Chiu-On Ng

List of Publications by Year
in descending order

135	2,894	172457	223800
papers	citations	29 h-index	46 g-index

135	135	135	1718
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Roll waves on a shallow layer of mud modelled as a power-law fluid. Journal of Fluid Mechanics, 1994, 263, 151-184.	3.4	149
2	Slip flow due to a stretching cylinder. International Journal of Non-Linear Mechanics, 2011, 46, 1191-1194.	2.6	110
3	Some Applications of the Homogenization Theory. Advances in Applied Mechanics, 1996, 32, 277-348.	2.3	108
4	Unsteady convective boundary layer flow of a viscous fluid at a vertical surface with variable fluid properties. Nonlinear Analysis: Real World Applications, 2013, 14, 455-464.	1.7	103
5	Water waves over a muddy bed: a two-layer Stokes' boundary layer model. Coastal Engineering, 2000, 40, 221-242.	4.0	91
6	Dispersion in steady and oscillatory flows through a tube with reversible and irreversible wall reactions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 481-515.	2.1	90
7	Stokes shear flow over a grating: Implications for superhydrophobic slip. Physics of Fluids, 2009, 21, .	4.0	89
8	Combined pressure-driven and electroosmotic flow of Casson fluid through a slit microchannel. Journal of Non-Newtonian Fluid Mechanics, 2013, 198, 1-9.	2.4	63
9	The effect of variable viscosity on the flow and heat transfer of a viscous Ag-water and Cu-water nanofluids. Journal of Hydrodynamics, 2013, 25, 1-9.	3.2	61
10	Apparent slip arising from Stokes shear flow over a bidimensional patterned surface. Microfluidics and Nanofluidics, 2010, 8, 361-371.	2.2	54
11	Darcyâ€“Brinkman Flow Through a Corrugated Channel. Transport in Porous Media, 2010, 85, 605-618.	2.6	52
12	Electroosmotic flow of a power-law fluid in a non-uniform microchannel. Journal of Non-Newtonian Fluid Mechanics, 2014, 208-209, 118-125.	2.4	51
13	Simulation of wave propagation over a submerged bar using the VOF method with a two-equation kâ€“Îµ turbulence modeling. Ocean Engineering, 2004, 31, 87-95.	4.3	48
14	Convective diffusion in steady flow through a tube with a retentive and absorptive wall. Physics of Fluids, 2008, 20, 073604.	4.0	48
15	Effects of kinetic sorptive exchange on solute transport in open-channel flow. Journal of Fluid Mechanics, 2001, 446, 321-345.	3.4	47
16	Effective slip for Stokes flow over a surface patterned with two- or three-dimensional protrusions. Fluid Dynamics Research, 2011, 43, 065504.	1.3	46
17	Dispersion due to electroosmotic flow in a circular microchannel with slowly varying wall potential and hydrodynamic slippage. Physics of Fluids, 2012, 24, .	4.0	46
18	Thermal convective instability in an Oldroyd-B nanofluid saturated porous layer. International Journal of Heat and Mass Transfer, 2015, 84, 167-177.	4.8	44

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19	Mass transport in water waves over a thin layer of soft viscoelastic mud. Journal of Fluid Mechanics, 2007, 573, 105-130.	3.4	43
20	On the effects of liquid-gas interfacial shear on slip flow through a parallel-plate channel with superhydrophobic grooved walls. Physics of Fluids, 2010, 22, .	4.0	43
21	Heat transfer over a nonlinearly stretching sheet with non-uniform heat source and variable wall temperature. International Journal of Heat and Mass Transfer, 2011, 54, 4960-4965.	4.8	42
22	Electrokinetic flows through a parallel-plate channel with slipping stripes on walls. Physics of Fluids, 2011, 23, .	4.0	41
23	Emulsification of Silicone Oil and Eye Movements. , 2011, 52, 9721.		39
24	Unsteady flow and heat transfer in a thin film of Ostwaldâ€“de Waele liquid over a stretching surface. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 4163-4173.	3.3	38
25	Pulsatile Casson Fluid Flow Through a Stenosed Bifurcated Artery. International Journal of Fluid Mechanics Research, 2009, 36, 43-63.	0.4	38
26	MHD squeeze flow and heat transfer of a nanofluid between parallel disks with variable fluid properties and transpiration. International Journal of Mechanical and Materials Engineering, 2017, 12, .	2.2	33
27	Oblique wave scattering by a floating elastic plate over a porous bed in single and two-layer fluid systems. Ocean Engineering, 2018, 159, 280-294.	4.3	33
28	Electro-osmotic flow in a rotating rectangular microchannel. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150200.	2.1	32
29	How does wall slippage affect hydrodynamic dispersion?. Microfluidics and Nanofluidics, 2011, 10, 47-57.	2.2	30
30	MHD flow and mass transfer of chemically reactive upper convected Maxwell fluid past porous surface. Applied Mathematics and Mechanics (English Edition), 2012, 33, 899-910.	3.6	30
31	Rotating electroosmotic flow of viscoplastic material between two parallel plates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 513, 355-366.	4.7	30
32	A time-varying diffusivity model for shear dispersion in oscillatory channel flow. Fluid Dynamics Research, 2004, 34, 335-355.	1.3	28
33	Aggregate Diffusion Model Applied to Soil Vapor Extraction in Unidirectional and Radial Flows. Water Resources Research, 1996, 32, 1289-1297.	4.2	27
34	Numerical study of interactive motion of dielectrophoretic particles. European Journal of Mechanics, B/Fluids, 2015, 49, 208-216.	2.5	27
35	Interaction between oblique waves and multiple bottom-standing flexible porous barriers near a rigid wall. Meccanica, 2018, 53, 871-885.	2.0	27
36	Dispersion in electroosmotic flow generated by oscillatory electric field interacting with oscillatory wall potentials. Microfluidics and Nanofluidics, 2012, 12, 237-256.	2.2	26

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37	Electroosmotic flow of a two-layer fluid in a slit channel with gradually varying wall shape and zeta potential. International Journal of Heat and Mass Transfer, 2018, 119, 52-64.	4.8	26
38	Temperature Jump Coefficient for Superhydrophobic Surfaces. Journal of Heat Transfer, 2014, 136, .	2.1	25
39	Electroosmotic flow of a power-law fluid in a slit microchannel with gradually varying channel height and wall potential. European Journal of Mechanics, B/Fluids, 2015, 52, 160-168.	2.5	25
40	Computations of water impact on a two-dimensional flat-bottomed body with a volume-of-fluid method. Ocean Engineering, 1992, 19, 377-393.	4.3	24
41	Mass transport and set-ups due to partial standing surface waves in a two-layer viscous system. Journal of Fluid Mechanics, 2004, 520, 297-325.	3.4	23
42	Dispersion in open-channel flow subject to the processes of sorptive exchange on the bottom and airâ€“water exchange on the free surface. Fluid Dynamics Research, 2006, 38, 359-385.	1.3	23
43	Electrohydrodynamic instability of a rotating couple stress dielectric fluid layer. International Journal of Heat and Mass Transfer, 2013, 62, 761-771.	4.8	23
44	Chemical transport associated with discharge of contaminated fine particles to a steady open-channel flow. Physics of Fluids, 2000, 12, 136-144.	4.0	22
45	The onset of electrothermoconvection in a rotating Brinkman porous layer. International Journal of Engineering Science, 2011, 49, 646-663.	5.0	22
46	A thermal non-equilibrium model with Cattaneo effect for convection in a Brinkman porous layer. International Journal of Non-Linear Mechanics, 2015, 71, 39-47.	2.6	22
47	Mass transport in a layer of power-law fluid forced by periodic surface pressure. Wave Motion, 2004, 39, 241-259.	2.0	21
48	Dispersion in oscillatory Couette flow with sorptive boundaries. Acta Mechanica, 2005, 178, 65-84.	2.1	21
49	Electro-osmotic flow through a thin channel with gradually varying wall potential and hydrodynamic slippage. Fluid Dynamics Research, 2012, 44, 055507.	1.3	21
50	Electroosmotic flow of a power-law fluid through an asymmetrical slit microchannel with gradually varying wall shape and wall potential. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 472, 26-37.	4.7	20
51	Wave Scattering by a Partial Flexible Porous Barrier in the Presence of a Step-Type Bottom Topography. Coastal Engineering Journal, 2016, 58, 1650008-1-1650008-26.	1.9	19
52	Electroosmotic flow of a viscoplastic material through a slit channel with walls of arbitrary zeta potential. Physics of Fluids, 2013, 25, .	4.0	18
53	Mass transport in gravity waves revisited. Journal of Geophysical Research, 2004, 109, .	3.3	17
54	Double diffusive convection of anomalous density fluids in a porous cavity. Transport in Porous Media, 2008, 71, 133-145.	2.6	17

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55	On the time development of dispersion in electroosmotic flow through a rectangular channel. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 631-643.	3.4	17
56	Stability of fluid flow in a Brinkman porous mediumâ€"A numerical study. Journal of Hydrodynamics, 2014, 26, 681-688.	3.2	17
57	Dispersion in oscillatory electro-osmotic flow through a parallel-plate channel with kinetic sorptive exchange at walls. Journal of Hydrodynamics, 2014, 26, 363-373.	3.2	15
58	Homogenization theory applied to soil vapor extraction in aggregated soils. Physics of Fluids, 1996, 8, 2298-2306.	4.0	14
59	A model for flow induced by steady air venting and air sparging. Applied Mathematical Modelling, 2002, 26, 727-750.	4.2	14
60	Experimental investigation of the effect of flow turbulence and sediment transport patterns on the adsorption of cadmium ions onto sediment particles. Journal of Environmental Sciences, 2007, 19, 696-703.	6.1	14
61	Natural convection in enclosures with partially thermally active side walls containing internal heat sources. Physics of Fluids, 2008, 20, 097104.	4.0	14
62	Predicting tsunami arrivals: Estimates and policy implications. Marine Policy, 2009, 33, 643-650.	3.2	14
63	Theoretical and experimental study of particle trajectories for nonlinear water waves propagating on a sloping bottom. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 1543-1571.	3.4	14
64	Natural Convection in a Vertical Slit Microchannel With Superhydrophobic Slip and Temperature Jump. Journal of Heat Transfer, 2014, 136, .	2.1	14
65	Mixed Convective Flow of a Casson Fluid over a Vertical Stretching Sheet. International Journal of Applied and Computational Mathematics, 2017, 3, 1619-1638.	1.6	14
66	ELECTROHYDRODYNAMIC STABILITY OF COUPLE STRESS FLUID FLOW IN A CHANNEL OCCUPIED BY A POROUS MEDIUM. Special Topics and Reviews in Porous Media, 2011, 2, 11-22.	1.1	14
67	A model for stripping multicomponent vapor from unsaturated soil with free and trapped residual nonaqueous phase liquid. Water Resources Research, 1999, 35, 385-406.	4.2	13
68	A note on the Aris dispersion in a tube with phase exchange and reaction. International Journal of Engineering Science, 2000, 38, 1639-1649.	5.0	13
69	On the propagation of a two-dimensional viscous density current under surface waves. Physics of Fluids, 2002, 14, 970-984.	4.0	13
70	A two-fluid model of turbulent two-phase flow for simulating turbulent stratified flows. Ocean Engineering, 2003, 30, 153-161.	4.3	13
71	Effective boundary element method for the interaction of oblique waves with long prismatic structures in water of finite depth. Ocean Engineering, 2008, 35, 494-502.	4.3	13
72	Oscillatory Flow Through a Channel With Stick-Slip Walls: Complex Navierâ€™s Slip Length. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	13

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73	3D numerical modeling of non-isotropic turbulent buoyant helicoidal flow and heat transfer in a curved open channel. International Journal of Heat and Mass Transfer, 2003, 46, 2087-2093.	4.8	12
74	Porous ferroconvection with local thermal nonequilibrium temperatures and with Cattaneo effects in the solid. Acta Mechanica, 2015, 226, 3763-3779.	2.1	12
75	Effective slip for flow through a channel bounded by lubricant-impregnated grooved surfaces. Theoretical and Computational Fluid Dynamics, 2017, 31, 189-209.	2.2	12
76	Effect of a Submerged Porous Plate on the Hydroelastic Response of a Very Large Floating Structure. Journal of Marine Science and Application, 2018, 17, 564-577.	1.7	12
77	Dispersion in Porous Media with and without Reaction: A Review. Journal of Porous Media, 2007, 10, 219-248.	1.9	12
78	STABILITY OF COUPLE STRESS FLUID FLOW THROUGH A HORIZONTAL POROUS LAYER. Journal of Porous Media, 2016, 19, 391-404.	1.9	12
79	Dispersion in Sediment-Laden Stream Flow. Journal of Engineering Mechanics - ASCE, 2000, 126, 779-786.	2.9	11
80	Lagrangian transport induced by peristaltic pumping in a closed channel. Physical Review E, 2009, 80, 056307.	2.1	11
81	Stokes Flow Through a Periodically Grooved Tube. Journal of Fluids Engineering, Transactions of the ASME, 2010, 132, .	1.5	11
82	Electroosmotic Flow Through a Circular Tube With Slip-Stick Striped Wall. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, .	1.5	11
83	Stagnation Flow on a Heated Vertical Plate With Surface Slip. Journal of Heat Transfer, 2013, 135, .	2.1	11
84	Rotating electroosmotic flow of an Eyring fluid. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 295-315.	3.4	11
85	On the oscillatory and mean motions due to waves in a thin viscoelastic layer. Wave Motion, 2006, 43, 387-405.	2.0	10
86	Enhancement of Nitrogen and Phosphorus Removal in Pilot-Scale Vertical Subsurface Flow-Constructed Wetlands Using Polypropylene Pellets. Environmental Engineering Science, 2009, 26, 621-631.	1.6	10
87	Dispersion in Electro-Osmotic Flow Through a Slit Channel With Axial Step Changes of Zeta Potential. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	10
88	Nonlinear dynamical characteristics of bed load motion. Science in China Series D: Earth Sciences, 2006, 49, 365-384.	0.9	9
89	Interfacial capillaryâ€“gravity waves due to a fundamental singularity in a system of two semi-infinite fluids. Journal of Engineering Mathematics, 2008, 62, 233-245.	1.2	9
90	Numerical Analysis of the Performance of Horizontal and Wavy Subsurface Flow Constructed Wetlands. Journal of Hydrodynamics, 2011, 23, 339-347.	3.2	9

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91	Hydraulics of a submerged weir and applicability in navigational channels: basic flow structures. International Journal for Numerical Methods in Engineering, 2007, 69, 2264-2278.	2.8	8
92	Wave propagation and induced steady streaming in viscous fluid contained in a prestressed viscoelastic tube. Physics of Fluids, 2009, 21, 051901.	4.0	8
93	A New Lagrangian Asymptotic Solution for Gravityâ€“Capillary Waves in Water of Finite Depth. Journal of Mathematical Fluid Mechanics, 2012, 14, 79-94.	1.0	8
94	Pressure loss in channel flow resulting from a sudden change in boundary condition from no-slip to partial-slip. Physics of Fluids, 2017, 29, 103603.	4.0	8
95	Rotating electroosmotic flow in a non-uniform microchannel. Meccanica, 2018, 53, 2105-2120.	2.0	8
96	A Fourierâ€“Chebyshev collocation method for the mass transport in a layer of power-law fluid mud. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 1136-1153.	6.6	7
97	Ferromagnetic Convection in a Heterogeneous Darcy Porous Medium Using a Local Thermal Non-equilibrium (LTNE) Model. Transport in Porous Media, 2011, 90, 529-544.	2.6	7
98	Natural Convection in a Vertical Microannulus with Superhydrophobic Slip and Temperature Jump. Journal of Thermophysics and Heat Transfer, 2014, 28, 287-294.	1.6	7
99	Macroscopic equations for vapor transport in a multi-layered unsaturated zone. Advances in Water Resources, 1999, 22, 611-622.	3.8	6
100	Interaction of oblique waves with an array of long horizontal circular cylinders. Science in China Series D: Earth Sciences, 2007, 50, 490-509.	0.9	6
101	Transient buoyancy-driven convection of water around 4â€‰Â°C in a porous cavity with internal heat generation. Physics of Fluids, 2008, 20, .	4.0	6
102	Dispersion of suspended particles in a wave boundary layer over a viscoelastic bed. International Journal of Engineering Science, 2008, 46, 50-65.	5.0	5
103	Starting flow in channels with boundary slip. Meccanica, 2017, 52, 45-67.	2.0	5
104	MHD Flow and Heat Transfer Over a Slender Elastic Permeable Sheet in a Rotating Fluid with Hall Current. International Journal of Applied and Computational Mathematics, 2017, 3, 3175-3200.	1.6	5
105	Ground Subsidence of Finite Amplitude Due to Pumping and Surface Loading. Water Resources Research, 1995, 31, 1953-1968.	4.2	4
106	Oscillatory electro-osmotic flow through a slit channel with slipping stripes on walls. Fluid Dynamics Research, 2013, 45, 025507.	1.3	4
107	Electro-osmotic dispersion in a circular tube with slip-stick striped wall. Fluid Dynamics Research, 2015, 47, 015502.	1.3	4
108	Starting Poiseuille Flow in a Circular Tube With Two Immiscible Fluids. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	1.5	4

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109	Mass transport in a two-layer wave boundary layer. Ocean Engineering, 2001, 28, 1393-1411.	4.3	3
110	On the longitudinal dispersion of heavy particles in a horizontal circular pipe. International Journal of Engineering Science, 2002, 40, 239-250.	5.0	3
111	Dispersion in open-channel flow subject to the processes of sorptive exchange on the bottom and air-water exchange on the free surface. Journal of Hydrodynamics, 2006, 18, 57-64.	3.2	3
112	Use of Mathcad as a Calculation Tool for Water Waves Over a Stratified Muddy Bed. Coastal Engineering Journal, 2009, 51, 69-79.	1.9	3
113	Ferromagnetic Convection in a Heterogeneous Porous Medium. Arabian Journal for Science and Engineering, 2014, 39, 7265-7274.	1.1	3
114	End loss for Stokes flow through a slippery circular pore in a barrier of finite thickness. Physics of Fluids, 2018, 30, .	4.0	3
115	Effects of a semipervious lens on soil vapour extraction. Journal of Fluid Mechanics, 1997, 341, 385-413.	3.4	2
116	Numerical Simulation of the Dispersion in Oscillating Flows with Reversible and Irreversible Wall Reactions. Journal of Hydrodynamics, 2009, 21, 482-490.	3.2	2
117	Electrohydrodynamic Dispersion of Deformable Aerosols in the Presence of an Electric Field and Chemical Reaction Using Taylor Dispersion Model. Journal of Hydrodynamics, 2011, 23, 247-257.	3.2	2
118	Hydrodynamic interactions among multiple circular cylinders in an inviscid flow. Journal of Fluid Mechanics, 2012, 712, 505-530.	3.4	2
119	An Exact, Fully Nonlinear Solution of the Poisson-Boltzmann Equation with Anti-symmetric Electric Potential Profiles. International Journal of Nonlinear Sciences and Numerical Simulation, 2013, 14, .	1.0	2
120	Natural Convection for Slip Flow in a Vertical Polygonal Duct. Journal of Thermophysics and Heat Transfer, 2015, 29, 117-126.	1.6	2
121	The Effects of Thermocapillarity on the Thin Film Flow of MHD UCM Fluid over an Unsteady Elastic Surface with Convective Boundary Conditions. International Journal of Thermofluid Science and Technology, 2019, 6, .	0.3	2
122	Dispersion in open-channel flow subject to the processes of sorptive exchange on the bottom and air-water exchange on the free surface. Journal of Hydrodynamics, 2006, 18, 57-64.	3.2	1
123	Wave Induced Oscillatory and Steady Flows in the Annulus of A Catheterized Viscoelastic Tube. Journal of Hydrodynamics, 2010, 22, 605-617.	3.2	1
124	Lagrangian transport by peristalsis in a closed cavity. Journal of Hydrodynamics, 2010, 22, 138-143.	3.2	1
125	Mass transport due to oscillatory flow through a prestressed viscoelastic tube with a retentive and absorptive wall. European Journal of Mechanics, B/Fluids, 2011, 30, 195-205.	2.5	1
126	Lagrangian transport induced by peristaltic pumping in a tube. Fluid Dynamics Research, 2011, 43, 015505.	1.3	1

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127	Effective slip for flow in a rotating channel bounded by stick-slip walls. Physical Review E, 2016, 94, 063115.	2.1	1
128	Effects of a depletion layer on flow in a rotating channel. Mechanics Research Communications, 2016, 76, 57-63.	1.8	1
129	Effective slip for Stokes flow between two grooved walls with an arbitrary phase shift. Fluid Dynamics Research, 2017, 49, 025516.	1.3	1
130	Nonlinear mechanism of bed load transport. Transactions of Tianjin University, 2009, 15, 126-129.	6.4	0
131	Dispersion due to Electroosmotic Flow Through a Circular Tube With Axial Step Changes of Zeta Potential and Hydrodynamic Slippage. , 2013, , .		0
132	A SPECTRAL METHOD FOR THE MASS TRANSPORT IN A LAYER OF POWER-LAW FLUID UNDER PERIODIC FORCING. , 2005, , .		0
133	Wave Propagation Through a Viscous Fluid Contained in a Prestressed Viscoelastic Tube. , 2009, , .		0
134	Propagating characteristics of waves on a thin layer of mud. Journal of Hydrodynamics, 2021, 33, 1078-1088.	3.2	0
135	Development and Validation of a Numerical Model of Subsurface Flow Constructed Wetlands. Energy Procedia, 2011, 11, 3993-3998.	1.8	0