Behzad Ghanbari

List of Publications by Year
in descending order

109 papers	5,209 citations	41339 49 h-index	91872 69 g-index
112 all docs	112 docs citations	112 times ranked	1645 citing authors

#	Article	IF	Citations
1	A study on fractional predatorâ€“preyâ€“pathogen model with <scp>Mittagâ€“Leffler</scp> kernelâ€based operators. Numerical Methods for Partial Differential Equations, 2024, 40, .	3.6	17
2	A new model for investigating the transmission of infectious diseases in a preyâ€predator system using a nonâ€singular fractional derivative. Mathematical Methods in the Applied Sciences, 2023, 46, 8106-8125.	2.3	19
3	Fuzzy fractional differential equations with the generalized Atangana-Baleanu fractional derivative. Fuzzy Sets and Systems, 2022, 429, 1-27.	2.7	7
4	Two efficient numerical schemes for simulating dynamical systems and capturing chaotic behaviors with Mittagâ€“Leffler memory. Engineering With Computers, 2022, 38, 2139-2167.	6.1	13
5	Exact solutions of local fractional longitudinal wave equation in a magneto-electro-elastic circular rod in fractal media. Indian Journal of Physics, 2022, 96, 787-794.	1.8	12
6	Soliton solutions in the conformable (2+1)-dimensional chiral nonlinear SchrÃ¶dinger equation. Journal of Optics (India), 2022, 51, 289-316.	1.7	14
7	On the nondifferentiable exact solutions to Schamel's equation with local fractional derivative on Cantor sets. Numerical Methods for Partial Differential Equations, 2022, 38, 1255-1270.	3.6	23
8	Implementation of cardiac Purkinje Fiber cells Model: High speed and low cost hardware. AEU - International Journal of Electronics and Communications, 2022, 153, 154269.	2.9	3
9	Backward, Hopf bifurcation in a heroin epidemic model with treat ageâ‹†. International Journal of Modeling, Simulation, and Scientific Computing, 2021, 12, 2150018.	1.4	19
10	On novel nondifferentiable exact solutions to local fractional Gardner's equation using an effective technique. Mathematical Methods in the Applied Sciences, 2021, 44, 4673-4685.	2.3	111
11	Analysis of fractional model of guava for biological pest control with memory effect. Journal of Advanced Research, 2021, 32, 99-108.	9.5	62
12	On constructing of multiple rogue wave solutions to the (3+1)-dimensional Kortewegâ€“de Vries Benjamin-Bona-Mahony equation. Physica Scripta, 2021, 96, 035226.	2.5	13
13	High Speed and Low Digital Resources Implementation of Hodgkin-Huxley Neuronal Model Using Base-2 Functions. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 275-287.	5.4	20
14	The influence of an infectious disease on a prey-predator model equipped with a fractional-order derivative. Advances in Difference Equations, 2021, 2021, .	3.5	60
15	An efficient numerical method for fractional model of allelopathic stimulatory phytoplankton species with Mittag-Leffler law. Discrete and Continuous Dynamical Systems - Series S, 2021, 14, 3577.	1.1	8
16	Abundant wave solutions to two novel KP-like equations using an effective integration method. Physica Scripta, 2021, 96, 045203.	2.5	24
17	On the modeling of an eco-epidemiological model using a new fractional operator. Results in Physics, 2021, 21, 103799.	4.1	21
18	Global stability analysis of a fractional SVEIR epidemic model. Mathematical Methods in the Applied Sciences, 2021, 44, 8577-8597.	2.3	64

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19	Spatial patterns in a vegetation model with internal competition and feedback regulation. European Physical Journal Plus, 2021, 136, 1.	2.6	16
20	Abundant exact solutions to a generalized nonlinear SchrÃ¶dinger equation with local fractional derivative. Mathematical Methods in the Applied Sciences, 2021, 44, 8759-8774.	2.3	119
21	On the solitary wave solutions and physical characterization of gas diffusion in a homogeneous medium via some efficient techniques. European Physical Journal Plus, 2021, 136, 1.	2.6	60
22	Chaotic behaviors of the prevalence of an infectious disease in a prey and predator system using fractional derivatives. Mathematical Methods in the Applied Sciences, 2021, 44, 9998-10013.	2.3	72
23	The Lie symmetry analysis and exact Jacobi elliptic solutions for the Kawaharaâ€"KdV type equations. Results in Physics, 2021, 23, 104006.	4.1	55
24	New approximate analytical solutions for the nonlinear fractional SchrÃ¶dinger equation with secondâ€order spatioâ€temporal dispersion via double Laplace transform method. Mathematical Methods in the Applied Sciences, 2021, 44, 11138-11156.	2.3	42
25	Dynamical behavior of two predatorsâ€"one prey model with generalized functional response and time-fractional derivative. Advances in Difference Equations, 2021, 2021, .	3.5	42
26	Lie Symmetry Analysis and Dynamics of Exact Solutions of the (2+1)-Dimensional Nonlinear Sharmaâ€"Tassoâ€"Olver Equation. Mathematical Problems in Engineering, 2021, 2021, 1-12.	1.1	3
27	On novel resonant multi-soliton and wave solutions to the (3+1)-dimensional GSWE equation via three effective approaches. Results in Physics, 2021, 26, 104421.	4.1	11
28	New solitary wave solutions of the Sawada-Kotera equation and its bidirectional form. Physica Scripta, 2021, 96, 104011.	2.5	7
29	Modeling escaping behavior from the herd in different ecological interactions. Physica Scripta, 2021, 96, 124016.	2.5	2
30	On fractional approaches to the dynamics of a SARS-CoV-2 infection model including singular and non-singular kernels. Results in Physics, 2021, 28, 104600.	4.1	13
31	On detecting chaos in a prey-predator model with preyâ€™s counter-attack on juvenile predators. Chaos, Solitons and Fractals, 2021, 150, 111136.	5.1	29
32	New analytical solutions for the Oskolkov-type equations in fluid dynamics via a modified methodology. Results in Physics, 2021, 28, 104610.	4.1	50
33	Employing Hirotaâ€™s bilinear form to find novel lump waves solutions to an important nonlinear model in fluid mechanics. Results in Physics, 2021, 29, 104689.	4.1	44
34	Impact of predation in the spread of an infectious disease with time fractional derivative and social behavior. International Journal of Modeling, Simulation, and Scientific Computing, 2021, 12, 2150023.	1.4	6
35	A constructive method for solving the equation Xa=b in Rn: A generalization of division in Rn. Applied Mathematics and Computation, 2020, 364, 124673.	2.2	1
36	On the fuzzy fractional differential equation with interval Atanganaâ€"Baleanu fractional derivative approach. Chaos, Solitons and Fractals, 2020, 130, 109397.	5.1	57

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37	Mathematical and numerical analysis of a threeâ€species predatorâ€prey model with herd behavior and time fractionalâ€order derivative. Mathematical Methods in the Applied Sciences, 2020, 43, 1736-1752.	2.3	93
38	A new application of fractional Atanganaâ€"Baleanu derivatives: Designing ABC-fractional masks in image processing. Physica A: Statistical Mechanics and Its Applications, 2020, 542, 123516.	2.6	123
39	Exact solitary wave solutions to the (2 + 1)-dimensional generalised Camassaâ€"Holmâ€"Kadomtsevâ€"Petviashvili equation. Pramana - Journal of Physics, 2020, 94, 1.	1.8	24
40	Existence of solutions for some functional integrodifferential equations with nonlocal conditions. Mathematical Methods in the Applied Sciences, 2020, 43, 10319-10331.	2.3	74
41	On forecasting the spread of the COVID-19 in Iran: The second wave. Chaos, Solitons and Fractals, 2020, 140, 110176.	5.1	84
42	A variety of solitary wave solutions to the (2+1)-dimensional bidirectional SK and variable-coefficient SK equations. Results in Physics, 2020, 18, 103266.	4.1	20
43	Determining new soliton solutions for a generalized nonlinear evolution equation using an effective analytical method. AEJ - Alexandria Engineering Journal, 2020, 59, 3171-3179.	6.4	20
44	Some new edge detecting techniques based on fractional derivatives with non-local and non-singular kernels. Advances in Difference Equations, 2020, 2020, .	3.5	90
45	Some new families of exact solutions to a new extension of nonlinear SchrÃ¶dinger equation. Physica Scripta, 2020, 95, 075208.	2.5	35
46	New Optical Solutions of the Fractional Gerdjikov-Ivanov Equation With Conformable Derivative. Frontiers in Physics, 2020, 8, .	2.1	73
47	Novel exact solutions of the fractional Bogoyavlenskyâ€"Konopelchenko equation involving the Atangana-Baleanu-Riemann derivative. AEJ - Alexandria Engineering Journal, 2020, 59, 2957-2967.	6.4	55
48	An application of the Atangana-Baleanu fractional derivative in mathematical biology: A three-species predator-prey model. Chaos, Solitons and Fractals, 2020, 138, 109910.	5.1	79
49	Mathematical analysis of a fractional-order predator-prey model with prey social behavior and infection developed in predator population. Chaos, Solitons and Fractals, 2020, 138, 109960.	5.1	84
50	Coronavirus pandemic: A predictive analysis of the peak outbreak epidemic in South Africa, Turkey, and Brazil. Chaos, Solitons and Fractals, 2020, 138, 109971.	5.1	74
51	Turing-Hopf bifurcation in a diffusive mussel-algae model with time-fractional-order derivative. Chaos, Solitons and Fractals, 2020, 138, 109954.	5.1	52
52	Some Effective Numerical Techniques for Chaotic Systems Involving Fractal-Fractional Derivatives With Different Laws. Frontiers in Physics, 2020, 8, .	2.1	27
53	Some mixed trigonometric complex soliton solutions to the perturbed nonlinear SchrÃ¶dinger equation. Modern Physics Letters B, 2020, 34, 2050034.	1.9	55
54	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.	5.1	283

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55	An efficient numerical approach for fractional diffusion partial differential equations. AEJ - Alexandria Engineering Journal, 2020, 59, 2171-2180.	6.4	6
56	Abundant new analytical and approximate solutions to the generalized Schamel equation. Physica Scripta, 2020, 95, 075201.	2.5	69
57	On fractional predator and prey models with mutualistic predation including non-local and nonsingular kernels. Chaos, Solitons and Fractals, 2020, 136, 109823.	5.1	33
58	Exact optical solutions for the regularized long-wave Kadomtsev-Petviashvili equation. Physica Scripta, 2020, 95, 105208.	2.5	8
59	Abundant solitary wave solutions to an extended nonlinear SchrÃ¶dingerâ€™s equation with conformable derivative using an efficient integration method. Advances in Difference Equations, 2020, 2020, .	3.5	107
60	On generalized fractional integral inequalities for the monotone weighted Chebyshev functionals. Advances in Difference Equations, 2020, 2020, .	3.5	53
61	A fractional system of delay differential equation with nonsingular kernels in modeling hand-foot-mouth disease. Advances in Difference Equations, 2020, 2020, 536.	3.5	72
62	On the modeling of the interaction between tumor growth and the immune system using some new fractional and fractional-fractal operators. Advances in Difference Equations, 2020, 2020, 585.	3.5	63
63	On approximate solutions for a fractional preyâ€“predator model involving the Atanganaâ€“Baleanu derivative. Advances in Difference Equations, 2020, 2020, .	3.5	68
64	Families of exact solutions of Biswas-Milovic equation by an exponential rational function method. Tbilisi Mathematical Journal, 2020, 13, .	0.3	7
65	Planar System-Masses in an Equilateral Triangle: Numerical Study within Fractional Calculus. CMES - Computer Modeling in Engineering and Sciences, 2020, 124, 953-968.	1.1	44
66	Exact traveling wave solutions for resonance nonlinear SchrÃ¶dinger equation with intermodal dispersions and the Kerr law nonlinearity. Mathematical Methods in the Applied Sciences, 2019, 42, 7210-7221.	2.3	102
67	Oblique optical solutions of mitigating internet bottleneck with quadratic-cubic nonlinearity. International Journal of Modern Physics B, 2019, 33, 1950224.	2.0	7
68	Existence and multiplicity for some boundary value problems involving Caputo and Atanganaâ€“Baleanu fractional derivatives: A variational approach. Chaos, Solitons and Fractals, 2019, 127, 312-317.	5.1	27
69	New exact wave solutions of the variable-coefficient (1 + 1)-dimensional Benjamin-Bona-Mahony and (2) Tj ETQq1 1 0.784314 rgBT /Ov rational function method. European Physical Journal Plus, 2019, 134, 1.	2.6	70
70	New numerical simulations for some real world problems with Atanganaâ€“Baleanu fractional derivative. Chaos, Solitons and Fractals, 2019, 128, 34-43.	5.1	109
71	New exact optical soliton solutions for nonlinear SchrÃ¶dinger equation with second-order spatio-temporal dispersion involving M-derivative. Modern Physics Letters B, 2019, 33, 1950235.	1.9	72
72	Optical soliton solutions for the nonlinear Radhakrishnanâ€“Kunduâ€“Lakshmanan equation. Modern Physics Letters B, 2019, 33, 1950402.	1.9	67

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73	A novel technique to construct exact solutions for nonlinear partial differential equations. European Physical Journal Plus, 2019, 134, 1.	2.6	67
74	A new and efficient numerical method for the fractional modeling and optimal control of diabetes and tuberculosis co-existence. Chaos, 2019, 29, 093111.	2.5	146
75	Existence and uniqueness of solution of a fractional order tuberculosis model. European Physical Journal Plus, 2019, 134, 1.	2.6	24
76	Exact optical solitons of Radhakrishnanâ€“Kunduâ€“Lakshmanan equation with Kerr law nonlinearity. Modern Physics Letters B, 2019, 33, 1950061.	1.9	23
77	Resonant multi-soliton solutions to new (3+1)-dimensional Jimboâ€“Miwa equations by applying the linear superposition principle. Nonlinear Dynamics, 2019, 96, 459-464.	5.2	61
78	Numerical solution of predator-prey model with Beddington-DeAngelis functional response and fractional derivatives with Mittag-Leffler kernel. Chaos, 2019, 29, 063103.	2.5	77
79	Generalized exponential rational function method for extended Zakharovâ€“Kuzetsov equation with conformable derivative. Modern Physics Letters A, 2019, 34, 1950155.	1.2	132
80	The new exact solitary wave solutions and stability analysis for the (2 + 1) $(2+1)$ -dimensional Zakharovâ€“Kuznetsov equation. Advances in Difference Equations, 2019, 2019, .	3.5	95
81	Abundant soliton solutions for the Hirotaâ€“Maccari equation via the generalized exponential rational function method. Modern Physics Letters B, 2019, 33, 1950106.	1.9	74
82	New Solutions of Gardner's Equation Using Two Analytical Methods. Frontiers in Physics, 2019, 7, .	2.1	56
83	Analysis of two avian influenza epidemic models involving fractal-fractional derivatives with power and Mittag-Leffler memories. Chaos, 2019, 29, 123113.	2.5	51
84	New Exact Solutions of the Generalized Benjaminâ€“Bonaâ€“Mahony Equation. Symmetry, 2019, 11, 20.	2.2	61
85	New complex waves in nonlinear optics based on the complex Ginzburg-Landau equation with Kerr law nonlinearity. European Physical Journal Plus, 2019, 134, 1.	2.6	88
86	An analytical method for soliton solutions of perturbed SchrÃ¶dingerâ€™s equation with quadratic-cubic nonlinearity. Modern Physics Letters B, 2019, 33, 1950018.	1.9	58
87	SOLITARY WAVE SOLUTIONS TO THE TZITZÃ‰ICA TYPE EQUATIONS OBTAINED BY A NEW EFFICIENT APPROACH. Journal of Applied Analysis and Computation, 2019, 9, 568-589.	0.5	17
88	The generalized exponential rational function method for Radhakrishnan-Kundu-Lakshmanan equation with I²-conformable time derivative. Revista Mexicana De FÃsica, 2019, 65, 503-518.	0.4	51
89	New solitary wave solutions and stability analysis of the Benney-Luke and the Phi-4 equations in mathematical physics. AIMS Mathematics, 2019, 4, 1523-1539.	1.6	35
90	A new generalized exponential rational function method to find exact special solutions for the resonance nonlinear SchrÃ¶dinger equation. European Physical Journal Plus, 2018, 133, 1.	2.6	177

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91	Modeling the dynamics of nutrientâ€“phytoplanktonâ€“zooplankton system with variable-order fractional derivatives. Chaos, Solitons and Fractals, 2018, 116, 114-120.	5.1	85
92	New optical solitary wave solutions of Fokas-Lenells equation in presence of perturbation terms by a novel approach. Optik, 2018, 175, 328-333.	2.9	137
93	Dark optical solitons and modulation instability analysis of nonlinear Schrodinger equation with higher order dispersion and cubic-quintic nonlinearity. Journal of Coupled Systems and Multiscale Dynamics, 2018, 6, 217-227.	0.2	4
94	Optical soliton solutions of the Ginzburg-Landau equation with conformable derivative and Kerr law nonlinearity. Revista Mexicana De FÃsica, 2018, 65, 73-81.	0.4	18
95	An Analytical Study for (2 + 1)-Dimensional SchrÃ¶dinger Equation. Scientific World Journal, The, 2014, 2014, 1-5.	2.1	4
96	The Convergence Study of the Homotopy Analysis Method for Solving Nonlinear Volterra-Fredholm Integrodifferential Equations. Scientific World Journal, The, 2014, 2014, 1-7.	2.1	4
97	A restarted iterative homotopy analysis method for two nonlinear models from image processing. International Journal of Computer Mathematics, 2014, 91, 661-687.	1.8	11
98	Effects of Brownian Motion and Thermophoresis on the Mixed Convection of Nanofluid in a Porous Channel Including Flow Reversal. Transport in Porous Media, 2014, 101, 115-136.	2.6	17
99	A restarted iterative homotopy analysis method for three-dimensional image segmentation. , 2012, , .		0
100	The homotopy perturbation method for solving neutral functionalâ€“differential equations with proportional delays. Journal of King Saud University - Science, 2012, 24, 33-37.	3.5	58
101	HAM solution of some initial value problems arising in heat radiation equations. Journal of King Saud University - Science, 2012, 24, 161-165.	3.5	7
102	A New Family of Nonlinear Fifth-Order Solvers for Finding Simple Roots. Applied Mathematics, 2012, 03, 577-580.	0.4	0
103	A new general fourth-order family of methods for finding simple roots of nonlinear equations. Journal of King Saud University - Science, 2011, 23, 395-398.	3.5	12
104	Application of He's variational iteration method for solution of the family of Kuramotoâ€“Sivashinsky equations. Journal of King Saud University - Science, 2011, 23, 407-411.	3.5	16
105	Numerical solution of functional integral equations by the variational iteration method. Journal of Computational and Applied Mathematics, 2011, 235, 2581-2585.	2.0	15
106	Heâ€™s homotopy perturbation method: A strongly promising method for solving non-linear systems of the mixed Volterraâ€“Fredholm integral equations. Computers and Mathematics With Applications, 2011, 61, 1016-1023.	2.7	23
107	Notes on â€œAn improvement to homotopy perturbation method for solving system of linear equationsâ€. Computers and Mathematics With Applications, 2011, 61, 1704.	2.7	0
108	Extracting a general iterative method from an Adomian decomposition method and comparing it to the variational iteration method. Computers and Mathematics With Applications, 2010, 59, 622-628.	2.7	29

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109	A new third-order family of nonlinear solvers for multiple roots. Computers and Mathematics With Applications, 2010, 59, 3315-3319.	2.7	8