Afshin Babaei

List of Publications by Citations

32 papers	387 citations	11 h-index	19 g-index
36 ext. papers	466 ext. citations	3 avg, IF	4.85 L-index

#	Paper	IF	Citations
32	A fractional order HIV/AIDS model based on the effect of screening of unaware infectives. *Mathematical Methods in the Applied Sciences*, **2019**, 42, 2334-2343	2.3	44
31	Numerical solution of variable-order fractional integro-partial differential equations via Sinc collocation method based on single and double exponential transformations. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 82, 104985	3.7	44
30	Numerical solution of variable order fractional nonlinear quadratic integro-differential equations based on the sixth-kind Chebyshev collocation method. *Journal of Computational and Applied Mathematics*, **2020**, 377, 112908	2.4	42
29	A computationally efficient method for tempered fractional differential equations with application. *Computational and Applied Mathematics*, **2018**, 37, 3657-3671		27
28	A Novel Approach for Solving an Inverse Reaction Diffusion Convection Problem. *Journal of Optimization Theory and Applications*, **2019**, 183, 688-704	1.6	25
27	Mathematical models of HIV/AIDS and drug addiction in prisons. *European Physical Journal Plus*, **2020**, 135, 1	3.1	24
26	A series solution of the nonlinear Volterra and Fredholm integro-differential equations. *Communications in Nonlinear Science and Numerical Simulation*, **2010**, 15, 205-215	3.7	22
25	Solving the inverse problem of identifying an unknown source term in a parabolic equation. *Computers and Mathematics With Applications*, **2010**, 60, 1209-1213	2.7	19
24	Mathematical analysis of a stochastic model for spread of Coronavirus. *Chaos, Solitons and Fractals*, **2021**, 145, 110788	9.3	19
23	A mathematical model to examine the effect of quarantine on the spread of coronavirus. *Chaos, Solitons and Fractals*, **2021**, 142, 110418	9.3	18
22	A Collocation Approach for Solving Time-Fractional Stochastic Heat Equation Driven by an Additive Noise. *Symmetry*, **2020**, 12, 904	2.7	13
21	A stable numerical scheme for a time fractional inverse parabolic equation. *Inverse Problems in Science and Engineering*, **2017**, 25, 1474-1491	1.3	11
20	Reconstructing unknown nonlinear boundary conditions in a time-fractional inverse reaction diffusion convection problem. *Numerical Methods for Partial Differential Equations*, **2019**, 35, 976-992	2.5	11
19	A Stable Numerical Approach to Solve a Time-Fractional Inverse Heat Conduction Problem **2018**, 42, 2225-2236		11
18	Approximate analytical solutions of the nonlinear reaction diffusion convection problems. *Mathematical and Computer Modelling*, **2011**, 53, 261-268		8
17	A series solution of the Cauchy problem for the generalized . *Computers and Mathematics With Applications*, **2010**, 59, 1500-1508	2.7	8
16	The Sinc-Galerkin method for solving an inverse parabolic problem with unknown source term. *Numerical Methods for Partial Differential Equations*, **2013**, 29, 64-78	2.5	6

15	A study on the d-dimensional Schrödinger equation with a power-law nonlinearity. *Chaos, Solitons and Fractals*, **2009**, 42, 2154-2158	9.3	5
14	A novel collocation approach to solve a nonlinear stochastic differential equation of fractional order involving a constant delay. *Discrete and Continuous Dynamical Systems - Series S*, **2021**,	2.8	5
13	Numerical simulation of the Hurst index of solutions of fractional stochastic dynamical systems driven by fractional Brownian motion. *Journal of Computational and Applied Mathematics*, **2021**, 386, 113210	2.4	4
12	Numerical treatment of a fractional order system of nonlinear stochastic delay differential equations using a computational scheme. *Chaos, Solitons and Fractals*, **2021**, 149, 111018	9.3	4
11	A Coupled Method for Solving a Class of Time Fractional Convection-Diffusion Equations with Variable Coefficients. *Computational Mathematics and Modeling*, **2017**, 28, 109-117	0.5	3
10	A New Accurate Approach to Solve the Cauchy Problem of the Kolmogorov–Petrovskii–Piskunov Equations. *International Journal of Applied and Computational Mathematics*, **2017**, 3, 343-356	1.3	2
9	On Analytical Approximate Solution of the Fractional Type Rosenau-Hyman Equation. *Fundamenta Informaticae*, **2017**, 151, 135-143	1	2
8	A stable collocation approach to solve a neutral delay stochastic differential equation of fractional order. *Journal of Computational and Applied Mathematics*, **2022**, 403, 113845	2.4	2
7	On the stable implicit finite differences approximation of diffusion equation with the time fractional derivative without singular kernel. *Asian-European Journal of Mathematics*, **2020**, 13, 2050111	0.4	2
6	An efficient numerical approach to solve a class of variable-order fractional integro-partial differential equations. *Numerical Methods for Partial Differential Equations*, **2021**, 37, 674-689	2.5	2
5	Computational technique for a class of nonlinear distributed-order fractional boundary value problems with singular coefficients. *Computational and Applied Mathematics*, **2021**, 40, 1	2.4	1
4	A numerical scheme to solve a class of two-dimensional nonlinear time-fractional diffusion equations of distributed order. *Engineering With Computers*, **2020**, 1	4.5	
3	Stabilized Solution for a Time-Fractional Inverse Problem with an Unknown Nonlinear Condition. *Computational Mathematics and Modeling*, **2019**, 30, 340-351	0.5	
2	A Chebyshev Collocation Approach to Solve Fractional Fisher–Kolmogorov–Petrovskii–Piskunov Equation with Nonlocal Condition. *Fractal and Fractional*, **2022**, 6, 160	3	
1	An efficient computational scheme to solve a class of fractional stochastic systems with mixed delays. *Communications in Nonlinear Science and Numerical Simulation*, **2022**, 111, 106408	3.7	