Sabyasachi Mondal

List of Publications by Year in Descending Order

56 papers	659 citations	14 h-index	23 g-index
64 ext. papers	831 ext. citations	2 avg, IF	4.76 L-index

#	Paper	IF	Citations
56	Darcy–Forchheimer electromagnetic flow of entropy optimized microrotating Casson–Carreau nanomaterials. *Heat Transfer*, **2022**, 51, 2401-2436	3.1	0
55	Satellite-Based Estimation of Ambient Particulate Matters (PM2.5) Over a Metropolitan City in Eastern India **2022**, 135-146		
54	Three-Dimensional Rotating Flow of an Oldroyd-B Nanofluid with Relaxation-Retardation Viscous Dissipation. *Journal of Nanofluids*, **2021**, 10, 408-419	2.2	1
53	The Overlapping Grid Spectral Collocation Method for Solving Entropy Generation in Casson Nanofluid Flow Past a Stretching Plate. *Journal of Nanofluids*, **2021**, 10, 45-57	2.2	0
52	Rheological Analysis of CNT Suspended Nanofluid with Convective Boundary Condition Using Spectral Method. *Nanoscience and Nanotechnology - Asia*, **2021**, 11, 163-173	0.7	2
51	A brief review of numerical methods for heat and mass transfer of Casson fluids. *Partial Differential Equations in Applied Mathematics*, **2021**, 3, 100034	0.8	5
50	Numerical study on combined thermal radiation and magnetic field effects on entropy generation in unsteady fluid flow past an inclined cylinder. *Journal of Computational Design and Engineering*, **2021**, 8, 149-169	4.6	5
49	Spectral methods to solve nonlinear problems: A review. *Partial Differential Equations in Applied Mathematics*, **2021**, 4, 100043	0.8	8
48	Flow and heat transfer over a thin needle immersed in a porous medium filled with an Al2O3-water nanofluids using Buongiorno's two-phase model. *International Journal of Ambient Energy*, **2020**, 1-9	2	4
47	Thermophysical analysis of three-dimensional magnetohydrodynamic flow of a tangent hyperbolic nanofluid. *Engineering Reports*, **2020**, 2, e12144	1.2	8
46	Thermodynamic effect in Darcy–Forchheimer nanofluid flow of a single-wall carbon nanotube/multi-wall carbon nanotube suspension due to a stretching/shrinking rotating disk: Buongiorno two-phase model. *Journal of Engineering Mathematics*, **2020**, 120, 43-65	1.2	25
45	Analysis of double-diffusion convection on three-dimensional MHD stagnation point flow of a tangent hyperbolic Casson nanofluid. *International Journal of Ambient Energy*, **2020**, 1-12	2	9
44	Meet Our Editorial Boad Member. *Nanoscience and Nanotechnology - Asia*, **2020**, 10, 1-2	0.7	3
43	A theoretical nanofluid analysis exhibiting hydromagnetics characteristics employing CVFEM. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2020**, 42, 1	2	18
42	Bioconvection in Casson nanofluid flow with Gyrotactic microorganisms and variable surface heat flux. *International Journal of Biomathematics*, **2019**, 12, 1950041	1.8	15
41	Efficient Multi-Domain Bivariate Spectral Collocation Solution for MHD Laminar Natural Convection Flow from a Vertical Permeable Flat Plate with Uniform Surface Temperature and Thermal Radiation. *International Journal of Computational Methods*, **2019**, 16, 1840029	1.1	3
40	Nonlinear Radiation in Bioconvective Casson Nanofluid Flow. *International Journal of Applied and Computational Mathematics*, **2019**, 5, 1	1.3	16

39	A Multi-Domain Bivariate Approach for Mixed Convection in a Casson Nanofluid with Heat Generation. *Walailak Journal of Science and Technology*, **2019**, 16, 681-699	1.5	10
38	Impact of the Cattaneo-Christov thermal and solutal diffusion models on the stagnation point slip flow of Walters' B nanofluid past an electromagnetic sheet. *Heat Transfer - Asian Research*, **2019**, 48, 713-726	2.8	10
37	A model for entropy generation in stagnation-point flow of non-Newtonian Jeffrey, Maxwell, and Oldroyd-B nanofluids. *Heat Transfer - Asian Research*, **2019**, 48, 24-41	2.8	11
36	MHD Boundary Layer Liquid Metal Flow in the Presence of Thermal Radiation Using Non-similar Solution. *Lecture Notes in Mechanical Engineering*, **2019**, 331-337	0.4	1
35	Hydromagnetic Nanofluids Flow through a Porous Medium with Thermal Radiation, Chemical Reaction and Viscous Dissipation using the Spectral Relaxation Method. *International Journal of Computational Methods*, **2019**, 16, 1840020	1.1	2
34	Unsteady double-diffusive convection in a water-based Al2O3-nanofluid in a two-sided lid-driven porous cavity. *Physics and Chemistry of Liquids*, **2019**, 57, 283-295	1.5	8
33	Unsteady double-diffusive natural convection in a two-sided lid-driven inclined porous enclosure with sinusoidal boundary conditions with Soret and Dufour effects. *Physics and Chemistry of Liquids*, **2019**, 57, 349-361	1.5	1
32	A new numerical approach to MHD stagnation point flow and heat transfer towards a stretching sheet. *Ain Shams Engineering Journal*, **2018**, 9, 233-243	4.4	28
31	MHD Flow and Heat Transfer of Maxwell Nanofluid Over an Unsteady Permeable Shrinking Sheet with Convective Boundary Conditions. *Journal of Nanofluids*, **2018**, 7, 995-1003	2.2	2
30	A multi-domain spectral method for non-Darcian mixed convection flow in a power-law fluid with viscous dissipation. *Physics and Chemistry of Liquids*, **2018**, 56, 771-789	1.5	4
29	Weakly Nonlinear Stability Analysis of a Nanofluid in a Horizontal Porous Layer Using a Multidomain Spectral Collocation Method **2018**,		1
28	Cattaneo□Christov Nanofluid Flow and Heat Transfer with Variable Properties Over a Vertical Cone in a Porous Medium. *International Journal of Applied and Computational Mathematics*, **2017**, 3, 1019-1034	1.3	8
27	An unsteady MHD Maxwell nanofluid flow with convective boundary conditions using spectral local linearization method. *Open Physics*, **2017**, 15, 637-646	1.3	14
26	A numerical study of unsteady non-Newtonian Powell-Eyring nanofluid flow over a shrinking sheet with heat generation and thermal radiation. *AEJ - Alexandria Engineering Journal*, **2017**, 56, 81-91	6.1	35
25	Unsteady mixed convection flow through a permeable stretching flat surface with partial slip effects through MHD nanofluid using spectral relaxation method. *Open Physics*, **2017**, 15, 323-334	1.3	4
24	On Unsteady Three-Dimensional Axisymmetric MHD Nanofluid Flow with Entropy Generation and Thermo-Diffusion Effects on a Non-Linear Stretching Sheet. *Entropy*, **2017**, 19, 168	2.8	9
23	Unsteady Mixed Convection in Nanofluid Flow Through a Porous Medium with Thermal Radiation Using the Bivariate Spectral Quasilinearization Method. *Journal of Nanofluids*, **2017**, 6, 273-281	2.2	4
22	An Unsteady Double-Diffusive Natural Convection in an Inclined Rectangular Enclosure with Different Angles of Magnetic Field. *International Journal of Computational Methods*, **2016**, 13, 1641015	1.1	5

21	Thermo-Diffusion Effects on Unsteady Mixed Convection in a Magneto-Nanofluid Flow Along an Inclined Cylinder with a Heat Source, Ohmic and Viscous Dissipation. *Journal of Computational and Theoretical Nanoscience*, **2016**, 13, 1670-1684	0.3	4
20	An Unsteady Magnetohydrodynamic Jeffery Nanofluid Flow Over a Shrinking Sheet with Thermal Radiation and Convective Boundary Condition Using Spectral Quasilinearisation Method. *Journal of Computational and Theoretical Nanoscience*, **2016**, 13, 7483-7492	0.3	6
19	An unsteady double-diffusive natural convection in an inclined enclosures filled with porous medium with non-uniform boundary conditions in presence of thermal radiation. *International Journal of Mathematical Analysis*, **2016**, 10, 469-491	1.5	3
18	Unsteady Casson nanofluid flow over a stretching sheet with thermal radiation, convective and slip boundary conditions. *AEJ - Alexandria Engineering Journal*, **2016**, 55, 1025-1035	6.1	116
17	Unsteady double diffusive convection in an inclined rectangular lid-driven enclosure with different magnetic field angles and non-uniform boundary conditions. *International Journal of Heat and Mass Transfer*, **2015**, 90, 900-910	4.9	14
16	Heat and mass transfer of nanofluid through an impulsively vertical stretching surface using the spectral relaxation method. *Boundary Value Problems*, **2015**, 2015,	2.1	6
15	Unsteady Natural Convective Boundary-layer Flow of MHD Nanofluid over a Stretching Surfaces with Chemical Reaction Using the Spectral Relaxation Method: A Revised Model. *Procedia Engineering*, **2015**, 127, 18-24		13
14	The Effects of Thermal Radiation on an Unsteady MHD Axisymmetric Stagnation-Point Flow over a Shrinking Sheet in Presence of Temperature Dependent Thermal Conductivity with Navier Slip. *PLoS ONE*, **2015**, 10, e0138355	3.7	14
13	Effects of buoyancy ratio on unsteady double-diffusive natural convection in a cavity filled with porous medium with non-uniform boundary conditions. *International Journal of Heat and Mass Transfer*, **2015**, 85, 401-413	4.9	30
12	On unsteady MHD mixed convection in a nanofluid due to a stretching/shrinking surface with suction/injection using the spectral relaxation method. *Boundary Value Problems*, **2015**, 2015,	2.1	23
11	Effects of buoyancy ratio on double-diffusive natural convection in a lid-driven cavity. *International Journal of Heat and Mass Transfer*, **2013**, 57, 771-785	4.9	44
10	Mixed convection flow in an inclined enclosure under magnetic field with thermal radiation and heat generation. *International Communications in Heat and Mass Transfer*, **2013**, 41, 47-56	5.8	43
9	Influence of thermal radiation on non-Darcian natural convection in a square cavity filled with fluid saturated porous medium of uniform porosity. *Nonlinear Analysis: Modelling and Control*, **2012**, 17, 223-237	1.3	11
8	Heat Transfer due to Magnetohydrodynamic Stagnation-Point Flow of a Power-Law Fluid towards a Stretching Surface in the Presence of Thermal Radiation and Suction/Injection. *ISRN Thermodynamics*, **2012**, 2012, 1-9		17
7	UNSTEADY MHD THREE-DIMENSIONAL CASSON NANOFLUID FLOW OVER A POROUS LINEAR STRETCHING SHEET WITH SLIP CONDITION. *Frontiers in Heat and Mass Transfer*,8,		8
6	A LARGE PARAMETER SPECTRAL PERTURBATION METHOD FOR NONLINEAR SYSTEMS OF PARTIAL DIFFERENTIAL EQUATIONS THAT MODELS BOUNDARY LAYER FLOW PROBLEMS. *Frontiers in Heat and Mass Transfer*,9,		2
5	A NUMERICAL STUDY OF ENTROPY GENERATION ON OLDROYD-B NANOFLUID FLOW PAST A RIGA PLATE. *Journal of Thermal Engineering*,845-866	1.1	7
4	Impact of irreversibility ratio and entropy generation on three-dimensional Oldroyd-B fluid flow with relaxation□etardation viscous dissipation. *Indian Journal of Physics*,1	1.4	7

3	Entropy minimized MHD microrotations of Cross nanomaterials with cubic autocatalytic chemical reaction. *Heat Transfer*,	3.1	3
2	Impact of Joule heating and nonlinear thermal radiation on the flow of Casson nanofluid with entropy generation. *International Journal of Ambient Energy*,1-24	2	3
1	Bio-convective viscoelastic Casson nanofluid flow over a stretching sheet in the presence of induced magnetic field with Cattaneo□Christov double diffusion. *International Journal of Biomathematics*,	1.8	3