Muhammad Umar

List of Publications by Year
in descending order

31 papers	**1,767** citations	304743 **22** h-index	434195 **31** g-index
31 all docs	**31** docs citations	**31** times ranked	**388** citing authors

#	Article	IF	Citations
1	Design of Morlet wavelet neural network to solve the non-linear influenza disease system. Applied Mathematics and Nonlinear Sciences, 2023, 8, 2033-2048.	1.6	10
2	FMNSICS: Fractional Meyer neuro-swarm intelligent computing solver for nonlinear fractional Lane–Emden systems. Neural Computing and Applications, 2022, 34, 4193-4206.	5.6	28
3	Designing of Morlet wavelet as a neural network for a novel prevention category in the HIV system. International Journal of Biomathematics, 2022, 15, .	2.9	20
4	An Advance Computing Numerical Heuristic of Nonlinear SIR Dengue Fever System Using the Morlet Wavelet Kernel. Journal of Healthcare Engineering, 2022, 2022, 1-14.	1.9	6
5	A computational framework to solve the nonlinear dengue fever SIR system. Computer Methods in Biomechanics and Biomedical Engineering, 2022, 25, 1821-1834.	1.6	10
6	Integrated intelligent computing paradigm for nonlinear multi-singular third-order Emden–Fowler equation. Neural Computing and Applications, 2021, 33, 3417-3436.	5.6	53
7	Solving a class of biological HIV infection model of latently infected cells using heuristic approach. Discrete and Continuous Dynamical Systems - Series S, 2021, 14, 3611.	1.1	35
8	IoT Technology Enabled Heuristic Model With Morlet Wavelet Neural Network for Numerical Treatment of Heterogeneous Mosquito Release Ecosystem. IEEE Access, 2021, 9, 132897-132913.	4.2	21
9	Computational Intelligent Paradigms to Solve the Nonlinear SIR System for Spreading Infection and Treatment Using Levenberg–Marquardt Backpropagation. Symmetry, 2021, 13, 618.	2.2	16
10	A novel study of Morlet neural networks to solve the nonlinear HIV infection system of latently infected cells. Results in Physics, 2021, 25, 104235.	4.1	61
11	Integrated neuro-swarm heuristic with interior-point for nonlinear SITR model for dynamics of novel COVID-19. AEJ - Alexandria Engineering Journal, 2021, 60, 2811-2824.	6.4	79
12	APPLICATIONS OF GUDERMANNIAN NEURAL NETWORK FOR SOLVING THE SITR FRACTAL SYSTEM. Fractals, 2021, 29, .	3.7	23
13	Soft Computing Paradigms to Find the Numerical Solutions of a Nonlinear Influenza Disease Model. Applied Sciences (Switzerland), 2021, 11, 8549.	2.5	6
14	Neuro-swarm intelligent computing paradigm for nonlinear HIV infection model with CD4+ T-cells. Mathematics and Computers in Simulation, 2021, 188, 241-253.	4.4	69
15	A numerical approach for 2-D Sutterby fluid-flow bounded at a stagnation point with an inclined magnetic field and thermal radiation impacts. Thermal Science, 2021, 25, 1975-1987.	1.1	43
16	Competency of Neural Networks for the Numerical Treatment of Nonlinear Host-Vector-Predator Model. Computational and Mathematical Methods in Medicine, 2021, 2021, 1-13.	1.3	9
17	Numerical Investigations through ANNs for Solving COVID-19 Model. International Journal of Environmental Research and Public Health, 2021, 18, 12192.	2.6	9
18	A Stochastic Intelligent Computing with Neuro-Evolution Heuristics for Nonlinear SITR System of Novel COVID-19 Dynamics. Symmetry, 2020, 12, 1628.	2.2	116

#	Article	IF	Citations
19	A stochastic computational intelligent solver for numerical treatment of mosquito dispersal model in a heterogeneous environment. European Physical Journal Plus, 2020, 135, 1.	2.6	126
20	A stochastic numerical computing heuristic of SIR nonlinear model based on dengue fever. Results in Physics, 2020, 19, 103585.	4.1	81
21	Design of neuro-swarming-based heuristics to solve the third-order nonlinear multi-singular Emdenâ€"Fowler equation. European Physical Journal Plus, 2020, 135, 1.	2.6	87
22	Stochastic numerical technique for solving HIV infection model of CD4+ T cells. European Physical Journal Plus, 2020, 135, 1.	2.6	127
23	Neuro-swarm intelligent computing to solve the second-order singular functional differential model. European Physical Journal Plus, 2020, 135, 1.	2.6	88
24	Novel design of Morlet wavelet neural network for solving second order Laneâ€"Emden equation. Mathematics and Computers in Simulation, 2020, 172, 1-14.	4.4	126
25	The 3-D flow of Casson nanofluid over a stretched sheet with chemical reactions, velocity slip, thermal radiation and Brownian motion. Thermal Science, 2020, 24, 2929-2939.	1.1	50
26	A Computational Analysis of Two-Phase Casson Nanofluid Passing a Stretching Sheet Using Chemical Reactions and Gyrotactic Microorganisms. Mathematical Problems in Engineering, 2019, 2019, 1-12.	1.1	43
27	Stochastic numerical approach for solving second order nonlinear singular functional differential equation. Applied Mathematics and Computation, 2019, 363, 124605.	2.2	57
28	Unsupervised constrained neural network modeling of boundary value corneal model for eye surgery. Applied Soft Computing Journal, 2019, 85, 105826.	7.2	56
29	Intelligent computing for numerical treatment of nonlinear preyâ€"predator models. Applied Soft Computing Journal, 2019, 80, 506-524.	7.2	128
30	Numerical Treatment for the Three-Dimensional Eyring-Powell Fluid Flow over a Stretching Sheet with Velocity Slip and Activation Energy. Advances in Mathematical Physics, 2019, 2019, 1-12.	0.8	53
31	A new stochastic computing paradigm for the dynamics of nonlinear singular heat conduction model of the human head. European Physical Journal Plus, 2018, 133, 1.	2.6	131