Muhammed Syam

List of Publications by Year
in descending order

83 papers	**1,792** citations	293460 **24** h-index	325983 **40** g-index
83 all docs	**83** docs citations	**83** times ranked	**1293** citing authors

#	Article	IF	Citations
1	Optimization of One-Step Block Method for Solving Second-Order Fuzzy Initial Value Problems. Complexity, 2021, 2021, 1-25.	0.9	2
2	A New Analysis of Fractional-Order Equal-Width Equations via Novel Techniques. Symmetry, 2021, 13, 886.	1.1	35
3	A numerical method for solving fractional delay differential equations based on the operational matrix method. Chaos, Solitons and Fractals, 2021, 147, 110977.	2.5	16
4	A Computational Algorithm for Solution of Population Models for Single and Interacting Species. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	0.9	0
5	Analysis of Multiterm Initial Value Problems with Caputoâ€"Fabrizio Derivative. Journal of Mathematics, 2021, 2021, 1-6.	0.5	0
6	Homotopy Sumudu transform method for solving applications in physics. Results in Physics, 2020, 18, 103265.	2.0	15
7	A reliable method for first order delay equations based on the implicit hybrid method. AEJ - Alexandria Engineering Journal, 2020, 59, 2677-2681.	3.4	7
8	A numerical approach for investigating a special class of fractional Riccati equation. Results in Physics, 2020, 17, 103080.	2.0	8
9	Generalized solutions of the fractional Burgerâ€™s equation. Results in Physics, 2019, 15, 102525.	2.0	4
10	Fractional differential equations with Atanganaâ€"Baleanu fractional derivative: Analysis and applications. Chaos, Solitons and Fractals: X, 2019, 2, 100013.	1.0	53
11	Optimization of one step block method with three hybrid points for solving first-order ordinary differential equations. Results in Physics, 2019, 12, 592-596.	2.0	12
12	A New Algorithm for Fractional Riccati Type Differential Equations by Using Haar Wavelet. Mathematics, 2019, 7, 545.	1.1	17
13	Analytical solutions of time-fractional wave equation by double Laplace transform method. European Physical Journal Plus, 2019, 134, 1.	1.2	49
14	The Modified Fractional Power Series Method for Solving Fractional Non-isothermal Reactionâ€"Diffusion Model Equations in a Spherical Catalyst. International Journal of Applied and Computational Mathematics, 2019, 5, 1.	0.9	3
15	A Reliable Study of New Nonlinear Equation: Two-Mode Kuramotoâ€"Sivashinsky. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	0.9	22
16	An Efficient Method for Solving Singularly Perturbed Riccati Equation with Fractional Order. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	0.9	3
17	New solitary wave and multiple soliton solutions for fifth order nonlinear evolution equation with time variable coefficients. Results in Physics, 2018, 8, 977-980.	2.0	6
18	An Accurate Method for Solving the Undamped Duffing Equation with Cubic Nonlinearity. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	0.9	0

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19	Theoretical and computational perspectives on the eigenvalues of fourth-order fractional Sturm–Liouville problem. International Journal of Computer Mathematics, 2018, 95, 1548-1564.	1.0	17
20	Intelligent computing approach to solve the nonlinear Van der Pol system for heartbeat model. Neural Computing and Applications, 2018, 30, 3651-3675.	3.2	57
21	Necessary conditions of coupled mkdV-BLMP system for multiple-soliton solutions to exist. AEJ - Alexandria Engineering Journal, 2018, 57, 2133-2137.	3.4	3
22	A modified approach for a reliable study of new nonlinear equation: two-mode Korteweg–de Vries–Burgers equation. Nonlinear Dynamics, 2018, 91, 1619-1626.	2.7	34
23	Reproducing Kernel Method for Solving Nonlinear Fractional Fredholm Integrodifferential Equation. Complexity, 2018, 2018, 1-7.	0.9	5
24	A new two-mode coupled Burgers equation: Conditions for multiple kink solution and singular kink solution to exist. Ain Shams Engineering Journal, 2018, 9, 3239-3244.	3.5	5
25	A Reliable Method for Solving Fractional Sturm–Liouville Problems. Mathematics, 2018, 6, 176.	1.1	1
26	A Numerical Method for Solving a Class of Nonlinear Second Order Fractional Volterra Integro-Differntial Type of Singularly Perturbed Problems. Mathematics, 2018, 6, 48.	1.1	3
27	A Numerical Solution of Fractional Lienard's Equation by Using the Residual Power Series Method. Mathematics, 2018, 6, 1.	1.1	109
28	An Implicit Hybrid Method for Solving Fractional Bagley-Torvik Boundary Value Problem. Mathematics, 2018, 6, 109.	1.1	6
29	Analytical Solution of the Fractional Initial Emden–Fowler Equation Using the Fractional Residual Power Series Method. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	0.9	16
30	Stability analysis of nonlinear fractional differential equations with Caputo and Riemann-Liouville derivatives. European Physical Journal Plus, 2018, 133, 1.	1.2	44
31	Modified Legendre Operational Matrix of Differentiation for Solving Strongly Nonlinear Dynamical Systems. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	0.9	1
32	New Nonlinear Equations: Two-Mode Gardner and Two-Mode Fisher Equations. Journal of Computational and Theoretical Nanoscience, 2018, 15, 3126-3129.	0.4	0
33	Neuro-heuristic computational intelligence for solving nonlinear pantograph systems. Frontiers of Information Technology and Electronic Engineering, 2017, 18, 464-484.	1.5	44
34	Analytical solution of the time-fractional Phi-4 equation by using modified residual power series method. Nonlinear Dynamics, 2017, 90, 2525-2529.	2.7	56
35	An Accurate Integral Solution for Solving the Pantograph Equation. International Journal of Applied and Computational Mathematics, 2017, 3, 925-935.	0.9	0
36	A two-mode coupled Korteweg–de Vries: multiple-soliton solutions and other exact solutions. Nonlinear Dynamics, 2017, 90, 371-377.	2.7	40

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37	A study on the two-mode coupled modified Korteweg–de Vries using the simplified bilinear and the trigonometric-function methods. Nonlinear Dynamics, 2017, 90, 1363-1371.	2.7	40
38	Unsteady Rheology of MHD Newtonian Material with Soret and Dufours Effects. International Journal of Applied and Computational Mathematics, 2017, 3, 1299-1311.	0.9	0
39	Design of bio-inspired heuristic technique integrated with interior-point algorithm to analyze the dynamics of heartbeat model. Applied Soft Computing Journal, 2017, 52, 605-629.	4.1	87
40	Evolutionary computational intelligence in solving a class of nonlinear Volterra–Fredholm integro-differential equations. Journal of Computational and Applied Mathematics, 2017, 311, 314-323.	1.1	22
41	Analytical Solution of the Fractional Fredholm Integrodifferential Equation Using the Fractional Residual Power Series Method. Complexity, 2017, 2017, 1-6.	0.9	13
42	On the Fractional Legendre Equation and Fractional Legendre Functions. Progress in Fractional Differentiation and Applications, 2017, 3, 93-102.	1.1	3
43	Fractional-order Legendre operational matrix of fractional integration for solving the Riccati equation with fractional order. Applied Mathematics and Computation, 2016, 290, 281-291.	1.4	41
44	Nature-inspired computing approach for solving non-linear singular Emden–Fowler problem arising in electromagnetic theory. Connection Science, 2015, 27, 377-396.	1.8	96
45	Design and application of nature inspired computing approach for nonlinear stiff oscillatory problems. Neural Computing and Applications, 2015, 26, 1763-1780.	3.2	46
46	Solving Fractional Diffusion Equation via the Collocation Method Based on Fractional Legendre Functions. Journal of Computational Methods in Physics, 2014, 2014, 1-10.	0.5	10
47	An Efficient Series Solution for Fractional Differential Equations. Abstract and Applied Analysis, 2014, 2014, 1-7.	0.3	10
48	The Chebyshev collocation-path following method for solving sixth-order Sturm–Liouville problems. Applied Mathematics and Computation, 2014, 232, 391-398.	1.4	16
49	The extended homotopy perturbation method for the boundary layer flow due to a stretching sheet with partial slip. International Journal of Computer Mathematics, 2013, 90, 1990-2002.	1.0	7
50	Neural network assessment of herbal protection against chemotherapeutic-induced reproductive toxicity. Theoretical Biology and Medical Modelling, 2012, 9, 1.	2.1	22
51	Extended homotopy perturbation method and the axisymmetric flow past a porous stretching sheet. International Journal for Numerical Methods in Fluids, 2012, 69, 909-925.	0.9	6
52	An efficient method for solving non-linear singularly perturbed two points boundary-value problems of fractional order. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2299-2308.	1.7	28
53	Analytical sequences of upper and lower solutions for a class of elliptic equations. Journal of Mathematical Analysis and Applications, 2011, 374, 402-411.	0.5	3
54	The extended homotopy perturbation method and boundary layer flow due to condensation and natural convection on a porous vertical plate. International Journal of Computer Mathematics, 2011, 88, 3535-3552.	1.0	5

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55	QR-algebraic method for approximating zeros of system of polynomials. International Journal of Computer Mathematics, 2011, 88, 110-120.	1.0	1
56	A collocation-shooting method for solving fractional boundary value problems. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 3814-3822.	1.7	95
57	An efficient technique for finding the eigenvalues of fourth-order Sturm–Liouville problems. Chaos, Solitons and Fractals, 2009, 39, 659-665.	2.5	28
58	Numerical investigation of the instability of Benard problem. Chaos, Solitons and Fractals, 2009, 40, 1552-1558.	2.5	0
59	An efficient method for analyzing the solutions of the Korteweg-de Vries equation. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3825-3832.	1.7	2
60	Nonlinear eigenvalue problems with symmetry. Chaos, Solitons and Fractals, 2008, 35, 931-941.	2.5	2
61	Efficient shooting method for solving two point boundary value problems. Chaos, Solitons and Fractals, 2008, 35, 895-903.	2.5	34
62	Sine–Cosine method for finding the soliton solutions of the generalized fifth-order nonlinear equation. Chaos, Solitons and Fractals, 2007, 33, 1610-1617.	2.5	38
63	Numerical study for the electrified instability of viscoelastic cylindrical dielectric fluid film surrounded by a conducting gas. Physica A: Statistical Mechanics and Its Applications, 2007, 377, 381-400.	1.2	13
64	Electrohydrodynamic instability of a dielectric compressible liquid sheet streaming into an ambient stationary compressible gas. Archive of Applied Mechanics, 2007, 77, 613-626.	1.2	22
65	The modified Broyden-variational method for solving nonlinear elliptic differential equations. Chaos, Solitons and Fractals, 2007, 32, 392-404.	2.5	24
66	An efficient method for solving Bratu equations. Applied Mathematics and Computation, 2006, 176, 704-713.	1.4	78
67	Weighted residual method for obtaining positive solutions of two-point nonlinear boundary value problems. Applied Mathematics and Computation, 2006, 176, 775-784.	1.4	7
68	An efficient implicit Runge–Kutta method for second order systems. Applied Mathematics and Computation, 2006, 178, 229-238.	1.4	20
69	On the analytic solutions of the nonhomogeneous Blasius problem. Journal of Computational and Applied Mathematics, 2005, 182, 362-371.	1.1	98
70	Adomian decomposition method for approximating the solution of the Korteweg–deVries equation. Applied Mathematics and Computation, 2005, 162, 1465-1473.	1.4	24
71	Nonlinear optimization exclusion tests for finding all solutions of nonlinear equations. Applied Mathematics and Computation, 2005, 170, 1104-1116.	1.4	6
72	Numerical solution of singularly perturbed fifth order two point boundary value problem. Applied Mathematics and Computation, 2005, 170, 1085-1094.	1.4	22

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73	Numerical continuation through folds with step control. International Journal of Computer Mathematics, 2005, 82, 457-468.	1.0	2
74	Finding all real zeros of polynomial systems using multi-resultant. Journal of Computational and Applied Mathematics, 2004, 167, 417-428.	1.1	5
75	Cubic spline interpolation predictors over implicitly defined curves. Journal of Computational and Applied Mathematics, 2003, 157, 283-295.	1.1	10
76	Interpolation predictors over implicitly defined curves. Computers and Mathematics With Applications, 2002, 44, 1067-1076.	1.4	5
77	The resultants method for approximating real fixed points of polynomials. Computers and Mathematics With Applications, 2001, 41, 879-891.	1.4	5
78	A new proof of the Euler-Maclaurin expansion for quadrature over implicitly defined curves. Journal of Computational and Applied Mathematics, 1999, 104, 19-25.	1.1	1
79	Numerical differentiation of implicitly defined curves. Journal of Computational and Applied Mathematics, 1999, 108, 131-144.	1.1	19
80	Collocation-continuation technique for solving nonlinear ordinary boundary value problems. Computers and Mathematics With Applications, 1999, 37, 11-17.	1.4	45
81	Numerical method for solving linear boundary value problems by the chebyshev Ï„-method. Applied Mathematics and Mechanics (English Edition), 1999, 20, 873-879.	1.9	2
82	The modified trapezoidal rule for line integrals. Journal of Computational and Applied Mathematics, 1997, 84, 1-14.	1.1	14
83	An accurate solution of the Poisson equation by the Chebyshev-Tau method. Journal of Computational and Applied Mathematics, 1997, 85, 1-10.	1.1	22