Daniel Henry

List of Publications by Year
in descending order

112 papers	1,740 citations	279487 23 h-index	360668 35 g-index
112 all docs	112 docs citations	112 times ranked	767 citing authors

#	Article	IF	Citations
1	Numerical simulation study of acoustic waves propagation and streaming using MRT-lattice Boltzmann method. International Journal for Computational Methods in Engineering Science and Mechanics, 2023, 24, 62-75.	1.4	5
2	Rayleighâ€“BÃ©nard flow for a Carreau fluid in a parallelepiped cavity. Journal of Fluid Mechanics, 2022, 936, .	1.4	2
3	Chaotic mixing in an acoustically driven cavity flow. Physical Review Fluids, 2022, 7, .	1.0	1
4	Acoustic streaming enhanced mass transfer at a wall. International Journal of Heat and Mass Transfer, 2021, 172, 121090.	2.5	11
5	Primary instability of a visco-plastic film down an inclined plane: experimental study. Journal of Fluid Mechanics, 2021, 922, .	1.4	4
6	Three-Dimensional Lattice Boltzmann Model for Acoustic Waves Emitted by a Source. International Journal of Computational Fluid Dynamics, 2021, 35, 850-871.	0.5	14
7	Effect of high frequency vibrations on PV silicon purification. Journal of Crystal Growth, 2020, 529, 125298.	0.7	3
8	Numerical study of natural convection and acoustic waves using the lattice Boltzmann method. Heat Transfer, 2020, 49, 3779-3796.	1.7	20
9	Three-dimensional effect of high frequency vibration on convection in silicon melt. Physical Review Fluids, 2020, 5, .	1.0	7
10	Theoretical and numerical study on high frequency vibrational convection: Influence of the vibration direction on the flow structure. Physics of Fluids, 2019, 31, .	1.6	25
11	A 2D1/2 model for natural convection and solidification in a narrow enclosure. International Journal of Thermal Sciences, 2019, 140, 167-183.	2.6	4
12	Bifurcations from steady to quasi-periodic flows in a laterally heated cavity filled with low Prandtl number fluids. Journal of Fluid Mechanics, 2019, 861, 223-252.	1.4	5
13	Transition to chaos in an acoustically driven cavity flow. Physical Review Fluids, 2019, 4, .	1.0	7
14	Primary instability of a shear-thinning film flow down an incline: experimental study. Journal of Fluid Mechanics, 2017, 821, .	1.4	15
15	Laminar-turbulent transition regimes in the conical Taylor-Couette flow system. EPJ Web of Conferences, 2017, 143, 02145.	0.1	0
16	An efficient 1D numerical model adapted to the study of transient convecto-diffusive heat and mass transfer in directional solidification. International Journal of Heat and Mass Transfer, 2017, 110, 209-218.	2.5	1
17	Towards wall functions for the prediction of solute segregation in plane front directional solidification. Journal of Crystal Growth, 2017, 475, 55-69.	0.7	5
18	On the effect of thermodiffusion on solute segregation during the growth of semiconductor materials by the vertical Bridgman method. Journal of Crystal Growth, 2017, 458, 154-165.	0.7	9

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19	Effect of rotation on the stability of side-heated buoyant convection between infinite horizontal walls. Physical Review Fluids, 2017, 2, .	1.0	3
20	From flying wheel to square flow: Dynamics of a flow driven by acoustic forcing. Physical Review Fluids, 2017, 2, .	1.0	10
21	Macrosegregations in Sn-3 wt%Pb alloy solidification: Experimental and 3D numerical simulation investigations. International Journal of Heat and Mass Transfer, 2016, 100, 680-690.	2.5	22
22	Y-shaped jets driven by an ultrasonic beam reflecting on a wall. Ultrasonics, 2016, 68, 33-42.	2.1	6
23	Transient growth in Poiseuille-Rayleigh-BÃ©nard flows of binary fluids with Soret effect. Applied Mathematics and Mechanics (English Edition), 2016, 37, 1203-1218.	1.9	2
24	Stability of an unsupported multi-layer surfactant laden liquid curtain under gravity. Journal of Engineering Mathematics, 2016, 99, 119-136.	0.6	1
25	Effet d'un champ magnÃ©tique uniforme sur les instabilitÃ©s de Rayleighâ€“BÃ©nard avec effet Soret. Comptes Rendus - Mecanique, 2016, 344, 1-11.	2.1	0
26	Transition from multiplicity to singularity of steady natural convection in a tilted cubical enclosure. Physical Review E, 2015, 92, 023031.	0.8	16
27	Stability of a flow down an incline with respect to two-dimensional and three-dimensional disturbances for Newtonian and non-Newtonian fluids. Physical Review E, 2015, 92, 063010.	0.8	16
28	Acoustic streaming jets: A scaling and dimensional analysis. AIP Conference Proceedings, 2015, , .	0.3	1
29	Near-field acoustic streaming jet. Physical Review E, 2015, 91, 033011.	0.8	24
30	Experimental determination of the viscosity at very low shear rate for shear thinning fluids by electrocapillarity. Journal of Non-Newtonian Fluid Mechanics, 2015, 215, 60-69.	1.0	11
31	On the effect of natural convection on solute segregation in the horizontal Bridgman configuration: Convergence of a theoretical model with numerical and experimental data. Journal of Crystal Growth, 2015, 409, 89-94.	0.7	12
32	Oscillating acoustic streaming jet. Applied Physics Letters, 2014, 105, 184102.	1.5	13
33	Experimental investigation of hysteresis in the break-up of liquid curtains. Chemical Engineering Science, 2014, 117, 248-263.	1.9	15
34	Scaling and dimensional analysis of acoustic streaming jets. Physics of Fluids, 2014, 26, .	1.6	58
35	Multi-layer film flow down an inclined plane: experimental investigation. Experiments in Fluids, 2014, 55, 1.	1.1	5
36	Bifurcation analysis of steady natural convection in a tilted cubical cavity with adiabatic sidewalls. Journal of Fluid Mechanics, 2014, 756, 650-688.	1.4	28

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37	Acoustic Streaming Jets in Liquids. , 2014, , .		0
38	A 2DÂ½ model for low Prandtl number convection in an enclosure. International Journal of Thermal Sciences, 2013, 71, 53-60.	2.6	7
39	Stability of two-layer shear-thinning film flows. Physical Review E, 2013, 88, 043004.	0.8	8
40	Measurement of Soret and Fickian diffusion coefficients by orthogonal phase-shifting interferometry and its application to protein aqueous solutions. Journal of Chemical Physics, 2013, 139, 074203.	1.2	33
41	Three-dimensional continuation study of convection in a tilted rectangular enclosure. Physical Review E, 2013, 88, 043015.	0.8	14
42	Instabilities in the Rayleigh-BÃ©nard-Eckart problem. Physical Review E, 2012, 86, 016312.	0.8	10
43	Linear biglobal analysis of Rayleighâ€“BÃ©nard instabilities in binary fluids with and without throughflow. Journal of Fluid Mechanics, 2012, 713, 216-242.	1.4	4
44	Multiple flow solutions in buoyancy induced convection in a porous square box. Water Resources Research, 2012, 48, .	1.7	7
45	Acoustic force model for the fluid flow under standing waves. Applied Acoustics, 2011, 72, 754-759.	1.7	6
46	Instabilities in a cylindrical cavity heated from below with a free surface. II. Effect of a horizontal magnetic field. Physical Review E, 2011, 84, 056303.	0.8	4
47	Instabilities in a cylindrical cavity heated from below with a free surface. I. Effect of Biot and Marangoni numbers. Physical Review E, 2011, 84, 056302.	0.8	10
48	Rotating magnetic field effect on convection and its stability in a horizontal cylinder subjected to a longitudinal temperature gradient. Journal of Fluid Mechanics, 2010, 664, 108-137.	1.4	15
49	Stability of buoyant convection in a layer submitted to acoustic streaming. Physical Review E, 2010, 81, 056309.	0.8	15
50	Selective control of Poiseuilleâ€“Rayleighâ€“BÃ©nard instabilities by a spanwise magnetic field. Physics of Fluids, 2010, 22, 034103.	1.6	6
51	Spatiotemporal evolution of Poiseuille-Rayleigh-BÃ©nard flows in binary fluids with Soret effect under initial pulselike disturbances. Physical Review E, 2009, 80, 026312.	0.8	4
52	Influence de l'acoustic streaming sur les instabilitÃ©s affectant une couche de fluide chauffÃ©e latÃ©ralement. Comptes Rendus - Mecanique, 2009, 337, 238-244.	2.1	2
53	InstabilitÃ©s de Rayleigh BÃ©nard sous vibrations hautes frÃ©quences et champ magnÃ©tique. Comptes Rendus - Mecanique, 2009, 337, 291-296.	2.1	5
54	Instabilities and bifurcations due to buoyancy in a cylindrical container heated from below with and without a free surface. Comptes Rendus - Mecanique, 2009, 337, 716-721.	2.1	0

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55	Stability of convection in a horizontal channel subjected to a longitudinal temperature gradient. Part 2. Effect of a magnetic field. Journal of Fluid Mechanics, 2009, 635, 297-319.	1.4	14
56	Stability of convection in a horizontal channel subjected to a longitudinal temperature gradient. Part 1. Effect of aspect ratio and Prandtl number. Journal of Fluid Mechanics, 2009, 635, 275-295.	1.4	33
57	Influence of acoustic streaming on the stability of melt flows in horizontal Bridgman configurations. Journal of Crystal Growth, 2008, 310, 1546-1551.	0.7	15
58	Magnetic stabilization of melt flows in horizontal Bridgman configurations. Journal of Crystal Growth, 2008, 310, 1533-1539.	0.7	2
59	Three-dimensional modelling of electric-arc development in a low-voltage circuit-breaker. International Journal of Heat and Mass Transfer, 2008, 51, 4973-4984.	2.5	10
60	Directional effect of a magnetic field on oscillatory low-Prandtl-number convection. Physics of Fluids, 2008, 20, .	1.6	10
61	Influence of acoustic streaming on the stability of a laterally heated three-dimensional cavity. Physical Review E, 2008, 77, 046311.	0.8	16
62	Linear temporal and spatiotemporal stability analysis of two-layer falling films with density stratification. Physical Review E, 2008, 77, 026302.	0.8	13
63	Linear temporal and spatio-temporal stability analysis of a binary liquid film flowing down an inclined uniformly heated plate. Journal of Fluid Mechanics, 2008, 599, 269-298.	1.4	20
64	Linear stability analysis of Poiseuille-Rayleigh-BÃ©nard flows in binary fluids with Soret effect. Physics of Fluids, 2007, 19, 034101.	1.6	19
65	Multiple modes of instability in a box heated from the side in low-Prandtl-number fluids. Physics of Fluids, 2007, 19, 081702.	1.6	2
66	Multiple flow transitions in a box heated from the side in low-Prandtl-number fluids. Physical Review E, 2007, 76, 016314.	0.8	27
67	Influence de l'acoustic streaming sur la stabilitÃ© d'une couche de fluide isotherme ou chauffÃ©e latÃ©ralement. Comptes Rendus - Mecanique, 2007, 335, 175-180.	2.1	8
68	An application of proper orthogonal decomposition to the stability analysis of Czochralski melt flows. Journal of Crystal Growth, 2007, 306, 166-176.	0.7	1
69	Effect of a weak polar misalignment of the magnetic field on the stabilization of the Hadley flow. Journal of Crystal Growth, 2007, 306, 473-479.	0.7	1
70	StabilitÃ© de l'Ã©coulement de Hartmann chauffÃ© par le bas. Comptes Rendus - Mecanique, 2006, 334, 332-339.	2.1	3
71	Numerical study of the influence of a longitudinal sound field on natural convection in a cavity. International Journal of Heat and Mass Transfer, 2006, 49, 3601-3616.	2.5	16
72	Study of the hydrodynamic instabilities in a differentially heated horizontal circular cylinder corresponding to a Bridgman growth configuration. Journal of Crystal Growth, 2006, 290, 674-682.	0.7	7

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73	Inertialess temporal and spatio-temporal stability analysis of the two-layer film flow with density stratification. Physics of Fluids, 2006, 18, 104101.	1.6	24
74	Effet d'un champ magnÃ©tique transversal sur la stabilitÃ© de l'Ã©coulement de Hartmann : les modes tridimensionnels. Comptes Rendus - Mecanique, 2005, 333, 447-451.	2.1	3
75	Stabilization of thermogravitational flows by magnetic field and surface tension. Physics of Fluids, 2005, 17, 054106.	1.6	5
76	Three-dimensional numerical study of natural convection in vertical cylinders partially heated from the side. Physics of Fluids, 2005, 17, 124101.	1.6	25
77	TOWARDS THREE-DIMENSIONAL MODELLING OF ELECTRIC ARC INITIATION IN A LOW-VOLTAGE CIRCUIT BREAKER. High Temperature Material Processes, 2005, 9, 557-571.	0.2	1
78	On the onset of oscillatory convection in molten gallium. Journal of Fluid Mechanics, 2004, 515, 391-413.	1.4	33
79	Soret effect and slow mass diffusion as a catalyst for overstability in Marangoni-Bï¿½nard flows. Heat and Mass Transfer, 2003, 40, 105-114.	1.2	4
80	Note on braking and stabilization laws for buoyant flows under a weak magnetic field. Fluid Dynamics Research, 2003, 33, 287-297.	0.6	2
81	Effet de l'orientation d'un champ magnÃ©tique horizontal sur la stabilitÃ© de l'Ã©coulement de Hadley. Comptes Rendus - Mecanique, 2003, 331, 431-436.	2.1	1
82	Magnetic stabilization of the buoyant convection between infinite horizontal walls with a horizontal temperature gradient. Journal of Fluid Mechanics, 2003, 480, 185-216.	1.4	48
83	Low-order dynamical model for low-Prandtl number fluid flow in a laterally heated cavity. Physics of Fluids, 2003, 15, 2152-2162.	1.6	10
84	Instabilities in liquid metals controlled by constant magnetic fieldâ€”Part I: vertical magnetic field. Journal of Crystal Growth, 2002, 242, 491-500.	0.7	13
85	Magnetic stabilization of the buoyant convection in the liquid-encapsulated Czochralski process. Journal of Crystal Growth, 2002, 243, 108-116.	0.7	21
86	Instabilities in liquid metals controlled by constant magnetic fieldâ€”Part II: horizontal magnetic field. Journal of Crystal Growth, 2002, 242, 501-510.	0.7	14
87	Three-dimensional free convection in molten gallium. Journal of Fluid Mechanics, 2001, 436, 267-281.	1.4	50
88	Three-dimensional Marangoniâ€“BÃ©nard flows in square and nearly square containers. Physics of Fluids, 2001, 13, 92-98.	1.6	15
89	Solidification in Bridgman configuration with solutally induced flow. Journal of Crystal Growth, 2001, 230, 188-194.	0.7	3
90	Analysis of the unsteady segregation in crystal growth from a melt Part II: Fluctuating convection velocity. Journal of Crystal Growth, 2000, 220, 166-175.	0.7	5

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91	Numerical study of coupled electromagnetic and aerothermodynamic phenomena in a circuit breaker electric arc. International Journal of Heat and Mass Transfer, 1999, 42, 1723-1734.	2.5	39
92	Analysis of the unsteady segregation in crystal growth from a melt. Journal of Crystal Growth, 1999, 204, 213-223.	0.7	14
93	Magnetohydrodynamic convection in molten gallium. Journal of Fluid Mechanics, 1999, 378, 97-118.	1.4	49
94	On the onset of convective instabilities in cylindrical cavities heated from below. I. Pure thermal case. Physics of Fluids, 1999, 11, 2078-2088.	1.6	68
95	On the onset of convective instabilities in cylindrical cavities heated from below. II. Effect of a magnetic field. Physics of Fluids, 1999, 11, 2089-2100.	1.6	25
96	2D and 3D Marangoni pattern selection in shallow cavities. Advances in Space Research, 1998, 22, 1223-1226.	1.2	3
97	MHD damped convection under non uniform magnetic fields. Advances in Space Research, 1998, 22, 1213-1216.	1.2	3
98	Two- and three-dimensional numerical simulations of the transition to oscillatory convection in low-Prandtl-number fluids. Journal of Fluid Mechanics, 1998, 374, 145-171.	1.4	36
99	Marangoni convection in binary mixtures with Soret effect. Journal of Fluid Mechanics, 1998, 375, 143-177.	1.4	98
100	Numerical study of convection in the horizontal Bridgman configuration under the action of a constant magnetic field. Part 2. Three-dimensional flow. Journal of Fluid Mechanics, 1997, 333, 57-83.	1.4	88
101	Numerical study of convection in the horizontal Bridgman configuration under the action of a constant magnetic field. Part 1. Two-dimensional flow. Journal of Fluid Mechanics, 1997, 333, 23-56.	1.4	80
102	Unsteady three-dimensional buoyancy-driven convection in a circular cylindrical cavity and its damping by magnetic field. Journal of Crystal Growth, 1997, 180, 433-441.	0.7	22
103	Interface curvature and convection related macrosegregation in the vertical Bridgman configuration. Journal of Crystal Growth, 1996, 158, 144-152.	0.7	33
104	Numerical simulation of convective three-dimensional flows in a horizontal cylinder under the action of a constant magnetic field. Journal of Crystal Growth, 1996, 166, 436-445.	0.7	32
105	Marangoni-BÃ©nard instability in microgravity conditions with Soret effect. International Journal of Heat and Mass Transfer, 1994, 37, 1545-1562.	2.5	13
106	Macrosegregation and convection in the horizontal Bridgman configuration II. Concentrated alloys. Journal of Crystal Growth, 1994, 141, 279-290.	0.7	16
107	Macrosegregation and convection in the horizontal Bridgman configuration I. Dilute alloys. Journal of Crystal Growth, 1994, 135, 341-353.	0.7	31
108	Buoyancy-driven instability in a vertical cylinder: Binary fluids with Soret effect. Part I: General theory and stationary stability results. International Journal for Numerical Methods in Fluids, 1990, 10, 79-117.	0.9	31

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109	Soret separation in a quasi-vertical cylinder. Journal of Fluid Mechanics, 1988, 195, 175.	1.4	12
110	Three-dimensional numerical study of convection in a cylindrical thermal diffusion cell: Inclination effect. Physics of Fluids, 1987, 30, 1656.	1.4	9
111	Numerical simulation of 3D convective motion disturbing the soret separation of the two components of a binary fluid mixture. Advances in Space Research, 1986, 6, 141-146.	1.2	2
112	Three-dimensional numerical study of convection in a cylindrical thermal diffusion cell: Its influence on the separation of constituents. Physics of Fluids, 1986, 29, 3562.	1.4	11