Emad E Mahmoud

List of Publications by Year
in descending order

102	2,284	257450 24	243625 44
papers	citations	h-index	g-index

104	104	104	1039
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Complete synchronization of chaotic complex nonlinear systems with uncertain parameters. Nonlinear Dynamics, 2010, 62, 875-882.	5.2	186
2	ACTIVE CONTROL AND GLOBAL SYNCHRONIZATION OF THE COMPLEX CHEN AND LÃœ SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 4295-4308.	1.7	169
3	Phase and antiphase synchronization of two identical hyperchaotic complex nonlinear systems. Nonlinear Dynamics, 2010, 61, 141-152.	5.2	111
4	On the hyperchaotic complex LÃ¼ system. Nonlinear Dynamics, 2009, 58, 725-738.	5.2	110
5	ANALYSIS OF HYPERCHAOTIC COMPLEX LORENZ SYSTEMS. International Journal of Modern Physics C, 2008, 19, 1477-1494.	1.7	92
6	Lag synchronization of hyperchaotic complex nonlinear systems. Nonlinear Dynamics, 2012, 67, 1613-1622.	5.2	92
7	Dynamics and synchronization of new hyperchaotic complex Lorenz system. Mathematical and Computer Modelling, 2012, 55, 1951-1962.	2.0	85
8	Synchronization and control of hyperchaotic complex Lorenz system. Mathematics and Computers in Simulation, 2010, 80, 2286-2296.	4.4	75
9	Chaos synchronization of two different chaotic complex Chen and LÃ¼ systems. Nonlinear Dynamics, 2009, 55, 43-53.	5.2	66
10	Complex modified projective synchronization of two chaotic complex nonlinear systems. Nonlinear Dynamics, 2013, 73, 2231-2240.	5.2	62
11	Adaptive anti-lag synchronization of two identical or non-identical hyperchaotic complex nonlinear systems with uncertain parameters. Journal of the Franklin Institute, 2012, 349, 1247-1266.	3.4	60
12	Complex complete synchronization of two nonidentical hyperchaotic complex nonlinear systems. Mathematical Methods in the Applied Sciences, 2014, 37, 321-328.	2.3	60
13	Chaos control of integer and fractional orders of chaotic Burkeâ€“Shaw system using time delayed feedback control. Chaos, Solitons and Fractals, 2017, 104, 680-692.	5.1	58
14	On projective synchronization of hyperchaotic complex nonlinear systems based on passive theory for secure communications. Physica Scripta, 2013, 87, 055002.	2.5	53
15	Mathematical analysis of COVID-19 via new mathematical model. Chaos, Solitons and Fractals, 2021, 143, 110585.	5.1	40
16	Modified projective phase synchronization of chaotic complex nonlinear systems. Mathematics and Computers in Simulation, 2013, 89, 69-85.	4.4	39
17	Dynamical properties and complex anti synchronization with applications to secure communications for a novel chaotic complex nonlinear model. Chaos, Solitons and Fractals, 2018, 106, 273-284.	5.1	38
18	Hybrid price and stock dependent inventory model for perishable goods with advance payment related discount facilities under preservation technology. AEJ - Alexandria Engineering Journal, 2021, 60, 3455-3465.	6.4	38

#	Article	IF	Citations
19	MODIFIED PROJECTIVE LAG SYNCHRONIZATION OF TWO NONIDENTICAL HYPERCHAOTIC COMPLEX NONLINEAR SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2011, 21, 2369-2379.	1.7	31
20	Passive control of n-dimensional chaotic complex nonlinear systems. JVC/Journal of Vibration and Control, 2013, 19, 1061-1071.	2.6	28
21	A production inventory model with partial trade credit policy and reliability. AEJ - Alexandria Engineering Journal, 2021, 60, 1325-1338.	6.4	28
22	Sensitivity analysis and optimal control of COVID-19 dynamics based on SEIQR model. Results in Physics, 2021, 22, 103956.	4.1	27
23	On modified time delay hyperchaotic complex LÃ¼ system. Nonlinear Dynamics, 2015, 80, 855-869.	5.2	25
24	Projective synchronization for coupled partially linear complexâ€variable systems with known parameters. Mathematical Methods in the Applied Sciences, 2017, 40, 1214-1222.	2.3	25
25	Optical solitons in birefringent fibers with quadratic-cubic nonlinearity using three integration architectures. AIP Advances, 2021, 11, .	1.3	25
26	Dynamical behaviors, control and synchronization of a new chaotic model with complex variables and cubic nonlinear terms. Results in Physics, 2017, 7, 1346-1356.	4.1	24
27	A New Nine-Dimensional Chaotic Lorenz System with Quaternion Variables: Complicated Dynamics, Electronic Circuit Design, Anti-Anticipating Synchronization, and Chaotic Masking Communication Application. Mathematics, 2019, 7, 877.	2.2	22
28	Problem of p- and SV-waves reflection and transmission during two media under three thermoelastic theories and electromagnetic field with and without gravity. Waves in Random and Complex Media, 2021, 31, 1-24.	2.7	22
29	Lag synchronization of hyperchaotic complex nonlinear systems via passive control. Applied Mathematics and Information Sciences, 2013, 7, 1429-1436.	0.5	20
30	Dynamical analysis and chaos control of the fractional chaotic ecological model. Chaos, Solitons and Fractals, 2020, 141, 110348.	5.1	19
31	Numerical study of fractional order COVID-19 pandemic transmission model in context of ABO blood group. Results in Physics, 2021, 22, 103852.	4.1	19
32	Haar wavelets multi-resolution collocation procedures for two-dimensional nonlinear SchrÃ¶dinger equation. AEJ - Alexandria Engineering Journal, 2021, 60, 3057-3071.	6.4	19
33	A New Nonlinear Chaotic Complex Model and Its Complex Antilag Synchronization. Complexity, 2017, 2017, 1-13.	1.6	18
34	Theoretical and numerical analysis of novel COVID-19 via fractional order mathematical model. Results in Physics, 2021, 20, 103676.	4.1	18
35	An unusual kind of complex synchronizations and its applications in secure communications. European Physical Journal Plus, 2017, 132, 1.	2.6	17
36	Entropy Optimized Second Grade Fluid with MHD and Marangoni Convection Impacts: An Intelligent Neuro-Computing Paradigm. Coatings, 2021, 11, 1492.	2.6	17

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37	Anti-synchronized quad-compound combination among parallel systems of fractional chaotic system with application. AEJ - Alexandria Engineering Journal, 2020, 59, 4183-4200.	6.4	16
38	Chaos control and analysis of fractional order neural network under electromagnetic radiation. Results in Physics, 2021, 21, 103786.	4.1	15
39	Controlling hyperchaotic complex systems with unknown parameters based on adaptive passive method. Chinese Physics B, 2013, 22, 060508.	1.4	14
40	Analytical and Numerical Study of the Projective Synchronization of the Chaotic Complex Nonlinear Systems with Uncertain Parameters and Its Applications in Secure Communication. Mathematical Problems in Engineering, 2014, 2014, 1-10.	1.1	14
41	Generation and suppression of a new hyperchaotic nonlinear model with complex variables. Applied Mathematical Modelling, 2014, 38, 4445-4459.	4.2	14
42	Bifurcations and chaos of time delay Lorenz system with dimension 2n+1. European Physical Journal Plus, 2017, 132, 1.	2.6	14
43	Meshless Analysis of Nonlocal Boundary Value Problems in Anisotropic and Inhomogeneous Media. Mathematics, 2020, 8, 2045.	2.2	14
44	Fractional order biological snap oscillator: Analysis and control. Chaos, Solitons and Fractals, 2021, 145, 110763.	5.1	14
45	A hyperchaotic detuned laser model with an infinite number of equilibria existing on a plane and its modified complex phase synchronization with time lag. Chaos, Solitons and Fractals, 2020, 130, 109442.	5.1	13
46	A Novel Strategy for Complete and Phase Robust Synchronizations of Chaotic Nonlinear Systems. Symmetry, 2020, 12, 1765.	2.2	13
47	Product Replacement Policy in a Production Inventory Model with Replacement Period-, Stock-, and Price-Dependent Demand. Journal of Mathematics, 2020, 2020, 1-8.	1.0	13
48	A novel sort of adaptive complex synchronizations of two indistinguishable chaotic complex nonlinear models with uncertain parameters and its applications in secure communications. Results in Physics, 2017, 7, 4174-4182.	4.1	12
49	Numerical simulation and exergy analysis of a novel nanofluid-cooled heat sink. Journal of Thermal Analysis and Calorimetry, 2021, 145, 1651-1660.	3.6	12
50	Chaos control and Penta-compound combination anti-synchronization on a novel fractional chaotic system with analysis and application. Results in Physics, 2021, 24, 104130.	4.1	12
51	Synchronization of time delay systems with non-diagonal complex scaling functions. Chaos, Solitons and Fractals, 2018, 111, 86-95.	5.1	11
52	High dimensional, four positive Lyapunov exponents and attractors with four scroll during a new hyperchaotic complex nonlinear model. AIP Advances, 2018, 8, 065018.	1.3	11
53	Investigating the thermal efficiency and pressure drop of a nanofluid within a micro heat sink with a new circular design used to cool electronic equipment. Chemical Engineering Communications, 2022, 209, 1035-1047.	2.6	11
54	Signal flow graph and control of realizable autonomous nonlinear Chen model with quaternion variables. AEJ - Alexandria Engineering Journal, 2020, 59, 1287-1305.	6.4	11

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55	Chaotic synchronization of two complex nonlinear oscillators. Chaos, Solitons and Fractals, 2009, 42, 2858-2864.	5.1	10
56	An efficient approach for fractional nonlinear chaotic model with Mittag-Leffler law. Journal of King Saud University - Science, 2021, 33, 101347.	3.5	10
57	Investigation of shape effects of Cu-nanoparticle on heat transfer of MHD rotating flow over nonlinear stretching sheet. AEJ - Alexandria Engineering Journal, 2022, 61, 4457-4466.	6.4	10
58	A phenomenal form of complex synchronization and chaotic masking communication between two identical chaotic complex nonlinear structures with unknown parameters. Results in Physics, 2019, 14, 102452.	4.1	9
59	Evaluating the efficiency of pinâ€“fin micro-heat sink considering different shapes of nanoparticle based on exergy analysis. Journal of Thermal Analysis and Calorimetry, 2021, 145, 1623-1632.	3.6	9
60	Solution of third order linear and nonlinear boundary value problems of integro-differential equations using Haar Wavelet method. Results in Physics, 2021, 25, 104176.	4.1	9
61	Secure communications via modified complex phase synchronization of two hyperchaotic complex models with identical linear structure and adjusting in nonlinear terms. Journal of Intelligent and Fuzzy Systems, 2019, 37, 17-25.	1.4	8
62	A Grey Wolf-Based Method for Mammographic Mass Classification. Applied Sciences (Switzerland), 2020, 10, 8422.	2.5	8
63	Numerical study of heat transfer and friction drag in MHD viscous flow of a nanofluid subject to the curved surface. Waves in Random and Complex Media, 0, , 1-16.	2.7	8
64	Applications of Prabhakar-like Fractional Derivative for the Solution of Viscous Type Fluid with Newtonian Heating Effect. Fractal and Fractional, 2022, 6, 265.	3.3	8
65	Complex anti-synchronization of two indistinguishable chaotic complex nonlinear models. Measurement and Control, 2019, 52, 922-928.	1.8	7
66	Nanoparticles shape effect on the efficiency of microheat sinks with tightly packed pin-fins. Chemical Engineering Communications, 2023, 210, 460-470.	2.6	7
67	A numerical study on fractional differential equation with population growth model. Numerical Methods for Partial Differential Equations, 2024, 40, .	3.6	6
68	Quaternion anti-synchronization of a novel realizable fractional chaotic model. Chaos, Solitons and Fractals, 2021, 144, 110715.	5.1	6
69	Complex lag synchronization of two identical chaotic complex nonlinear systems. Open Physics, 2014, 12, .	1.7	5
70	Circular Intensely Orthogonal Double Cover Design of Balanced Complete Multipartite Graphs. Symmetry, 2020, 12, 1743.	2.2	5
71	Control and synchronization of the hyperchaotic attractor for a 5-D self-exciting homopolar disc dynamo. AEJ - Alexandria Engineering Journal, 2021, 60, 1173-1181.	6.4	5
72	On the dissipativity property of negative imaginary systems. AEJ - Alexandria Engineering Journal, 2021, 60, 1403-1410.	6.4	5

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73	Numerical solution of two-dimensional fractional order Volterra integro-differential equations. AIP Advances, 2021, 11, 035232.	1.3	5
74	Numerical solution of 2D-fuzzy Fredholm integral equations using optimal homotopy asymptotic method. AEJ - Alexandria Engineering Journal, 2021, 60, 2483-2490.	6.4	5
75	Numerical evaluation of the effect of nano-additive type on the second-law performance of Î³-AlOOH nano-fluid flow in a wavy microchannel. Chemical Engineering Communications, 2023, 210, 536-548.	2.6	5
76	Quaternion nonlinear LÃ¼ model and its novel quaternion complete synchronization. AEJ - Alexandria Engineering Journal, 2020, 59, 1391-1403.	6.4	4
77	Complex modified projective phase synchronization of nonlinear chaotic frameworks with complex variables. AEJ - Alexandria Engineering Journal, 2020, 59, 1265-1273.	6.4	4
78	Analysis and control of a fractional chaotic tumour growth and decay model. Results in Physics, 2021, 20, 103677.	4.1	4
79	Analysis and control of the fractional chaotic Hopfield neural network. Advances in Difference Equations, 2021, 2021, .	3.5	4
80	Dynamics and Robust Control of a New Realizable Chaotic Nonlinear Model. Complexity, 2021, 2021, 1-17.	1.6	4
81	On Phase and Anti-Phase Combination Synchronization of Time Delay Nonlinear Systems. Journal of Computational and Nonlinear Dynamics, 2018, 13, .	1.2	3
82	Secure communications via complex phase synchronization of pair complex chaotic structures with a similar structure of linear terms with modifying in nonlinear terms. AEJ - Alexandria Engineering Journal, 2020, 59, 1107-1116.	6.4	3
83	Application of triple compound combination anti-synchronization among parallel fractional snap systems & electronic circuit implementation. Advances in Difference Equations, 2021, 2021, .	3.5	3
84	Effects of Energy Dissipation and Deformation Function on the Entanglement, Photon Statistics and Quantum Fisher Information of Three-Level Atom in Photon-Added Coherent States for Morse Potential. Symmetry, 2021, 13, 2188.	2.2	3
85	A new memristive model with complex variables and its generalized complex synchronizations with time lag. Results in Physics, 2019, 15, 102619.	4.1	2
86	A general formula of complex synchronizations with complex scaling diagonal matrix and time lag. Results in Physics, 2019, 12, 603-614.	4.1	2
87	Third-Order Neutral Delay Differential Equations: New Iterative Criteria for Oscillation. Journal of Function Spaces, 2020, 2020, 1-8.	0.9	2
88	A Hybrid Semantic Knowledge Integration and Sharing Approach for Distributed Smart Environments. Sensors, 2020, 20, 5918.	3.8	2
89	Secure communication and synchronizations in light of the stability theory of the hyperchaotic complex nonlinear systems. Journal of Intelligent and Fuzzy Systems, 2020, 38, 2569-2583.	1.4	2
90	Impact of pangolin bootleg market on the dynamics of COVID-19 model. Results in Physics, 2021, 23, 103913.	4.1	2

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91	FRACTIONAL POWER SERIES APPROACH FOR THE SOLUTION OF FRACTIONAL-ORDER INTEGRO-DIFFERENTIAL EQUATIONS. Fractals, 2022, 30, .	3.7	2
92	Anti-lag synchronisation of hyperchaotic complex non-linear systems. International Journal of Computing Science and Mathematics, 2013, 4, 197.	0.3	1
93	Specialized study to perform complex phase synchronization of two chaotic complex systems including a similar structure of direct terms with modifying in nonlinear terms. Mathematical Methods in the Applied Sciences, 2020, 43, 1516-1529.	2.3	1
94	Accurate spectral algorithm for twoâ€dimensional variableâ€order fractional percolation equations. Mathematical Methods in the Applied Sciences, 2021, 44, 6228-6238.	2.3	1
95	Mathematical Modeling on Rotational Magneto-Thermoelastic Phenomenon under Gravity and Laser Pulse considering Four Theories. Complexity, 2021, 2021, 1-15.	1.6	1
96	Bernstein basis functions based algorithm for solving system of third order initial value problems. AEJ - Alexandria Engineering Journal, 2021, 60, 2395-2404.	6.4	1
97	Fractional chaotic cryptovirology in blockchain - analysis and control. Chaos, Solitons and Fractals, 2021, 148, 110989.	5.1	1
98	Problem of Longitudinal and Secondary Vertically Waves Reflection and Transmission during Two Media in the Context of Three Magneto-thermoelastic Theories with Varies Fields. Applied Mathematics and Information Sciences, 2018, 12, 957-968.	0.5	1
99	A powerful numerical technique for treating twelfth-order boundary value problems. Open Physics, 2020, 18, 1048-1062.	1.7	1
100	Bayesian Estimation of Different Scale Parameters Using a LINEX Loss Function. Computational Intelligence and Neuroscience, 2022, 2022, 1-12.	1.7	1
101	On Solutions of Hybridâ€“Sturm-Liouvilleâ€“Langevin Equations with Generalized Versions of Caputo Fractional Derivatives. Journal of Function Spaces, 2022, 2022, 1-9.	0.9	1
102	An Efficient Energy Management Routing and Scalable Topology in Wireless Sensor Network Using Virtual Backbone. Wireless Communications and Mobile Computing, 2022, 2022, 1-10.	1.2	0