 2021, 162, 53-66.	1.2	5
133	A study on four-species fractional population competition dynamical model. Results in Physics, 2021, 24, 104089.	2.0	5
134	Dynamical study on three-species population eco-epidemiological model with fractional order derivatives. Results in Physics, 2021, 24, 104074.	2.0	5
135	A ROBUST COMPUTATIONAL DYNAMICS OF FRACTIONAL-ORDER SMOKING MODEL WITH RELAPSE HABIT. Fractals, 2022, 30, .	1.8	5
136	Bernstein Operational Matrix Approach for Integro-Differential Equation Arising in Control theory. Nonlinear Engineering, 2014, 3, .	1.4	4
137	A study on fractional tumour–immune–vitamins model for intervention of vitamins. Results in Physics, 2022, 33, 104963.	2.0	4
138	Complex Dynamic Behaviour of Food Web Model with Generalized Fractional Operator. Mathematics, 2022, 10, 1702.	1.1	4
139	A series-form solution of the coupled nonlinear equations by the method of directly defined inverse mapping and SRM. International Journal of Ambient Energy, 2022, 43, 1345-1354.	1.4	3
140	A fractional system of Cauchyâ€reaction diffusion equations by adopting Robotnov function. Numerical Methods for Partial Differential Equations, 2020, , .	2.0	3
141	A stability analysis on a smoking model with stochastic perturbation. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, ahead-of-print, .	1.6	3
142	A FRACTAL-FRACTIONAL 2019-NCOV MODEL OF MAJOR DISASTER FOR HUMAN LIFE. Fractals, 2022, 30, .	1.8	3
143	A computational study of transmission dynamics for dengue fever with a fractional approach. Mathematical Modelling of Natural Phenomena, 2021, 16, 48.	0.9	2
144	Time fractional advection-dispersion model to study transportation of particles with time-memory for unsteady nonequilibrium suspension in open-channel turbulent flows. Physica Scripta, 2021, 96, 124078.	1.2	2

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145	Analytical expressions for the concentration of nitric oxide removal in the gas and biofilm phase in a biotrickling filter. Journal of the Association of Arab Universities for Basic and Applied Sciences, 2015, 18, 19-28.	1.0	1
146	Accurate spectral algorithm for twoâ€dimensional variableâ€order fractional percolation equations. Mathematical Methods in the Applied Sciences, 2021, 44, 6228-6238.	1.2	1
147	A class of computationally efficient Newton-like methods with frozen inverse operator for nonlinear systems. International Journal of Nonlinear Sciences and Numerical Simulation, 2023, 24, 1177-1195.	0.4	1
148	A THEORETICAL STUDY ON FRACTIONAL EBOLA HEMORRHAGIC FEVER MODEL. Fractals, 2022, 30, .	1.8	1
149	Orthonormal Bernoulli Polynomials for Solving a Class of Two Dimensional Stochastic Volterra–Fredholm Integral Equations. International Journal of Applied and Computational Mathematics, 2022, 8, 31.	0.9	1
150	A numerical study of fractional population growth and nuclear decay model. AIMS Mathematics, 2022, 7, 11417-11442.	0.7	1
151	A study of Ralston's cubic convergence with the application of population growth model. AIMS Mathematics, 2022, 7, 11320-11344.	0.7	1
152	Symmetry Reduction, Exact Solutions, and Conservation Laws of the ZK-BBM Equation. ISRN Mathematical Analysis, 2012, 2012, 1-9.	0.3	0
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