Aatef D Hobiny

List of Publications by Year
in descending order

75 papers	1,589 citations	411340 20 h-index	388640 36 g-index
75 all docs	75 docs citations	75 times ranked	814 citing authors

#	Article	IF	Citations
1	Mathematical modeling and heat transfer in nanofluid flow of Newtonian material between two rotating disks. Applied Nanoscience (Switzerland), 2023, 13, 201-212.	1.6	7
2	Al_2O_3–47 nm and Al_2O_3–36 nm characterizations of nonlinear differential equations for biomedical applications: Magnetized peristaltic transport. Numerical Methods for Partial Differential Equations, 2023, 39, 827-847.	2.0	0
3	The Influences of the Hyperbolic Two-Temperatures Theory on Waves Propagation in a Semiconductor Material Containing Spherical Cavity. Mathematics, 2022, 10, 121.	1.1	8
4	Influence of Fear Effect on Bifurcation Dynamics of Predator-prey System in a Predator-poisoned Environment. Qualitative Theory of Dynamical Systems, 2022, 21, 1.	0.8	2
5	The impacts of variable thermal conductivity in a semiconducting medium using finite element method. Case Studies in Thermal Engineering, 2022, 31, 101773.	2.8	10
6	Hopf bifurcation induced by time delay and influence of Allee effect in a diffusive predator–prey system with herd behavior and prey chemotaxis. Nonlinear Dynamics, 2022, 108, 4581-4598.	2.7	5
7	Analytical Solutions of Nonlocal Thermoelastic Interaction on Semi-Infinite Mediums Induced by Ramp-Type Heating. Symmetry, 2022, 14, 864.	1.1	2
8	Analysis of Thermoelastic Interaction in a Polymeric Orthotropic Medium Using the Finite Element Method. Polymers, 2022, 14, 2112.	2.0	4
9	Global Stability of a Humoral Immunity COVID-19 Model with Logistic Growth and Delays. Mathematics, 2022, 10, 1857.	1.1	17
10	Generalized Thermoelastic Interaction in a Half-Space under a Nonlocal Thermoelastic Model. Mathematics, 2022, 10, 2168.	1.1	5
11	Thermoelastic Analysis in Poro-Elastic Materials Using a TPL Model. Applied Sciences (Switzerland), 2022, 12, 5914.	1.3	2
12	Analytical solutions of fractional bioheat model in a spherical tissue. Mechanics Based Design of Structures and Machines, 2021, 49, 430-439.	3.4	60
13	On the effects of chemical reaction on controlled heat and mass transfer in magnetized non-Newtonian biofluid through a long rectangular tunnel. Journal of Thermal Analysis and Calorimetry, 2021, 143, 2637-2646.	2.0	9
14	Analysis of Buongiorno's nanofluid model in marangoni convective flow with gyrotactic microorganism and activation energy. International Journal of Modern Physics C, 2021, 32, 2150072.	0.8	3
15	A study on photo-thermo-elastic wave in a semi-conductor material caused by ramp-type heating. AEJ - Alexandria Engineering Journal, 2021, 60, 2033-2040.	3.4	6
16	Finite Element Analysis of Nonlinear Bioheat Model in Skin Tissue Due to External Thermal Sources. Mathematics, 2021, 9, 1459.	1.1	29
17	The Effects of Fractional Time Derivatives in Porothermoelastic Materials Using Finite Element Method. Mathematics, 2021, 9, 1606.	1.1	50
18	Insight into the Dynamics of Oldroyd-B Fluid Over an Upper Horizontal Surface of a Paraboloid of Revolution Subject to Chemical Reaction Dependent on the First-Order Activation Energy. Arabian Journal for Science and Engineering, 2021, 46, 6039-6048.	1.7	35

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19	Finite Element Analysis of Thermal-Diffusions Problem for Unbounded Elastic Medium Containing Spherical Cavity under DPL Model. Mathematics, 2021, 9, 2782.	1.1	2
20	An analytical solution of the bioheat model in a spherical tissue due to laser irradiation. Indian Journal of Physics, 2020, 94, 1329-1334.	0.9	13
21	Impact of B-cell impairment on virus dynamics with time delay and two modes of transmission. Chaos, Solitons and Fractals, 2020, 130, 109455.	2.5	3
22	Fractional Order GN Model on Photo-Thermal Interaction in a Semiconductor Plane. Silicon, 2020, 12, 1957-1964.	1.8	23
23	Mode transition in a memristive dynamical system and its application in image encryption. International Journal of Modern Physics B, 2020, 34, 2050244.	1.0	7
24	The thermomechanical response of a poroelastic medium with two thermal relaxation times. Multidiscipline Modeling in Materials and Structures, 2020, 17, 493-506.	0.6	3
25	Analytical Estimation of Temperature in Living Tissues Using the TPL Bioheat Model with Experimental Verification. Mathematics, 2020, 8, 1188.	1.1	21
26	Three-phase lag model of thermo-elastic interaction in a 2D porous material due to pulse heat flux. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 5191-5207.	1.6	7
27	Photo-thermal interactions in a semi-conductor material with cylindrical cavities and variable thermal conductivity. Journal of Taibah University for Science, 2020, 14, 1369-1376.	1.1	74
28	Transportation of nonlinear radiative heat flux in Al2O3–Cu/H2O hybrid nanofluid subject to dissipation energy: Dual solutions analysis. AIP Advances, 2020, 10, .	0.6	11
29	Characterization of thermal-dependent conductivity in Cattaneo–Christov (CC)-based buoyancy-driven incompressible flow. Applied Nanoscience (Switzerland), 2020, 10, 5441-5447.	1.6	1
30	Analysis of Arrhenius Kinetics on Multiphase Flow between a Pair of Rotating Circular Plates. Mathematical Problems in Engineering, 2020, 2020, 1-17.	0.6	54
31	Effects of porosity and thermal relaxation time in a poro-thermoelastic material by hybrid finite element method. Mechanics Based Design of Structures and Machines, 2020, , 1-15.	3.4	6
32	Effect of the hyperbolic two-temperature model without energy dissipation on photo-thermal interaction in a semi-conducting medium. Results in Physics, 2020, 18, 103167.	2.0	17
33	Modeling of Cattaneo-Christov double diffusions (CCDD) in Williamson nanomaterial slip flow subject to porous medium. Journal of Materials Research and Technology, 2020, 9, 6172-6177.	2.6	81
34	An Eigenvalues Approach for a Two-Dimensional Porous Medium Based Upon Weak, Normal and Strong Thermal Conductivities. Symmetry, 2020, 12, 848.	1.1	107
35	Nonlinear analysis of dual-phase lag bio-heat model in living tissues induced by laser irradiation. Journal of Thermal Stresses, 2020, 43, 503-511.	1.1	31
36	The Effect of Fractional Time Derivative of Bioheat Model in Skin Tissue Induced to Laser Irradiation. Symmetry, 2020, 12, 602.	1.1	95

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37	A new photosensitive neuron model and its dynamics. Frontiers of Information Technology and Electronic Engineering, 2020, 21, 1387-1396.	1.5	84
38	High-Efficiency Three-Party Quantum Key Agreement Protocol with Quantum Dense Coding and Bell States. International Journal of Theoretical Physics, 2019, 58, 2834-2846.	0.5	11
39	A GN model on photothermal interactions in a two-dimensions semiconductor half space. Results in Physics, 2019, 15, 102588.	2.0	84
40	Global Properties of a Delay-Distributed HIV Dynamics Model Including Impairment of B-Cell Functions. Mathematics, 2019, 7, 837.	1.1	35
41	Differential coupling contributes to synchronization via a capacitor connection between chaotic circuits. Frontiers of Information Technology and Electronic Engineering, 2019, 20, 571-583.	1.5	51
42	Thermal response of cylindrical tissue induced by laser irradiation with experimental study. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 4013-4023.	1.6	17
43	Global properties of virus dynamics with B-cell impairment. Open Mathematics, 2019, 17, 1435-1449.	0.5	1
44	Theoretical analysis of thermal damages in skin tissue induced by intense moving heat source. International Journal of Heat and Mass Transfer, 2018, 124, 1011-1014.	2.5	90
45	A DPL model of photo-thermal interaction in an infinite semiconductor material containing a spherical hole. European Physical Journal Plus, 2018, 133, 1.	1.2	14
46	Optimal Synthesis of the Joint Unitary Evolutions. International Journal of Theoretical Physics, 2018, 57, 1942-1947.	0.5	1
47	The influence of thermal and conductive temperatures in a nanoscale resonator. Results in Physics, 2018, 9, 705-711.	2.0	3
48	Photo-thermal-elastic interaction in an unbounded semiconducting medium with spherical cavity due to pulse heat flux. Waves in Random and Complex Media, 2018, 28, 670-682.	1.6	17
49	A Two-Temperature Photothermal Interaction in a Semiconductor Medium Containing a Cylindrical Hole. International Journal of Thermophysics, 2018, 39, 1.	1.0	3
50	Efficient Entanglement Concentration of Nonlocal Two-Photon Polarization-Time-Bin Hyperentangled States. International Journal of Theoretical Physics, 2018, 57, 664-673.	0.5	2
51	One-step entanglements generation on distant superconducting resonators in the dispersive regime. Quantum Information Processing, 2018, 17, 1.	1.0	1
52	Analytical solutions of photo-thermo-elastic waves in a non-homogenous semiconducting material. Results in Physics, 2018, 10, 385-390.	2.0	60
53	Fractional order photo-thermo-elastic waves in a two-dimensional semiconductor plate. European Physical Journal Plus, 2018, 133, 1.	1.2	8
54	A study on photothermal waves in an unbounded semiconductor medium with cylindrical cavity. Mechanics of Time-Dependent Materials, 2017, 21, 61-72.	2.3	56

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55	Practical entanglement concentration of nonlocal polarization-spatial hyperentangled states with linear optics. Quantum Information Processing, 2017, 16, 1.	1.0	3
56	On the libration collinear points in the restricted three – body problem. Open Physics, 2017, 15, 58-67.	0.8	34
57	Periodic orbits of the generalized Friedmann-Robertson-Walker potential in galactic dynamics in a rotating reference frame. AIP Advances, 2017, 7, 035021.	0.6	4
58	Hyperentanglement concentration for polarization–spatial–time-bin hyperentangled photon systems with linear optics. Quantum Information Processing, 2017, 16, 1.	1.0	8
59	Self-error-rejecting photonic qubit transmission in polarization-spatial modes with linear optical elements. Science China: Physics, Mechanics and Astronomy, 2017, 60, 1.	2.0	18
60	High-capacity quantum secure direct communication with two-photon six-qubit hyperentangled states. Science China: Physics, Mechanics and Astronomy, 2017, 60, 1.	2.0	90
61	Formation of Autapse Connected to Neuron and Its Biological Function. Complexity, 2017, 2017, 1-9.	0.9	47
62	Analytical solution of magnetothermoelastic interaction in a fiber-reinforced anisotropic material. European Physical Journal Plus, 2016, 131, 1.	1.2	9
63	Fractional-Order Generalized Thermoelastic Interaction in an Unbounded Media by Pulsed Laser Heating. Journal of Molecular and Engineering Materials, 2016, 04, 1650002.	0.9	0
64	On the convergence of the quadratic method. IMA Journal of Numerical Analysis, 2016, 36, 1310-1333.	1.5	2
65	The Rational Recursive Sequence $y_{n+1} = (α y_n y_{n-t})/(γ y_{n-k} + β y_n)$. Journal of Computational and Theoretical Nanoscience, 2016, 13, 4439-4446.	0.4	0
66	Similarity solution for flow over an unsteady nonlinearly stretching rotating disk. AIP Advances, 2015, 5, 047113.	0.6	3
67	Free vibration of a thermoelastic hollow cylinder with one relaxation time. Canadian Journal of Physics, 2015, 93, 1082-1087.	0.4	6
68	On the quality of complementary bounds for eigenvalues. Calcolo, 2015, 52, 577-601.	0.6	1
69	A Half-Space Problem in the Fractional Order Theory of Thermoelastic Diffusion. Journal of Computational and Theoretical Nanoscience, 2015, 12, 4803-4808.	0.4	0
70	Generalized thermoelastic interaction in a two-dimensional orthotropic material caused by a pulse heat flux. Waves in Random and Complex Media, 0, , 1-18.	1.6	3
71	A study on thermoelastic interactions in fiber-reinforced mediums containing spherical cavities. Waves in Random and Complex Media, 0, , 1-12.	1.6	3
72	A GL photo-thermal theory upon new hyperbolic two-temperatures in a semiconductor material. Waves in Random and Complex Media, 0, , 1-14.	1.6	1

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73	Bifurcation dynamics of a reaction–diffusion predator–prey model with fear effect in a predator‐poisoned environment. Mathematical Methods in the Applied Sciences, 0, , .	1.2	5
74	The effect of variable thermal conductivity in a semi-conductor material using implicit finite difference approach. Waves in Random and Complex Media, 0, , 1-13.	1.6	1
75	Entropy generation analysis for the radiative flow of Sisko nanofluid with heat sink/source. Waves in Random and Complex Media, 0, , 1-17.	1.6	3