Hang Xu

List of Publications by Year in descending order

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115	2,674	172207	214527
papers	citations	29 h-index	47 g-index

117	117	117	1304
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Series solutions of unsteady magnetohydrodynamic flows of non-Newtonian fluids caused by an impulsively stretching plate. Journal of Non-Newtonian Fluid Mechanics, 2005, 129, 46-55.	1.0	134
2	Series solutions of non-linear Riccati differential equations with fractional order. Chaos, Solitons and Fractals, 2009, 40, 1-9.	2.5	121
3	A reliable algorithm of homotopy analysis method for solving nonlinear fractional differential equations. Applied Mathematical Modelling, 2010, 34, 593-600.	2.2	115
4	Series solutions of unsteady three-dimensional MHD flow and heat transfer in the boundary layer over an impulsively stretching plate. European Journal of Mechanics, B/Fluids, 2007, 26, 15-27.	1.2	105
5	Homotopy based solutions of the Navierâ€“Stokes equations for a porous channel with orthogonally moving walls. Physics of Fluids, 2010, 22, .	1.6	103
6	Mixed convection flow of a nanofluid over a stretching surface with uniform free stream in the presence of both nanoparticles and gyrotactic microorganisms. International Journal of Heat and Mass Transfer, 2014, 75, 610-623.	2.5	96
7	Fully developed mixed convection flow in a horizontal channel filled by a nanofluid containing both nanoparticles and gyrotactic microorganisms. European Journal of Mechanics, B/Fluids, 2014, 46, 37-45.	1.2	82
8	Analysis of nonlinear fractional partial differential equations with the homotopy analysis method. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 1152-1156.	1.7	74
9	Analytical approximations for a population growth model with fractional order. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 1978-1983.	1.7	70
10	Laminar flow and heat transfer in the boundary-layer of non-Newtonian fluids over a stretching flat sheet. Computers and Mathematics With Applications, 2009, 57, 1425-1431.	1.4	68
11	Series solution of unsteady boundary layer flows of non-Newtonian fluids near a forward stagnation point. Journal of Non-Newtonian Fluid Mechanics, 2006, 139, 31-43.	1.0	67
12	Analysis of mixed convection flow of a nanofluid in a vertical channel with the Buongiorno mathematical model. International Communications in Heat and Mass Transfer, 2013, 44, 15-22.	2.9	64
13	Flow and heat transfer in a nano-liquid film over an unsteady stretching surface. International Journal of Heat and Mass Transfer, 2013, 60, 646-652.	2.5	62
14	Modelling unsteady mixed convection of a nanofluid suspended with multiple kinds of nanoparticles between two rotating disks by generalized hybrid model. International Communications in Heat and Mass Transfer, 2019, 108, 104275.	2.9	58
15	Analysis of a time fractional wave-like equation with the homotopy analysis method. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 1250-1255.	0.9	55
16	Unsteady stagnation flow and heat transfer towards a shrinking sheet. International Communications in Heat and Mass Transfer, 2010, 37, 1440-1446.	2.9	55
17	Unsteady mixed nano-bioconvection flow in a horizontal channel with its upper plate expanding or contracting. International Journal of Heat and Mass Transfer, 2015, 86, 174-182.	2.5	55
18	Dual solutions of boundary layer flow over an upstream moving plate. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 350-358.	1.7	54

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19	Mixed convection in gravity-driven nano-liquid film containing both nanoparticles and gyrotactic microorganisms. Applied Mathematics and Mechanics (English Edition), 2015, 36, 163-178.	1.9	52
20	Explicit series solution of travelling waves with a front of Fisher equation. Chaos, Solitons and Fractals, 2007, 31, 462-472.	2.5	51
21	Fully developed mixed convection flow in a vertical channel filled with nanofluids. International Communications in Heat and Mass Transfer, 2012, 39, 1086-1092.	2.9	51
22	Series solution to the Thomasâ€“Fermi equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 365, 111-115.	0.9	42
23	An explicit analytic solution for convective heat transfer in an electrically conducting fluid at a stretching surface with uniform free stream. International Journal of Engineering Science, 2005, 43, 859-874.	2.7	41
24	Analysis of mixed convection flow in an inclined lid-driven enclosure with Buongiornoâ€™s nanofluid model. International Journal of Heat and Mass Transfer, 2018, 126, 221-236.	2.5	37
25	Mixed convection flow in a channel with slip in a porous medium saturated with a nanofluid containing both nanoparticles and microorganisms. International Journal of Heat and Mass Transfer, 2018, 125, 1043-1053.	2.5	37
26	Series solutions of unsteady boundary layer flow of a micropolar fluid near the forward stagnation point of a plane surface. Acta Mechanica, 2006, 184, 87-101.	1.1	35
27	Three-dimensional stagnation flow of a nanofluid containing both nanoparticles and microorganisms on a moving surface with anisotropic slip. Applied Mathematical Modelling, 2016, 40, 4136-4150.	2.2	34
28	An explicit analytic solution for free convection about a vertical flat plate embedded in a porous medium by means of homotopy analysis method. Applied Mathematics and Computation, 2004, 158, 433-443.	1.4	31
29	Peristaltic channel flow and heat transfer of Carreau magneto hybrid nanofluid in the presence of homogeneous/heterogeneous reactions. Scientific Reports, 2020, 10, 11499.	1.6	31
30	A family of new solutions on the wall jet. European Journal of Mechanics, B/Fluids, 2008, 27, 322-334.	1.2	29
31	Series solutions of unsteady free convection flow in the stagnation-point region of a three-dimensional body. International Journal of Thermal Sciences, 2008, 47, 600-608.	2.6	24
32	Nanofluid flow and heat transfer in a microchannel with interfacial electrokinetic effects. International Journal of Heat and Mass Transfer, 2018, 124, 158-167.	2.5	23
33	A novel homotopy-wavelet approach for solving stream function-vorticity formulation of Navierâ€“Stokes equations. Communications in Nonlinear Science and Numerical Simulation, 2019, 67, 124-151.	1.7	23
34	Modelling two-layer nanofluid flow in a micro-channel with electro-osmotic effects by means of Buongiornoâ€™s mode. Applied Mathematics and Mechanics (English Edition), 2020, 41, 83-104.	1.9	23
35	Coiflets solutions for FÃ¶ppl-von KÃ¡rmÃ¡n equations governing large deflection of a thin flat plate by a novel wavelet-homotopy approach. Numerical Algorithms, 2018, 79, 993-1020.	1.1	22
36	A homogeneous-heterogeneous model for mixed convection in gravity-driven film flow of nanofluids. International Communications in Heat and Mass Transfer, 2018, 95, 19-24.	2.9	21

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37	Series solutions of unsteady MHD flows above a rotating disk. Meccanica, 2006, 41, 599-609.	1.2	20
38	Homogeneous-heterogeneous reactions in flow of nanofluids near the stagnation region of a plane surface: The Buongiornoâ€™s model. International Journal of Heat and Mass Transfer, 2018, 125, 604-609.	2.5	20
39	Generalized Hybrid Nanofluid Model with the Application of Fully Developed Mixed Convection Flow in a Vertical Microchannel*. Communications in Theoretical Physics, 2019, 71, 903.	1.1	20
40	Flow and heat transfer of nanofluid through a horizontal microchannel with magnetic field and interfacial electrokinetic effects. European Journal of Mechanics, B/Fluids, 2020, 80, 72-79.	1.2	20
41	Forced convection with unsteady pulsating flow of a hybrid nanofluid in a microchannel in the presence of EDL, magnetic and thermal radiation effects. International Communications in Heat and Mass Transfer, 2021, 120, 105042.	2.9	20
42	Explicit solutions of wall jet flow subject to a convective boundary condition. Boundary Value Problems, 2014, 2014, .	0.3	18
43	A homogeneous-heterogeneous reaction model for heat fluid flow in the stagnation region of a plane surface. International Communications in Heat and Mass Transfer, 2017, 87, 112-117.	2.9	18
44	Accurate storm surge forecasting using the encoderâ€“decoder long short term memory recurrent neural network. Physics of Fluids, 2022, 34, .	1.6	18
45	Time-dependent squeezing bio-thermal MHD convection flow of a micropolar nanofluid between two parallel disks with multiple slip effects. Case Studies in Thermal Engineering, 2022, 31, 101850.	2.8	18
46	A Series Solution of the Unsteady Von KÃ¡rmÃ¡n Swirling Viscous Flows. Acta Applicandae Mathematicae, 2007, 94, 215-231.	0.5	16
47	Lie Group Analysis of a Nanofluid Bioconvection Flow Past a Vertical Flat Surface With an Outer Power-Law Stream. Journal of Heat Transfer, 2015, 137, .	1.2	16
48	Homogeneousâ€“Heterogeneous Reactions in Boundary-Layer Flow of a Nanofluid Near the Forward Stagnation Point of a Cylinder. Journal of Heat Transfer, 2017, 139, .	1.2	16
49	Fluid flow driven along microchannel by its upper stretching wall with electrokinetic effects. Applied Mathematics and Mechanics (English Edition), 2018, 39, 395-408.	1.9	16
50	Nonlinear analysis for extreme large bending deflection of a rectangular plate on non-uniform elastic foundations. Applied Mathematical Modelling, 2018, 61, 316-340.	2.2	15
51	Entropy Generation Analysis of Peristaltic Flow and Heat Transfer of a Jeffery Nanofluid in a Horizontal Channel under Magnetic Environment. Mathematical Problems in Engineering, 2019, 2019, 1-13.	0.6	15
52	Modelling convective transport of hybrid nanofluid in a lid driven square cavity with consideration of Brownian diffusion and thermophoresis. International Communications in Heat and Mass Transfer, 2022, 137, 106226.	2.9	15
53	Homotopy analysis of unsteady boundaryâ€layer flow started impulsively from rest along a symmetric wedge. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2008, 88, 507-514.	0.9	14
54	Mixed convective flow of a hybrid nanofluid between two parallel inclined plates under wall-slip condition. Applied Mathematics and Mechanics (English Edition), 2022, 43, 113-126.	1.9	14

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55	Analytical approximations for the periodic motion of the Duffing system with delayed feedback. Numerical Algorithms, 2011, 56, 561-576.	1.1	13
56	Mixed convection heat transfer in horizontal channel filled with nanofluids. Applied Mathematics and Mechanics (English Edition), 2013, 34, 339-350.	1.9	13
57	Unsteady Mixed Bioconvection Flow of a Nanofluid Between Two Contracting or Expanding Rotating Discs. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2016, 71, 261-272.	0.7	13
58	Novel wavelet-homotopy Galerkin technique for analysis of lid-driven cavity flow and heat transfer with non-uniform boundary conditions. Applied Mathematics and Mechanics (English Edition), 2018, 39, 1691-1718.	1.9	13
59	Unsteady three-dimensional MHD flow and heat transfer in porous medium suspended with both microorganisms and nanoparticles due to rotating disks. Journal of Thermal Analysis and Calorimetry, 2022, 147, 1607-1619.	2.0	13
60	Accurate estimation of tidal level using bidirectional long short-term memory recurrent neural network. Ocean Engineering, 2021, 235, 108765.	1.9	13
61	The jet over a stretching wall with suction or injection. Science China: Physics, Mechanics and Astronomy, 2011, 54, 502-510.	2.0	12
62	Free convection of a hybrid nanofluid past a vertical plate embedded in a porous medium with anisotropic permeability. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 4083-4101.	1.6	12
63	A modified model for isothermal homogeneous and heterogeneous reactions in the boundary-layer flow of a nanofluid. Applied Mathematics and Mechanics (English Edition), 2020, 41, 479-490.	1.9	11
64	Highly accurate wavelet-homotopy solutions for mixed convection hybrid nanofluid flow in an inclined square lid-driven cavity. Computers and Mathematics With Applications, 2022, 108, 88-108.	1.4	11
65	Homotopy analysis of unsteady heat transfer started impulsively from rest along a symmetric wedge. International Communications in Heat and Mass Transfer, 2010, 37, 47-51.	2.9	10
66	On the Nonsimilarity Boundary-Layer Flows of Second-Order Fluid Over a Stretching Sheet. Journal of Applied Mechanics, Transactions ASME, 2010, 77, .	1.1	10
67	Analysis of Fully Developed Opposing Mixed Convection Flow in an Inclined Channel Filled by a Nanofluid. Journal of Heat Transfer, 2014, 136, .	1.2	10
68	Three-dimensional free bio-convection of nanofluid near stagnation point on general curved isothermal surface. Applied Mathematics and Mechanics (English Edition), 2016, 37, 417-432.	1.9	10
69	Analysis of Mixed Convection in a Vertical Channel in the Presence of Electrical Double Layers. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2018, 73, 741-751.	0.7	10
70	A new branch of the temperature distribution of boundary-layer flows over an impermeable stretching plate. Heat and Mass Transfer, 2008, 44, 501-504.	1.2	9
71	Mixed convection in gravity-driven thin nano-liquid film flow with homogeneousâ€“heterogeneous reactions. Physics of Fluids, 2020, 32, 023604.	1.6	9
72	Unsteady Bioconvection Squeezing Flow in a Horizontal Channel with Chemical Reaction and Magnetic Field Effects. Mathematical Problems in Engineering, 2017, 2017, 1-9.	0.6	8

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73	Analysis of three-dimensional boundary-layer nanofluid flow and heat transfer over a stretching surface by means of the homotopy analysis method. Boundary Value Problems, 2015, 2015, .	0.3	7
74	An effective treatment of nonlinear differential equations with linear boundary conditions using the homotopy analysis method. Mathematical and Computer Modelling, 2009, 49, 770-779.	2.0	6
75	Free Convection Nanofluid Flow in the Stagnation-Point Region of a Three-Dimensional Body. Scientific World Journal, The, 2014, 2014, 1-14.	0.8	6
76	Free convection along a convectively heated vertical flat sheet embedded in a saturated porous medium. International Communications in Heat and Mass Transfer, 2014, 55, 102-108.	2.9	6
77	Nonlinear dispersive AlfvÃ©n waves interaction in magnetized plasma. Physics of Fluids, 2019, 31, 082105.	1.6	6
78	Modeling heat transfer of nanofluid flow in microchannels with electrokinetic and slippery effects using Buongiornoâ€™s model. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 2566-2587.	1.6	6
79	Entropy generation of nanofluid flow and heat transfer driven through a paralleled microchannel. Canadian Journal of Physics, 2019, 97, 678-691.	0.4	6
80	Interactions of multiple three-dimensional nonlinear high frequency magnetosonic waves in magnetized plasma. Physics of Fluids, 2020, 32, .	1.6	6
81	Analytical approximation for laminar film condensation of saturated stream on an isothermal vertical plate. Applied Mathematical Modelling, 2008, 32, 738-748.	2.2	5
82	Stagnation Flow of a SWCNT Nanofluid towards a Plane Surface with Heterogeneous-Homogeneous Reactions. Mathematical Problems in Engineering, 2020, 2020, 1-12.	0.6	5
83	A homotopy-based wavelet approach for large deflection of a circular plate on nonlinear foundations with parameterized boundaries. Computers and Mathematics With Applications, 2021, 90, 80-95.	1.4	5
84	Explicit Solutions of a Gravity-Induced Film Flow along a Convectively Heated Vertical Wall. Scientific World Journal, The, 2013, 2013, 1-7.	0.8	4
85	Homogeneousâ€“Heterogeneous Reactions of Blasius Flow in a Nanofluid. Journal of Heat Transfer, 2019, 141, .	1.2	4
86	Fully Developed Flow of a Nanofluid through a Circular Micropipe in the Presence of Electroosmotic Effects. Mathematical Problems in Engineering, 2020, 2020, 1-15.	0.6	4
87	Homotopy Coiflets wavelet solution of electrohydrodynamic flows in a circular cylindrical conduit. Applied Mathematics and Mechanics (English Edition), 2020, 41, 681-698.	1.9	4
88	Two-layer nanofluid flow and heat transfer in a horizontal microchannel with electric double layer effects and magnetic field. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 2347-2372.	1.6	4
89	Homotopy analysis of a self-similar boundary-flow driven by a power-law shear. Archive of Applied Mechanics, 2008, 78, 311-320.	1.2	3
90	New branches with algebraical behaviour for thermal boundary-layer flow over a permeable sheet. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 1162-1174.	1.7	3

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91	Homotopy Analysis Method for Nonlinear Periodic Oscillating Equations with Absolute Value Term. Mathematical Problems in Engineering, 2015, 2015, 1-7.	0.6	3
92	New groups of solutions to the Whitham-Broer-Kaup equation. Applied Mathematics and Mechanics (English Edition), 2020, 41, 1735-1746.	1.9	3
93	Studies of wave interaction of high-order Korteweg-de Vries equation by means of the homotopy strategy and neural network prediction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 415, 127653.	0.9	3
94	Homotopy Shear Band Solutions in Gradient Plasticity. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 477-486.	0.7	2
95	Analytical solutions for unsteady forced convection pulsating flow in a microchannel in the presence of EDL effects. Canadian Journal of Physics, 2020, 98, 442-457.	0.4	2
96	Coiflet Wavelet-Homotopy Solution of Channel Flow due to Orthogonally Moving Porous Walls Governed by the Navierâ€“Stokes Equations. Journal of Mathematics, 2020, 2020, 1-12.	0.5	2
97	Coiflet wavelet-homotopy solution of free convection in a closed cavity subjected to an inclined external magnetic field. Mathematics and Computers in Simulation, 2022, 191, 288-308.	2.4	2
98	Multiple-soliton and periodic solutions to spaceâ€“time fractional Whithamâ€“Broerâ€“Kaup equations. European Physical Journal: Special Topics, 2022, 231, 2353-2357.	1.2	2
99	Homotopy Solution for Non-Similarity Boundary-Layer Flow near a Stagnation Point. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2010, 65, 161-172.	0.7	1
100	INFLUENCE OF VARIABLE PERMEABILITY ON FREE CONVECTION FLOW ALONG A CONVECTIVELY HEATED VERTICAL SURFACE IN A SATURATED POROUS MEDIUM. Journal of Porous Media, 2018, 21, 1215-1228.	1.0	1
101	Liquid Flow in a Porous Channel with Electrokinetic Effects. Communications in Theoretical Physics, 2018, 70, 391.	1.1	1
102	Non-similarity solution of double-diffusive free convection flow from a vertical surface. AIP Conference Proceedings, 2018, , .	0.3	1
103	Study of electrokinetic effects for heat transfer in microchannel with sinusoidal thermal boundary conditions. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 3872-3892.	1.6	1
104	Fully developed opposing mixed convection in inclined microchannel with electric double layer effects. International Communications in Heat and Mass Transfer, 2022, 131, 105848.	2.9	1
105	Application of Homotopy analysis method for mechanical model of deepwater SCR installation. , 2012, , .		0
106	Boundary-layer flow of a nano-liquid film on an unsteady stretching surface. , 2012, , .		0
107	Three-dimensional boundary-layer flow and heat transfer of a Cu-water nanofluid over a stretching surface. , 2012, , .		0
108	Preface of the â€œSymposium on analytical approaches for nonlinear differential equations modeling complex natural phenomena & advanced technological processesâ€• AIP Conference Proceedings, 2015, , .	0.3	0

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109	Analytic investigation of bioconvection in an unsteady squeezing flow of nanofluid between parallel plates. AIP Conference Proceedings, 2015, , .	0.3	0
110	Homotopy analysis method for the convection flow in two rotating disks filled by a nanofluid containing both nanoparticles and microorganisms. AIP Conference Proceedings, 2015, , .	0.3	0
111	Analysis of free convection in the stagnation point of a three-dimensional body immersed in a nanofluid. AIP Conference Proceedings, 2015, , .	0.3	0
112	Homogeneousâ€“Heterogeneous Reactions in Boundary-Layer Flow of a Maxwell Nanofluid Over a Stretching Surface. Journal of Thermal Science and Engineering Applications, 2019, 11, .	0.8	0
113	Nonlinear dynamical magnetosonic wave interactions and collisions in magnetized plasma. Applied Mathematics and Mechanics (English Edition), 2020, 41, 1139-1156.	1.9	0
114	Unsteady Laminar Pulsating Flow in a Saturated Porous Microchannel in the Presence of Electrical Double-Layer Effects. Journal of Heat Transfer, 2020, 142, .	1.2	0
115	Highly accurate Coiflet wavelet-homotopy solution of Jefferyâ€“Hamel problem at extreme parameters. International Journal of Wavelets, Multiresolution and Information Processing, 0, , .	0.9	0