Sedaghat Shahmorad

List of Publications by Year
in descending order

71 papers	1,112 citations	471061 17 h-index	433756 31 g-index
71 all docs	71 docs citations	71 times ranked	669 citing authors

#	Article	IF	Citations
1	A new Tau-collocation method with fractional basis for solving weakly singular delay Volterra integro-differential equations. Journal of Applied Mathematics and Computing, 2022, 68, 2435-2469.	1.2	5
2	Recursive higher order fuzzy transform method for numerical solution of Volterra integral equation with singular and nonsingular kernels. Journal of Computational and Applied Mathematics, 2022, 403, 113854.	1.1	0
3	Fractional differential equations, compatibility, and exact solutions. Computational and Applied Mathematics, 2022, 41, 1.	1.0	1
4	Numerical Solution of a Nonlinear Fractional Integro-Differential Equation by a Geometric Approach. Differential Equations and Dynamical Systems, 2021, 29, 585-596.	0.5	3
5	Quickest flow over time network interdiction: mathematical formulation and a solution method. Operational Research, 2021, 21, 1179-1209.	1.3	0
6	Numerical solution of fractional Blackâ€Scholes model of American put option pricing via a nonstandard finite difference method: Stability and convergent analysis. Mathematical Methods in the Applied Sciences, 2021, 44, 2790-2805.	1.2	1
7	Torsional waves with force-free magnetic fields in solar plasma structures. Monthly Notices of the Royal Astronomical Society, 2021, 502, 4930-4934.	1.6	1
8	Lie symmetry analysis of two dimensional weakly singular integral equations. Journal of Geometry and Physics, 2021, 170, 104385.	0.7	4
9	Numerical solution of the time-fractional Navierâ€“Stokes equations for incompressible flow in a lid-driven cavity. Computational and Applied Mathematics, 2021, 40, 1.	1.0	2
10	Study of Public Health Education Effect on Spread of HIV Infection in a Density-Dependent Transmission Model. Differential Equations and Dynamical Systems, 2020, 28, 201-215.	0.5	3
11	Solving Finite Part Singular Integral Equations Using Orthogonal Polynomials. Bulletin of the Iranian Mathematical Society, 2020, 46, 799-814.	0.4	1
12	New fractional Lanczos vector polynomials and their application to system of Abelâ€“Volterra integral equations and fractional differential equations. Journal of Computational and Applied Mathematics, 2020, 366, 112409.	1.1	13
13	Mathematical Models to Shed Light on Amyloid-Beta and Tau Protein Dependent Pathologies in Alzheimerâ€™s Disease. Neuroscience, 2020, 424, 45-57.	1.1	10
14	A Tauâ€“like numerical method for solving fractional delay integroâ€“differential equations. Applied Numerical Mathematics, 2020, 151, 322-336.	1.2	24
15	Computational modeling to determine key regulators of hypoxia effects on theÂlactate production in the glycolysis pathway. Scientific Reports, 2020, 10, 9163.	1.6	10
16	A computational method for time fractional partial integro-differential equations. Journal of Applied Analysis, 2020, 26, 315-323.	0.2	0
17	A new recursive formulation of the Tau method for solving linear Abelâ€“Volterra integral equations and its application to fractional differential equations. Calcolo, 2019, 56, 1.	0.6	7
18	Two-step collocation methods for two-dimensional Volterra integral equations of the second kind. Journal of Applied Analysis, 2019, 25, 1-11.	0.2	2

#	Article	IF	Citations
19	A Stable and Convergent Finite Difference Method for Fractional Blackâ€“Scholes Model of American Put Option Pricing. Computational Economics, 2019, 53, 191-205.	1.5	11
20	On the structural properties of F m -transform with applications. Fuzzy Sets and Systems, 2018, 342, 32-52.	1.6	14
21	An equivalence lemma for a class of fuzzy implicit integro-differential equations. Journal of Computational and Applied Mathematics, 2018, 327, 388-399.	1.1	5
22	Free response of a continuous vibrational system with attachments and/or discontinuities using segmented operational Tau method. JVC/Journal of Vibration and Control, 2018, 24, 2120-2133.	1.5	1
23	Approximate solution of dual integral equations using Chebyshev polynomials. International Journal of Computer Mathematics, 2017, 94, 493-502.	1.0	3
24	Trigonometric $$F^m$$ F m -transform and its approximative properties. Soft Computing, 2017, 21, 3567-3577.	2.1	9
25	Analytical lie group approach for solving fractional integro-differential equations. Communications in Nonlinear Science and Numerical Simulation, 2017, 51, 66-77.	1.7	29
26	Comparative study of different wavelets for developing parsimonious Volterra model for rainfall-runoff simulation. Water Resources, 2017, 44, 568-578.	0.3	5
27	A matrix formulated algorithm for solving parabolic equations with nonlocal boundary conditions. Numerical Algorithms, 2017, 74, 1203-1221.	1.1	7
28	On the Accuracy of Fm-transform Approximation in Boundary Subintervals. , 2017, , .		0
29	An Operational Matrix Method for Solving Delay Fredholm and Volterra Integroâ€“Differential Equations. International Journal of Computational Methods, 2016, 13, 1650040.	0.8	9
30	The period ratio P 1 / P 2 P_{1}/P_{2} of torsional AlfvÃ©n waves with steady flows in spicules. Astrophysics and Space Science, 2016, 361, 1.	0.5	1
31	Integration of Volterra model with artificial neural networks for rainfall-runoff simulation in forested catchment of northern Iran. Journal of Hydrology, 2016, 540, 340-354.	2.3	32
32	The Stability Analysis of Predictorâ€“Corrector Method in Solving American Option Pricing Model. Computational Economics, 2016, 47, 255-274.	1.5	6
33	Efficient quadrature rules for solving nonlinear fractional integro-differential equations of the Hammerstein type. Applied Mathematical Modelling, 2015, 39, 5452-5458.	2.2	6
34	Quantum stabilizer codes from Abelian and non-Abelian groups association schemes. International Journal of Quantum Information, 2015, 13, 1550021.	0.6	9
35	Topological quantum codes from self-complementary self-dual graphs. Quantum Information Processing, 2015, 14, 4057-4066.	1.0	4
36	A BLOCK BY BLOCK METHOD FOR SOLVING SYSTEM OF VOLTERRA INTEGRAL EQUATIONS WITH CONTINUOUS AND ABEL KERNELS. Mathematical Modelling and Analysis, 2015, 20, 737-753.	0.7	5

#	Article	IF	Citations
37	Dynamical analysis of public health education on HIV/AIDS transmission. Mathematical Methods in the Applied Sciences, 2015, 38, 3601-3614.	1.2	7
38	A matrix based method for two dimensional nonlinear Volterra-Fredholm integral equations. Numerical Algorithms, 2015, 68, 511-529.	1.1	18
39	Hermite and piecewise cubic Hermite interpolation of fuzzy data. Journal of Intelligent and Fuzzy Systems, 2014, 26, 2889-2898.	0.8	11
40	Review the allocation of production lines in shifts with minimising energy costs approach in Tehran Pegah Co.. International Journal of Operational Research, 2014, 19, 68.	0.1	1
41	Numerical solution of transient heat conduction equation with variable thermophysical properties by the Tau method. Numerical Methods for Partial Differential Equations, 2014, 30, 964-977.	2.0	3
42	Torsional AlfvÃ©n waves and the period ratio P 1/P 2 in spicules. Astrophysics and Space Science, 2014, 353, 25-29.	0.5	2
43	Comparison of Volterra Model and Artificial Neural Networks for Rainfallâ€“Runoff Simulation. Natural Resources Research, 2014, 23, 341-354.	2.2	11
44	Extension of the operational Tau method for solving 1-D nonlinear transient heat conduction equations. Journal of King Saud University - Science, 2013, 25, 283-288.	1.6	14
45	Convergence analysis of piecewise continuous collocation methods for higher index integral algebraic equations of the Hessenberg type. International Journal of Applied Mathematics and Computer Science, 2013, 23, 341-355.	1.5	12
46	The block-by-block method with Romberg quadrature for the solution of nonlinear volterra integral equations on large intervals. Ukrainian Mathematical Journal, 2012, 64, 1050-1063.	0.1	7
47	A computational method for solving two-dimensional linear Volterra integral equations of the first kind. Scientia Iranica, 2012, 19, 829-835.	0.3	8
48	An operational approach with Pade approximant for the numerical solution of non-linear Fredholm integro-differential equations. Scientia Iranica, 2012, 19, 1691-1698.	0.3	3
49	An Approximation Method Based on Matrix Formulated Algorithm for the Heat Equation with Nonlocal Boundary Conditions. Computational Methods in Applied Mathematics, 2012, 12, 92-107.	0.4	6
50	A block by block method with Romberg quadrature for the system of Urysohn type Volterra integral equations. Computational and Applied Mathematics, 2012, 31, 191-203.	1.0	7
51	Multistep Hermite collocation methods for solving Volterra Integral Equations. Numerical Algorithms, 2012, 60, 27-50.	1.1	11
52	Super implicit multistep collocation methods for nonlinear Volterra integral equations. Mathematical and Computer Modelling, 2012, 55, 590-607.	2.0	12
53	Differential transform method for the system of two-dimensional nonlinear Volterra integro-differential equations. Computers and Mathematics With Applications, 2011, 61, 2621-2629.	1.4	22
54	A new two-step P-stable hybrid Obrechkoff method for the numerical integration of second-order IVPs. Journal of Computational and Applied Mathematics, 2011, 235, 1706-1712.	1.1	9

#	Article	IF	Citations
55	Block by block method for the systems of nonlinear Volterra integral equations. Applied Mathematical Modelling, 2010, 34, 400-406.	2.2	37
56	Application of the fractional differential transform method to fractional-order integro-differential equations with nonlocal boundary conditions. Journal of Computational and Applied Mathematics, 2010, 234, 883-891.	1.1	108
57	Approximate Solution of a Singular Integral Cauchy-Kernel Equation of the First Kind. Computational Methods in Applied Mathematics, 2010, 10, 359-367.	0.4	1
58	Development of the Tau Method for the Numerical Solution of Two-dimensional Linear Volterra Integro-differential Equations. Computational Methods in Applied Mathematics, 2009, 9, 421-435.	0.4	20
59	Solving a class of two-dimensional linear and nonlinear Volterra integral equations by the differential transform method. Journal of Computational and Applied Mathematics, 2009, 228, 70-76.	1.1	75
60	A COMPUTATIONAL METHOD FOR SOLVING TWO-DIMENSIONAL LINEAR FREDHOLM INTEGRAL EQUATIONS OF THE SECOND KIND. ANZIAM Journal, 2008, 49, 543-549.	0.3	24
61	Approximate Solution Of The System Of Non-Linear Volterra Integro-Differential Equations. Computational Methods in Applied Mathematics, 2008, 8, 77-85.	0.4	1
62	Numerical solution of the nonlinear Volterra integro-differential equations by the Tau method. Applied Mathematics and Computation, 2007, 188, 1580-1586.	1.4	26
63	Iterative numerical solution of non-linear integro-differential equations by the Tau method. Applied Mathematics and Computation, 2007, 193, 514-522.	1.4	9
64	A quadrature free convergent method for the numerical solution of linear Fredholm integral equations based on Hermite-spline interpolation. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2020041-2020042.	0.2	0
65	Numerical solution of the general form linear Fredholmâ€“Volterra integro-differential equations by the Tau method with an error estimation. Applied Mathematics and Computation, 2005, 167, 1418-1429.	1.4	81
66	Numerical solution of the system of Fredholm integro-differential equations by the Tau method. Applied Mathematics and Computation, 2005, 168, 465-478.	1.4	82
67	Numerical solution of Volterra integro-differential equations by the Tau method with the Chebyshev and Legendre bases. Applied Mathematics and Computation, 2005, 170, 314-338.	1.4	17
68	Numerical piecewise approximate solution of Fredholm integro-differential equations by the Tau method. Applied Mathematical Modelling, 2005, 29, 1005-1021.	2.2	27
69	Numerical solution of a class of Integro-Differential equations by the Tau Method with an error estimation. Applied Mathematics and Computation, 2003, 136, 559-570.	1.4	75
70	Tau numerical solution of Fredholm integro-differential equations with arbitrary polynomial bases. Applied Mathematical Modelling, 2003, 27, 145-154.	2.2	81
71	A matrix formulation of the Tau Method for Fredholm and Volterra linear integro-differential equations. Korean Journal of Computational and Applied Mathematics, 2002, 9, 497-507.	0.2	41