Zaid M Odibat

List of Publications by Year
in descending order

95 papers	7,636 citations	53794 45 h-index	51608 86 g-index
98 all docs	98 docs citations	98 times ranked	2838 citing authors

#	Article	IF	Citations
1	Nonlinear dynamics and chaos in fractional differential equations with a new generalized Caputo fractional derivative. Chinese Journal of Physics, 2022, 77, 1003-1014.	3.9	18
2	A linearization-based computational algorithm of homotopy analysis method for nonlinear reactionâ€“diffusion systems. Mathematics and Computers in Simulation, 2022, 194, 505-522.	4.4	8
3	On the dynamics of a Caputo-like discrete fractional RÃ¶ssler system: chaos, stabilization and synchronization. Physica Scripta, 2022, 97, 035203.	2.5	6
4	An Implementation of the Generalized Differential Transform Scheme for Simulating Impulsive Fractional Differential Equations. Mathematical Problems in Engineering, 2022, 2022, 1-11.	1.1	13
5	The optimal homotopy analysis method applied on nonlinear timeâ€fractional hyperbolic partial differential equation<scp>s</scp>. Numerical Methods for Partial Differential Equations, 2021, 37, 2008-2022.	3.6	9
6	Nonlinear dynamics and chaos in Caputo-like discrete fractional Chen system. Physica Scripta, 2021, 96, 095219.	2.5	2
7	The optimized decomposition method for a reliable treatment of IVPs for second order differential equations. Physica Scripta, 2021, 96, 095206.	2.5	6
8	A universal predictorâ€“corrector algorithm for numerical simulation of generalized fractional differential equations. Nonlinear Dynamics, 2021, 105, 2363-2374.	5.2	14
9	Dynamics of generalized Caputo type delay fractional differential equations using a modified Predictor-Corrector scheme. Physica Scripta, 2021, 96, 125213.	2.5	34
10	On a New Modification of the ErdÃ©lyiâ€“Kober Fractional Derivative. Fractal and Fractional, 2021, 5, 121.	3.3	9
11	An optimized decomposition method for nonlinear ordinary and partial differential equations. Physica A: Statistical Mechanics and Its Applications, 2020, 541, 123323.	2.6	23
12	On the Three-Dimensional Fractional-Order HÃ©non Map with Lorenz-Like Attractors. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050217.	1.7	21
13	An optimized linearization-based predictor-corrector algorithm for the numerical simulation of nonlinear FDEs. Physica Scripta, 2020, 95, 065202.	2.5	16
14	Numerical simulation of initial value problems with generalized Caputo-type fractional derivatives. Applied Numerical Mathematics, 2020, 156, 94-105.	2.1	126
15	An improved optimal homotopy analysis algorithm for nonlinear differential equations. Journal of Mathematical Analysis and Applications, 2020, 488, 124089.	1.0	11
16	Solitary Wave Solutions of Some Nonlinear Physical Models Using Riccati Equation Approach. Acta Mathematicae Applicatae Sinica, 2020, 36, 401-418.	0.7	0
17	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.	1.6	51
18	A linearizationâ€based approach of homotopy analysis method for nonâ€linear timeâ€fractional parabolic PDEs. Mathematical Methods in the Applied Sciences, 2019, 42, 7222-7232.	2.3	22

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19	A Robust Computational Algorithm of Homotopy Asymptotic Method for Solving Systems of Fractional Differential Equations. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	1.2	62
20	On the dynamics, control and synchronization of fractional-order Ikeda map. Chaos, Solitons and Fractals, 2019, 123, 108-115.	5.1	63
21	Synchronization Control in Reaction-Diffusion Systems: Application to Lengyel-Epstein System. Complexity, 2019, 2019, 1-8.	1.6	12
22	On the optimal selection of the linear operator and the initial approximation in the application of the homotopy analysis method to nonlinear fractional differential equations. Applied Numerical Mathematics, 2019, 137, 203-212.	2.1	37
23	A New Qâ€“S Synchronization Results for Discrete Chaotic Systems. Differential Equations and Dynamical Systems, 2019, 27, 413-422.	1.0	20
24	Investigation of Q-S synchronization in coupled chaotic incommensurate fractional order systems. Chinese Journal of Physics, 2018, 56, 1940-1948.	3.9	17
25	Numerical solutions of time-fractional partial integrodifferential equations of Robin functions types in Hilbert space with error bounds and error estimates. Nonlinear Dynamics, 2018, 94, 1819-1834.	5.2	64
26	A Riccati Equation Approach and Travelling Wave Solutions for Nonlinear Evolution Equations. International Journal of Applied and Computational Mathematics, 2017, 3, 1-13.	1.6	13
27	A study on the convergence conditions of generalized differential transform method. Mathematical Methods in the Applied Sciences, 2017, 40, 40-48.	2.3	36
28	Universal chaos synchronization control laws for general quadratic discrete systems. Applied Mathematical Modelling, 2017, 45, 636-641.	4.2	36
29	A nonlinear fractional model to describe the population dynamics of two interacting species. Mathematical Methods in the Applied Sciences, 2017, 40, 4134-4148.	2.3	71
30	On a function projective synchronization scheme for non-identical Fractional-order chaotic (hyperchaotic) systems with different dimensions and orders. Optik, 2017, 136, 513-523.	2.9	37
31	Chaos in Fractional Order Cubic Chua System and Synchronization. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750161.	1.7	32
32	Fractional analysis of co-existence of some types of chaos synchronization. Chaos, Solitons and Fractals, 2017, 105, 215-223.	5.1	26
33	On Inverse Generalized Synchronization of Continuous Chaotic Dynamical Systems. International Journal of Applied and Computational Mathematics, 2016, 2, 1-11.	1.6	38
34	Generalized synchronization of different dimensional chaotic dynamical systems in discrete time. Nonlinear Dynamics, 2015, 81, 765-771.	5.2	66
35	An adaptation of homotopy analysis method for reliable treatment of strongly nonlinear problems: construction of homotopy polynomials. Mathematical Methods in the Applied Sciences, 2015, 38, 991-1000.	2.3	59
36	Optimal homotopy asymptotic method for solving fractional relaxation-oscillation equation. Journal of Interpolation and Approximation in Scientific Computing, 2015, 2015, 98-111.	0.3	8

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37	A note on phase synchronization in coupled chaotic fractional order systems. Nonlinear Analysis: Real World Applications, 2012, 13, 779-789.	1.7	86
38	The Multi-Step Differential Transform Method and Its Application to Determine the Solutions of Non-Linear Oscillators. Advances in Applied Mathematics and Mechanics, 2012, 4, 422-438.	1.2	21
39	On Legendre polynomial approximation with the VIM or HAM for numerical treatment of nonlinear fractional differential equations. Journal of Computational and Applied Mathematics, 2011, 235, 2956-2968.	2.0	52
40	An approximate solution of a fractional order differential equation model of human T-cell lymphotropic virus I (HTLV-I) infection of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si21.gif" display="inline" overflow="scroll"><mml:mstyle mathvariant="normal"><mml:mi>CD</mml:mi></mml:mstyle><mml:msup><mml:mrow><mml:mn>4</mml:mn></mml:mrow><mml:mr T-cells. Computers and Mathematics With Applications, 2011, 62, 996-1002.	2.7	57
41	An alternative solution of the neutron diffusion equation in cylindrical symmetry. Annals of Nuclear Energy, 2011, 38, 1140-1143.	1.8	17
42	Adaptive feedback control and synchronization ofÂnon-identical chaotic fractional order systems. Nonlinear Dynamics, 2010, 60, 479-487.	5.2	203
43	The homotopy analysis method for handling systems of fractional differential equations. Applied Mathematical Modelling, 2010, 34, 24-35.	4.2	102
44	A reliable algorithm of homotopy analysis method for solving nonlinear fractional differential equations. Applied Mathematical Modelling, 2010, 34, 593-600.	4.2	115
45	A study on the convergence of variational iteration method. Mathematical and Computer Modelling, 2010, 51, 1181-1192.	2.0	141
46	A study on the convergence of homotopy analysis method. Applied Mathematics and Computation, 2010, 217, 782-789.	2.2	63
47	Analytic study on linear systems of fractional differential equations. Computers and Mathematics With Applications, 2010, 59, 1171-1183.	2.7	117
48	A multi-step differential transform method and application to non-chaotic or chaotic systems. Computers and Mathematics With Applications, 2010, 59, 1462-1472.	2.7	159
49	SYNCHRONIZATION OF CHAOTIC FRACTIONAL-ORDER SYSTEMS VIA LINEAR CONTROL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 81-97.	1.7	109
50	On the approximation of integrals using homotopy perturbation method. International Journal of Computer Mathematics, 2010, 87, 53-62.	1.8	1
51	The variational iteration method: An efficient scheme for handling fractional partial differential equations in fluid mechanics. Computers and Mathematics With Applications, 2009, 58, 2199-2208.	2.7	217
52	Computational algorithms for computing the fractional derivatives of functions. Mathematics and Computers in Simulation, 2009, 79, 2013-2020.	4.4	60
53	Exact solitary solutions for variants of the KdV equations with fractional time derivatives. Chaos, Solitons and Fractals, 2009, 40, 1264-1270.	5.1	14
54	Computing eigenelements of boundary value problems with fractional derivatives. Applied Mathematics and Computation, 2009, 215, 3017-3028.	2.2	15

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55	A solution of the neutron diffusion equation in hemispherical symmetry using the homotopy perturbation method. Annals of Nuclear Energy, 2009, 36, 1711-1717.	1.8	13
56	Numerical methods for nonlinear partial differential equations of fractional order. Applied Mathematical Modelling, 2008, 32, 28-39.	4.2	208
57	Variational iteration method for solving the space- and time-fractional KdV equation. Numerical Methods for Partial Differential Equations, 2008, 24, 262-271.	3.6	77
58	Numerical solutions of the spaceâ€time fractional advectionâ€dispersion equation. Numerical Methods for Partial Differential Equations, 2008, 24, 1416-1429.	3.6	64
59	Compact and noncompact structures for nonlinear fractional evolution equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 1219-1227.	2.1	12
60	Construction of solitary solutions for nonlinear dispersive equations by variational iteration method. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 4045-4052.	2.1	13
61	Reliable approaches of variational iteration method for nonlinear operators. Mathematical and Computer Modelling, 2008, 48, 222-231.	2.0	14
62	Differential transform method for solving Volterra integral equation with separable kernels. Mathematical and Computer Modelling, 2008, 48, 1144-1149.	2.0	100
63	Generalized differential transform method: Application to differential equations of fractional order. Applied Mathematics and Computation, 2008, 197, 467-477.	2.2	176
64	Compact structures in a class of nonlinearly dispersive equations with time-fractional derivatives. Applied Mathematics and Computation, 2008, 205, 273-280.	2.2	11
65	A generalized differential transform method for linear partial differential equations of fractional order. Applied Mathematics Letters, 2008, 21, 194-199.	2.7	310
66	Application of generalized differential transform method to multi-order fractional differential equations. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 1642-1654.	3.3	156
67	A novel method for nonlinear fractional partial differential equations: Combination of DTM and generalized Taylor's formula. Journal of Computational and Applied Mathematics, 2008, 220, 85-95.	2.0	119
68	Modified homotopy perturbation method: Application to quadratic Riccati differential equation of fractional order. Chaos, Solitons and Fractals, 2008, 36, 167-174.	5.1	334
69	Analytic study on time-fractional SchrÃ¶dinger equations: exact solutions by GDTM. Journal of Physics: Conference Series, 2008, 96, 012066.	0.4	15
70	ANALYTICAL COMPARISON BETWEEN THE HOMOTOPY PERTURBATION METHOD AND VARIATIONAL ITERATION METHOD FOR DIFFERENTIAL EQUATIONS OF FRACTIONAL ORDER. International Journal of Modern Physics B, 2008, 22, 4041-4058.	2.0	14
71	Fractional Green's function for fractional partial differential equations. Journal Europeen Des Systemes Automatises, 2008, 42, 639-651.	0.4	0
72	Approximate analytical solution of the space-and time-fractional Burgers equations. Journal Europeen Des Systemes Automatises, 2008, 42, 627-638.	0.4	1

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73	Numerical approach to differential equations of fractional order. Journal of Computational and Applied Mathematics, 2007, 207, 96-110.	2.0	209
74	Comparison between the homotopy perturbation method and the variational iteration method for linear fractional partial differential equations. Computers and Mathematics With Applications, 2007, 54, 910-919.	2.7	139
75	Numerical comparison of methods for solving linear differential equations of fractional order. Chaos, Solitons and Fractals, 2007, 31, 1248-1255.	5.1	284
76	Generalized Taylorâ€™s formula. Applied Mathematics and Computation, 2007, 186, 286-293.	2.2	656
77	A new modification of the homotopy perturbation method for linear and nonlinear operators. Applied Mathematics and Computation, 2007, 189, 746-753.	2.2	63
78	Homotopy perturbation method for nonlinear partial differential equations of fractional order. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 365, 345-350.	2.1	315
79	A reliable treatment of homotopy perturbation method for Kleinâ€“Gordon equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 365, 351-357.	2.1	67
80	Numerical solution of Fokkerâ€“Planck equation with space- and time-fractional derivatives. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 369, 349-358.	2.1	70
81	Solitary solutions for the nonlinear dispersive equations with fractional time derivatives. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 370, 295-301.	2.1	20
82	Generalized differential transform method for solving a space- and time-fractional diffusion-wave equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 370, 379-387.	2.1	177
83	Fractional green function for linear time-fractional inhomogeneous partial differential equations in fluid mechanics. Journal of Applied Mathematics and Computing, 2007, 24, 167-178.	2.5	42
84	Application of Variational Iteration Method to Nonlinear Differential Equations of Fractional Order. International Journal of Nonlinear Sciences and Numerical Simulation, 2006, 7, .	1.0	496
85	Analytical solution of a time-fractional Navierâ€“Stokes equation by Adomian decomposition method. Applied Mathematics and Computation, 2006, 177, 488-494.	2.2	293
86	Approximations of fractional integrals and Caputo fractional derivatives. Applied Mathematics and Computation, 2006, 178, 527-533.	2.2	135
87	Rectangular decomposition method for fractional diffusion-wave equations. Applied Mathematics and Computation, 2006, 179, 92-97.	2.2	16
88	Approximate solutions for boundary value problems of time-fractional wave equation. Applied Mathematics and Computation, 2006, 181, 767-774.	2.2	82
89	Variational iteration method for solving nonlinear boundary value problems. Applied Mathematics and Computation, 2006, 183, 1351-1358.	2.2	76
90	A reliable modification of the rectangular decomposition method. Applied Mathematics and Computation, 2006, 183, 1226-1234.	2.2	6

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91	Analytical approach to linear fractional partial differential equations arising in fluid mechanics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 355, 271-279.	2.1	205
92	An analytic solution for fractional order Riccati equations by using optimal homotopy asymptotic method. Applied Mathematical Sciences, 0, 10, 1131-1150.	0.1	6
93	Reduced-Increased Synchronization Between Fractional Chaotic Systems with Different Dimensions and Orders. SSRN Electronic Journal, 0, , .	0.4	0
94	A Legendreâ€based approach of the optimized decomposition method for solving nonlinear Caputoâ€type fractional differential equations. Mathematical Methods in the Applied Sciences, 0, , .	2.3	6
95	Numerical schemes for variable exponent fractionalâ€type integral equations. Mathematical Methods in the Applied Sciences, 0, , .	2.3	1