

# Irma ChacÃ³n

## List of Publications by Year in descending order

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68  
papers

2,369  
citations

201674

27  
h-index

243625

44  
g-index

68  
all docs

68  
docs citations

68  
times ranked

1030  
citing authors

#	ARTICLE	IF	CITATIONS
1	A stable computational approach to analyze semi-relativistic behavior of fractional evolutionary problems. <i>Numerical Methods for Partial Differential Equations</i> , 2022, 38, 122-136.	3.6	22
2	Higher-order algorithms for stable solutions of fractional time-dependent nonlinear telegraph equations in space. <i>Numerical Methods for Partial Differential Equations</i> , 2022, 38, 1293-1318.	3.6	1
3	Investigation of shape effects of Cu-nanoparticle on heat transfer of MHD rotating flow over nonlinear stretching sheet. <i>AEJ - Alexandria Engineering Journal</i> , 2022, 61, 4457-4466.	6.4	10
4	A symmetric property in the enhanced common index jump theorem with applications to the closed geodesic problem. <i>Discrete and Continuous Dynamical Systems</i> , 2022, 42, 1933.	0.9	2
5	Purification, characterization, and determination of biological activities of water-soluble polysaccharides from <i>Mahonia bealei</i> . <i>Scientific Reports</i> , 2022, 12, 8160.	3.3	7
6	Thermal treatment inside a partially heated triangular cavity filled with casson fluid with an inner cylindrical obstacle via FEM approach. <i>European Physical Journal: Special Topics</i> , 2022, 231, 2683-2694.	2.6	12
7	An analysis of latent heat thermal energy storage in a hexagonal triplex-tube unit with curve shape fin and CNTs. <i>Case Studies in Thermal Engineering</i> , 2022, 36, 102241.	5.7	17
8	Fractional analysis of Jeffrey fluid over a vertical plate with time-dependent conductivity and diffusivity: A low-cost spectral approach. <i>Journal of Computational Science</i> , 2022, 63, 101769.	2.9	10
9	Finite element analysis of water-based Ferrofluid flow in a partially heated triangular cavity. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2021, 31, 3132-3147.	2.8	16
10	Unsteady flow and heat transfer of tangent-hyperbolic fluid: Legendre wavelet-based analysis. <i>Heat Transfer</i> , 2021, 50, 3079-3093.	3.0	19
11	Hybrid fully spectral linearized scheme for time-fractional evolutionary equations. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 3890-3912.	2.3	14
12	A review on polysaccharides from <i>Artemisia sphaerocephala</i> Krasch seeds, their extraction, modification, structure, and applications. <i>Carbohydrate Polymers</i> , 2021, 252, 117113.	10.2	44
13	Non-Newtonian fluid flow around a Y-shaped fin embedded in a square cavity. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 143, 573-585.	3.6	38
14	In silico screening and identification of deleterious missense SNPs along with their effects on CD-209 gene: An insight to CD-209 related-diseases. <i>PLoS ONE</i> , 2021, 16, e0247249.	2.5	6
15	Automated multi-class classification of skin lesions through deep convolutional neural network with dermoscopic images. <i>Computerized Medical Imaging and Graphics</i> , 2021, 88, 101843.	5.8	89
16	Novel operational matrices-based finite difference/spectral algorithm for a class of time-fractional Burger equation in multidimensions. <i>Chaos, Solitons and Fractals</i> , 2021, 144, 110701.	5.1	13
17	Linearized novel operational matrices-based scheme for classes of nonlinear time-space fractional unsteady problems in 2D. <i>Applied Numerical Mathematics</i> , 2021, 162, 351-373.	2.1	5
18	Heat generation/absorption on MHD flow of a micropolar fluid over a heated stretching surface in the presence of the boundary parameter. <i>Heat Transfer</i> , 2021, 50, 6129-6147.	3.0	37

#	ARTICLE	IF	CITATIONS
19	A spectral approach to analyze the nonlinear oscillatory fractional-order differential equations. Chaos, Solitons and Fractals, 2021, 146, 110921.	5.1	22
20	Neuronal dynamics and electrophysiology fractional model: A modified wavelet approach. Physica A: Statistical Mechanics and Its Applications, 2021, 570, 125805.	2.6	4
21	Brownian motion and thermophoretic effects on non-Newtonian nanofluid flow via Crank-Nicolson scheme. Archive of Applied Mechanics, 2021, 91, 3303-3313.	2.2	23
22	Thermal non-equilibrium natural convection in a trapezoidal porous cavity with heated cylindrical obstacles. International Communications in Heat and Mass Transfer, 2021, 126, 105460.	5.6	27
23	Synthesis of bimetallic nanoparticles loaded on to PNIPAM hybrid microgel and their catalytic activity. Scientific Reports, 2021, 11, 14759.	3.3	19
24	Computational analysis of radiative Williamson hybrid nanofluid comprising variable thermal conductivity. Japanese Journal of Applied Physics, 2021, 60, 087004.	1.5	15
25	Irreversibilities in natural convection inside a right-angled trapezoidal cavity with sinusoidal wall temperature. Physics of Fluids, 2021, 33, .	4.0	30
26	Galerkin time discretization for transmission dynamics of HBV with non-linear saturated incidence rate. Applied Mathematics and Computation, 2021, 410, 126481.	2.2	8
27	A Galerkin approach to analyze MHD flow of nanofluid along converging/diverging channels. Archive of Applied Mechanics, 2021, 91, 1907-1924.	2.2	33
28	Novel operational matrices-based method for solving fractional-order delay differential equations via shifted Gegenbauer polynomials. Applied Mathematics and Computation, 2020, 372, 124985.	2.2	35
29	Hydromagnetic flow of ferrofluid in an enclosed partially heated trapezoidal cavity filled with a porous medium. Journal of Magnetism and Magnetic Materials, 2020, 499, 166241.	2.3	74
30	Finite element analysis of hybrid nanofluid flow and heat transfer in a split lid-driven square cavity with Y-shaped obstacle. Physics of Fluids, 2020, 32, .	4.0	64
31	A New Operational Matrices-Based Spectral Method for Multi-Order Fractional Problems. Symmetry, 2020, 12, 1471.	2.2	7
32	Linearized stable spectral method to analyze two-dimensional nonlinear evolutionary and reaction-diffusion models. Numerical Methods for Partial Differential Equations, 2020, , .	3.6	16
33	Novel modification in wavelets method to analyze unsteady flow of nanofluid between two infinitely parallel plates. Chinese Journal of Physics, 2020, 66, 222-236.	3.9	30
34	Effects of volume fraction on water-based carbon nanotubes flow in a right-angle trapezoidal cavity: FEM based analysis. International Communications in Heat and Mass Transfer, 2020, 116, 104640.	5.6	56
35	A robust scheme based on novel operational matrices for some classes of time-fractional nonlinear problems arising in mechanics and mathematical physics. Numerical Methods for Partial Differential Equations, 2020, 36, 1566-1600.	3.6	22
36	A Chebyshev polynomial based algorithm to analyze the transport dynamics and anomalous diffusion in fractional model. Physica A: Statistical Mechanics and Its Applications, 2020, 551, 124227.	2.6	32

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37	A review on structure, extraction, and biological activities of polysaccharides isolated from <i>Cyclocarya paliurus</i> (Batalin) Iljinskaja. <i>International Journal of Biological Macromolecules</i> , 2020, 156, 420-429.	7.5	59
38	Numerical simulation of wavy porous enclosure filled with hybrid nanofluid involving Lorentz effect. <i>Physica Scripta</i> , 2020, 95, 115701.	2.5	18
39	Brownian motion and thermophoresis effects on unsteady stagnation point flow of Eyring-Powell nanofluid: a Galerkin approach. <i>Communications in Theoretical Physics</i> , 2020, 72, 125005.	2.5	22
40	Gegenbauer wavelets collocation-based scheme to explore the solution of free bio-convection of nanofluid in 3D nearby stagnation point. <i>Neural Computing and Applications</i> , 2019, 31, 8003-8019.	5.6	32
41	CVFEM modeling for nanofluid behavior involving non-equilibrium model and Lorentz effect in appearance of radiation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 534, 122154.	2.6	27
42	Wavelet analysis of stagnation point flow of non-Newtonian nanofluid. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2019, 40, 1211-1226.	3.6	41
43	Heat transfer and flow analysis of Casson fluid enclosed in a partially heated trapezoidal cavity. <i>International Communications in Heat and Mass Transfer</i> , 2019, 108, 104284.	5.6	93
44	Natural convection of water-based carbon nanotubes in a partially heated rectangular fin-shaped cavity with an inner cylindrical obstacle. <i>Physics of Fluids</i> , 2019, 31, .	4.0	92
45	Innovative operational matrices based computational scheme for fractional diffusion problems with the Riesz derivative. <i>European Physical Journal Plus</i> , 2019, 134, 1.	2.6	25
46	Operational-matrix-based algorithm for differential equations of fractional order with Dirichlet boundary conditions. <i>European Physical Journal Plus</i> , 2019, 134, 1.	2.6	20
47	Wavelet investigation of Soret and Dufour effects on stagnation point fluid flow in two dimensions with variable thermal conductivity and diffusivity. <i>Physica Scripta</i> , 2019, 94, 115219.	2.5	28
48	An efficient analysis for N-soliton, Lump and lump-kink solutions of time-fractional (2+1)-Kadomtsev-Petviashvili equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 528, 121320.	2.6	45
49	Dual solutions and stability analysis of flow and heat transfer of Casson fluid over a stretching sheet. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019, 383, 2400-2408.	2.1	108
50	Natural convection effects on heat and mass transfer of slip flow of time-dependent Prandtl fluid. <i>Journal of Computational Design and Engineering</i> , 2019, 6, 584-592.	3.1	45
51	Rotating flow of nanofluid due to exponentially stretching surface: An optimal study. <i>Journal of Algorithms and Computational Technology</i> , 2019, 13, 174830261988136.	0.7	21
52	Fluid flow and heat transfer investigation of blood with nanoparticles through porous vessels in the presence of magnetic field. <i>Journal of Algorithms and Computational Technology</i> , 2019, 13, 174830181878866.	0.7	7
53	Numerical investigation of fractional-order unsteady natural convective radiating flow of nanofluid in a vertical channel. <i>AIMS Mathematics</i> , 2019, 4, 1416-1429.	1.6	51
54	Investigation of heat and mass transfer under the influence of variable diffusion coefficient and thermal conductivity. <i>Indian Journal of Physics</i> , 2018, 92, 1109-1117.	1.8	28

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55	Shape effects of MoS2 nanoparticles on rotating flow of nanofluid along a stretching surface with variable thermal conductivity: A Galerkin approach. <i>International Journal of Heat and Mass Transfer</i> , 2018, 124, 706-714.	4.8	118
56	Wavelets solution of MHD 3-D fluid flow in the presence of slip and thermal radiation effects. <i>Physics of Fluids</i> , 2018, 30, .	4.0	52
57	Heat and fluid flow of water and ethylene-glycol based Cu-nanoparticles between two parallel squeezing porous disks: LSGM approach. <i>International Journal of Heat and Mass Transfer</i> , 2018, 123, 888-895.	4.8	47
58	A study of heat transfer analysis for squeezing flow of a Casson fluid via differential transform method. <i>Neural Computing and Applications</i> , 2018, 30, 3253-3264.	5.6	26
59	Differential transform method for unsteady nanofluid flow and heat transfer. <i>AEJ - Alexandria Engineering Journal</i> , 2018, 57, 1867-1875.	6.4	43
60	Comparison of Lagrange multipliers for telegraph equations. <i>Ain Shams Engineering Journal</i> , 2018, 9, 2323-2328.	6.1	19
61	Least square study of heat transfer of water based Cu and Ag nanoparticles along a converging/diverging channel. <i>Journal of Molecular Liquids</i> , 2018, 249, 856-867.	4.9	66
62	Numerical study of unsteady MHD flow of Williamson nanofluid in a permeable channel with heat source/sink and thermal radiation. <i>European Physical Journal Plus</i> , 2018, 133, 1.	2.6	61
63	Exploration of uniform heat flux on the flow and heat transportation of ferrofluids along a smooth plate: Comparative investigation. <i>International Journal of Biomathematics</i> , 2018, 11, 1850048.	2.9	27
64	An efficient algorithm based on Gegenbauer wavelets for the solutions of variable-order fractional differential equations. <i>European Physical Journal Plus</i> , 2018, 133, 1.	2.6	40
65	Cu-AlO/Water hybrid nanofluid through a permeable surface in the presence of nonlinear radiation and variable thermal conductivity via LSM. <i>International Journal of Heat and Mass Transfer</i> , 2018, 126, 1347-1356.	4.8	177
66	Examination of carbon-water nanofluid flow with thermal radiation under the effect of Marangoni convection. <i>Engineering Computations</i> , 2017, 34, 2330-2343.	1.4	30
67	Thermal and Entropy generation analysis of magnetohydrodynamic tangent hyperbolic slip flow towards a stretching sheet. <i>Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering</i> , 0, , 095440892110411.	2.5	5
68	Hybrid nanofluid flow around a triangular-shaped obstacle inside a split lid-driven trapezoidal cavity. <i>European Physical Journal: Special Topics</i> , 0, , .	2.6	17