

# Muhammad Umar

## List of Publications by Year in descending order

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31  
papers

1,767  
citations

304368

22  
h-index

433756

31  
g-index

31  
all docs

31  
docs citations

31  
times ranked

388  
citing authors

#	ARTICLE	IF	CITATIONS
1	A new stochastic computing paradigm for the dynamics of nonlinear singular heat conduction model of the human head. <i>European Physical Journal Plus</i> , 2018, 133, 1.	1.2	131
2	Intelligent computing for numerical treatment of nonlinear prey-predator models. <i>Applied Soft Computing Journal</i> , 2019, 80, 506-524.	4.1	128
3	Stochastic numerical technique for solving HIV infection model of CD4+ T cells. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	127
4	A stochastic computational intelligent solver for numerical treatment of mosquito dispersal model in a heterogeneous environment. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	126
5	Novel design of Morlet wavelet neural network for solving second order Lane-Emden equation. <i>Mathematics and Computers in Simulation</i> , 2020, 172, 1-14.	2.4	126
6	A Stochastic Intelligent Computing with Neuro-Evolution Heuristics for Nonlinear Sitr System of Novel COVID-19 Dynamics. <i>Symmetry</i> , 2020, 12, 1628.	1.1	116
7	Neuro-swarm intelligent computing to solve the second-order singular functional differential model. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	88
8	Design of neuro-swarming-based heuristics to solve the third-order nonlinear multi-singular Emden-Fowler equation. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	87
9	A stochastic numerical computing heuristic of SIR nonlinear model based on dengue fever. <i>Results in Physics</i> , 2020, 19, 103585.	2.0	81
10	Integrated neuro-swarm heuristic with interior-point for nonlinear Sitr model for dynamics of novel COVID-19. <i>AEJ - Alexandria Engineering Journal</i> , 2021, 60, 2811-2824.	3.4	79
11	Neuro-swarm intelligent computing paradigm for nonlinear HIV infection model with CD4+ T-cells. <i>Mathematics and Computers in Simulation</i> , 2021, 188, 241-253.	2.4	69
12	A novel study of Morlet neural networks to solve the nonlinear HIV infection system of latently infected cells. <i>Results in Physics</i> , 2021, 25, 104235.	2.0	61
13	Stochastic numerical approach for solving second order nonlinear singular functional differential equation. <i>Applied Mathematics and Computation</i> , 2019, 363, 124605.	1.4	57
14	Unsupervised constrained neural network modeling of boundary value corneal model for eye surgery. <i>Applied Soft Computing Journal</i> , 2019, 85, 105826.	4.1	56
15	Numerical Treatment for the Three-Dimensional Eyring-Powell Fluid Flow over a Stretching Sheet with Velocity Slip and Activation Energy. <i>Advances in Mathematical Physics</i> , 2019, 2019, 1-12.	0.4	53
16	Integrated intelligent computing paradigm for nonlinear multi-singular third-order Emden-Fowler equation. <i>Neural Computing and Applications</i> , 2021, 33, 3417-3436.	3.2	53
17	The 3-D flow of Casson nanofluid over a stretched sheet with chemical reactions, velocity slip, thermal radiation and Brownian motion. <i>Thermal Science</i> , 2020, 24, 2929-2939.	0.5	50
18	A Computational Analysis of Two-Phase Casson Nanofluid Passing a Stretching Sheet Using Chemical Reactions and Gyrotactic Microorganisms. <i>Mathematical Problems in Engineering</i> , 2019, 2019, 1-12.	0.6	43

#	ARTICLE	IF	CITATIONS
19	A numerical approach for 2-D Sutterby fluid-flow bounded at a stagnation point with an inclined magnetic field and thermal radiation impacts. <i>Thermal Science</i> , 2021, 25, 1975-1987.	0.5	43
20	Solving a class of biological HIV infection model of latently infected cells using heuristic approach. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2021, 14, 3611.	0.6	35
21	FMNSICS: Fractional Meyer neuro-swarm intelligent computing solver for nonlinear fractional Laneâ€Emden systems. <i>Neural Computing and Applications</i> , 2022, 34, 4193-4206.	3.2	28
22	APPLICATIONS OF GUDERMANNIAN NEURAL NETWORK FOR SOLVING THE SITR FRACTAL SYSTEM. <i>Fractals</i> , 2021, 29, .	1.8	23
23	IoT Technology Enabled Heuristic Model With Morlet Wavelet Neural Network for Numerical Treatment of Heterogeneous Mosquito Release Ecosystem. <i>IEEE Access</i> , 2021, 9, 132897-132913.	2.6	21
24	Designing of Morlet wavelet as a neural network for a novel prevention category in the HIV system. <i>International Journal of Biomathematics</i> , 2022, 15, .	1.5	20
25	Computational Intelligent Paradigms to Solve the Nonlinear SIR System for Spreading Infection and Treatment Using Levenbergâ€Marquardt Backpropagation. <i>Symmetry</i> , 2021, 13, 618.	1.1	16
26	Design of Morlet wavelet neural network to solve the non-linear influenza disease system. <i>Applied Mathematics and Nonlinear Sciences</i> , 2023, 8, 2033-2048.	0.9	10
27	A computational framework to solve the nonlinear dengue fever SIR system. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2022, 25, 1821-1834.	0.9	10
28	Competency of Neural Networks for the Numerical Treatment of Nonlinear Host-Vector-Predator Model. <i>Computational and Mathematical Methods in Medicine</i> , 2021, 2021, 1-13.	0.7	9
29	Numerical Investigations through ANNs for Solving COVID-19 Model. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 12192.	1.2	9
30	Soft Computing Paradigms to Find the Numerical Solutions of a Nonlinear Influenza Disease Model. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 8549.	1.3	6
31	An Advance Computing Numerical Heuristic of Nonlinear SIR Dengue Fever System Using the Morlet Wavelet Kernel. <i>Journal of Healthcare Engineering</i> , 2022, 2022, 1-14.	1.1	6