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762	Trapping and manipulation of microparticles using laser-induced convection currents and photophoresis. 2015 , 6, 4079		
761	Trapping and manipulation of microparticles using laser-induced convection currents and photophoresis. 2015 , 6, 4079		
760	Trapping and manipulation of microparticles using laser-induced convection currents and photophoresis. 2015 , 6, 4079		
759	Trapping and manipulation of microparticles using laser-induced convection currents and photophoresis. 2015 , 6, 4079		
758	Trapping and manipulation of microparticles using laser-induced convection currents and photophoresis. 2015 , 6, 4079		
757	Mechanisms of extensive spatiotemporal chaos in Rayleigh-Benard convection. 2000, 404, 733-6		107
756	Phase transitions in the incoherent lattice fluctuations in YBa2Cu3O(7-delta). 2000, 404, 736-40		27
755	Chaos in space and time. 2000 , 404, 710-1		48
754	Plant biology. Shattering developments. 2000 , 404, 711, 713		19
753	100 and 50 years ago. 2000 , 404, 711-711		16
75 ²	Pattern formation in rayleigh-Benard convection in a cylindrical container. <i>Physical Review E</i> , 2000 , 62, 4927-31	2.4	19
75 ¹	Superlattice patterns in vertically oscillated rayleigh-Benard convection. 2000, 85, 4281-4		54
75°	Deviations from linear theory for fluctuations below the supercritical primary bifurcation to electroconvection. 2000 , 85, 3754-7		21
749	Pattern formation in inclined layer convection. 2000 , 84, 5320-3		46
748	Recent Developments in Rayleigh-BBard Convection. <i>Annual Review of Fluid Mechanics</i> , 2000 , 32, 709-7	782	674
747	Pattern selection in extended periodically forced systems: a continuum coupled map approach. <i>Physical Review E</i> , 2001 , 63, 046202	2.4	15
746	Fluctuations in fluids in thermal nonequilibrium states below the convective Rayleigh B Bard instability. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001 , 300, 25-52	3.3	26

Vortex structures in geophysical convection. 2001, 20, 437-470 745 19 Nonlinear Convective States in a Fluid Mixture with Through-Flow. 2001, 106, 1115-1128 744 Spiral patterns in oscillated granular layers. Physical Review E, 2001, 63, 041305 743 2.4 27 Influence of inlet and bulk noise on Rayleigh-Bflard convection with lateral flow. Physical Review E, 742 2.4 2001, 63, 056301 Flow pattern dynamics in convecting liquid helium. Physical Review E, 2001, 63, 045301 6 741 2.4 Temporal and spatial properties of fluctuations below a supercritical primary bifurcation to 16 740 2.4 traveling oblique-roll electroconvection. Physical Review E, 2002, 65, 051101 Boundary effects on the nonequilibrium structure factor of fluids below the Rayleigh-Bflard 2.4 20 739 instability. Physical Review E, 2002, 66, 036305 Spiral-defect chaos: Swift-Hohenberg model versus Boussinesq equations. Physical Review E, 2002, 738 2.4 65,037302 Glasslike relaxation of labyrinthine domain patterns. Physical Review E, 2002, 65, 031504 737 2.4 10 Traveling concentric-roll patterns in Rayleigh-Bhard convection with modulated rotation. Physical 736 2.4 16 Review E, 2002, 65, 046218 Influence of ohmic heating on the flow field in thin-layer electrodeposition. Physical Review E, 2002, 2.4 1 735 66,026307 Rayleigh-Bfiard convection in elliptic and stadium-shaped containers. Physical Review E, 2002, 66, 04630&..4 6 734 Wall-enhanced convection in vibrofluidized granular systems. 2002, 89, 064301 733 41 Rayleigh-Bflard convection with rotation at small Prandtl numbers. Physical Review E, 2002, 65, 056309 2.4 22 732 Nonequilibrium Concentration Fluctuations in Binary Liquid Systems Induced by the Soret Effect. 12 731 2002, 121-145 Patterns in spherical Rayleigh-Bfiard convection: a giant spiral roll and its dislocations. Physical 730 2.4 Review E, 2002, 66, 055203 Nonlinear Convection in a Rotating Annulus with a Finite Gap. 2002, 96, 499-518 6 729 Three dimensional finite element analysis for Rayleight-Benard convection in rectangular 728 enclosures. 2002, 18, 114-125

727	A shooting method for the Swift-Hohenberg equation. 2002 , 17, 391-403		2
726	Mean flow in hexagonal convection: stability and nonlinear dynamics. 2002 , 163, 166-183		15
725	Tomographic particle-image velocimetry and thermography in Rayleigh-Blard convection using suspended thermochromic liquid crystals and digital image processing. 2003 , 34, 156-172		32
724	Ultrasound thermometry in transparent and opaque fluids. 2003, 35, 152-158		11
723	Pattern formation in polymer films under the mask. 2003 , 44, 2379-2384		15
722	Wave vectors selection at the threshold of a generic instability of a hexagonal stationary pattern. 2003 , 179, 92-104		7
721	Periodic convection in liquid 4He close to onset. 2003 , 329-333, 222-223		1
720	Joseph Boussinesq and his approximation: a contemporary view. 2003, 331, 575-586		63
719	Large time behaviour of solutions of the Swift⊞ohenberg equation. 2003 , 336, 225-230		34
718	Statistics of defect motion in spatiotemporal chaos in inclined layer convection. 2003 , 13, 55-63		19
717	Propagation of hexagonal patterns near onset. 2003 , 14, 85-110		42
716	Competition of spiral-defect chaos and rolls in Rayleigh-Bflard convection under shear flow. <i>Physical Review E</i> , 2003 , 67, 026306	2.4	2
715	Localized transverse bursts in inclined layer convection. 2003 , 91, 114501		11
714	Efficient algorithm on a nonstaggered mesh for simulating Rayleigh-Bflard convection in a box. <i>Physical Review E</i> , 2003 , 68, 026705	2.4	3
713	Defect formation in the Swift-Hohenberg equation. <i>Physical Review E</i> , 2003 , 67, 035101	2.4	10
712	Large scale structures in Rayleigh-Bflard convection at high Rayleigh numbers. 2003 , 91, 064501		77
711	Nusselt number measurements for turbulent Rayleigh-BBard convection. 2003, 91, 084501		22
710	Penta-hepta defect chaos in a model for rotating hexagonal convection. 2003 , 90, 134502		21

709	Thermal-noise effect on the transition to Rayleigh-Bflard convection. 2003, 91, 094501		28
708	Onset of thermal convection in a horizontal layer of granular gas. <i>Physical Review E</i> , 2003 , 67, 021306	2.4	43
707	Mean flow and spiral defect chaos in Rayleigh-Bliard convection. <i>Physical Review E</i> , 2003 , 67, 056206	2.4	27
706	Dynamic self-assembly and patterns in electrostatically driven granular media. 2003 , 90, 114301		65
705	Critical Phenomena Near Bifurcations in Nonequilibrium Systems. 2003 , 17, 3899-3907		4
704	Pattern formation in vertically oscillated convection. 2003 , 16, C1-C10		13
703	Whirling hexagons and defect chaos in hexagonal non-Boussinesq convection. 2003 , 5, 135-135		8
702	Plume patterns in radiativedonvective flows. 2003 , 5, 106-106		5
701	Effects of Sidewall Temperature on the Flow Pattern and the Bifurcation to Chaos of Rayleigh-Benard Cells in an Enclosure (Aspect Ratio of Enclosure: 6:4:1). 2003 , 46, 377-384		
700	The corkscrew instability of a Fr\u00e4dericksz domain wall in a nematic liquid crystal. 2003, 5, 63-63		4
699	CONVECTION Laboratory Models. 2003 , 528-539		
698	Automating Symmetry-Breaking Calculations. 2004 , 7, 101-119		3
697	Fluid-Mechanical Instabilities. 2004, 357-425		
696	Hexagonal pattern instabilities in rotating Rayleigh-Bflard convection of a non-Boussinesq fluid: experimental results. <i>Physical Review E</i> , 2004 , 69, 066311	2.4	4
695	Wave-number selection by target patterns and sidewalls in Rayleigh-Bflard convection. <i>Physical Review E</i> , 2004 , 70, 036313	2.4	2
694	Dislocation dynamics in Rayleigh-Bflard convection. 2004 , 14, 933-9		5
693	Isotropic convection scenarios in an anisotropic fluid. 2004 , 93, 044502		13
692	Control of spatiotemporal disorder in parametrically excited surface waves. 2004 , 92, 244502		19

691	Direct transition to electroconvection in a homeotropic nematic liquid crystal. 2004 , 14, 793-802	22
690	Dynamics of fluctuations in a fluid below the onset of Rayleigh-Bflard convection. <i>Physical Review E</i> , 2004 , 69, 021106	30
689	Statistics of defect trajectories in spatio-temporal chaos in inclined layer convection and the complex Ginzburg-Landau equation. 2004 , 14, 864-74	14
688	HEXAGONAL PATTERNS IN A MODEL FOR ROTATING CONVECTION. 2004 , 14, 107-117	3
687	\$sqrt{5}:2\$ MODE INTERACTIONS ON A SQUARE LATTICE. 2004 , 14, 3883-3897	1
686	Non-Boussinesq simulations of Rayleigh B Bard convection in a perfect gas. <i>Physics of Fluids</i> , 2004 , 4.4	11
685	Stability analysis of the flow in a cubical cavity heated from below. <i>Physics of Fluids</i> , 2004 , 16, 3639-3655 _{4.4}	41
684	Infinite Prandtl number limit of Rayleigh-BBard convection. 2004 , 57, 1265-1282	40
683	Defect turbulence and generalized statistical mechanics. 2004 , 193, 208-217	82
682	Pattern selection of solutions of the SwiftHohenberg equation. 2004 , 194, 95-126	66
681	Mechanism of finite-amplitude double-component convection due to different boundary conditions. 2004 , 329, 445-450	4
680	Reactions and fluidics in miniaturized natural convection systems. 2004 , 76, 6254-65	76
679	Three-Dimensional Simulations of Micro Rayleigh-Benard Convenction by DSMC. 2004,	О
678	Characterization and Predictability of Transient Heat Transfer in an Unstably Stratified Fluid Layer during Power Startup. 2004 ,	
677	Fluctuations in turbulent Rayleigh B flard convection: The role of plumes. <i>Physics of Fluids</i> , 2004 , 16, 4462-4472	198
676	Influence of number of simulated particles on DSMC modeling of micro-scale Rayleigh B Bard flows. <i>International Journal of Heat and Mass Transfer</i> , 2005 , 48, 2841-2855	10
675	Control and characterization of spatio-temporal disorder in parametrically excited surface waves. 2005 , 64, 903-913	1
674	Pattern formation in Rayleigh-Bflard convection: numerical simulation with a coupled-map-lattice model. 2005 , 50, 399-406	1

(2006-2005)

673	Rayleigh-Benard Convection in a Near-Critical Fluid in the Neighborhood of the Stability Threshold. 2005 , 40, 209-220		18
672	Axisymmetric convective states of pure and binary liquids enclosed in a vertical cylinder and boundary conditions Influence thereupon. <i>Physics of Fluids</i> , 2005 , 17, 044102	4.4	1
671	Hydrodynamic coarsening in striped pattern formation with a conservation law. <i>Physical Review E</i> , 2005 , 72, 016204	2.4	4
670	Complex-ordered patterns in shaken convection. <i>Physical Review E</i> , 2005 , 71, 066214	2.4	24
669	Codimension-two points in annular electroconvection as a function of aspect ratio. <i>Physical Review E</i> , 2005 , 72, 036211	2.4	6
668	Transitions to electrochemical turbulence. 2005 , 94, 174104		41
667	Uniform estimates on the velocity in Rayleigh B Bard convection. 2005 , 46, 033102		
666	Square patterns in rotating Rayleigh-Bflard convection. <i>Physical Review E</i> , 2005 , 72, 036307	2.4	17
665	Surface-element analysis of spatiotemporal stripe patterns formed by Ag and Sb coelectrodeposition. <i>Physical Review E</i> , 2005 , 72, 016201	2.4	8
664	ROTATING CONVECTION IN A BINARY VISCOELASTIC LIQUID MIXTURE. 2005 , 15, 3329-3336		6
663	Numerical Simulations of Convective Heat Transfer in Rayleigh-Bflard Convection and a Rotating Annulus. 2005 , 48, 529-545		11
662	Nonlinear coupling network to simulate the development of the r mode instability in neutron stars. II. Dynamics. 2005 , 71,		34
661	Analysis of tissue flow patterns during primitive streak formation in the chick embryo. 2005 , 284, 37-47		67
660	On multiscale approaches to three-dimensional modelling of morphogenesis. 2005 , 2, 237-53		98
659	DIRECT-SIMULATION MONTE CARLO MODELING ON TWO-DIMENSIONAL RAYLEIGH-BNARD INSTABILITIES OF RAREFIED GAS. 2005 , 47, 805-823		14
658	Large-eddy simulation and deduced scaling analysis of Rayleigh B flard convection up to Ra = 109. 2006 , 7, N66		19
657	Hexagonal convection patterns in atomistically simulated fluids. <i>Physical Review E</i> , 2006 , 73, 025301	2.4	25
656	Two-dimensional electrochemical turbulence during the electrodissolution of metal disk electrodes: Model calculations. 2006 , 8, 3659-68		8

655 Bibliography. **2006**, 273-295

654	Travelling circular waves in axisymmetric rotating convection. <i>Journal of Fluid Mechanics</i> , 2006 , 569, 331 _{3.7}	18
653	Non-Oberbeck B oussinesq effects in strongly turbulent Rayleigh B flard convection. <i>Journal of Fluid Mechanics</i> , 2006 , 569, 409	114
652	Standing and travelling waves in cylindrical Rayleigh B fiard convection. <i>Journal of Fluid Mechanics</i> , 2006 , 559, 279	31
651	Re-entrant hexagons in non-Boussinesq convection. <i>Journal of Fluid Mechanics</i> , 2006 , 548, 341 3.7	11
650	Template-free magnesium oxide hollow sphere inclusion in organic-inorganic hybrid films via sol-gel reaction. 2006 , 22, 5220-3	12
649	Rayleigh B fiard convection in the presence of a radial ramp of the Rayleigh number. 2006 , 2006, P02001-P02	0011
648	Entropy in Nonequilibrium Statistical Mechanics. <i>Journal of the Physical Society of Japan</i> , 2006 , 75, 11400 <u>5</u> 5	19
647	Local wave director analysis of domain chaos in Rayleigh B fiard convection. 2006 , 2006, P12002-P12002	4
646	References. 408-416	
645	Principle of Maximum Entropy Applied to Rayleigh B flard Convection. <i>Journal of the Physical Society of Japan</i> , 2006 , 75, 124005	8
644	Hydrostatic compressibility phenomena: new opportunities for near-critical research in microgravity. 2006 , 1077, 304-27	4
643	Magnetic field generation by convective flows in a plane layer. 2006 , 50, 639-652	14
642	General soliton solutions for nonlinear dispersive waves in convective type instabilities. 2006 , 74, 384-393	99
641	Experiments with Rayleigh-Bflard Convection. 2006 , 67-94	6
640	Rayleigh-Bfiard Convection: Thirty Years of Experimental, Theoretical, and Modeling Work. 2006 , 41-65	30
639	CONVECTIVE PATTERNS IN LIQUID CRYSTALS DRIVEN BY ELECTRIC FIELD. 2006 , 55-82	5
638	Advances in Sensing with Security Applications. 2006,	

(2007-2006)

637	Effect of the centrifugal force on domain chaos in Rayleigh-Blard convection. <i>Physical Review E</i> , 2006 , 73, 066309	2.4	15
636	Onset of electroconvection of homeotropically aligned nematic liquid crystals. <i>Physical Review E</i> , 2006 , 74, 046211	2.4	8
635	Spatiotemporal chaos in electroconvection of a homeotropically aligned nematic liquid crystal. <i>Physical Review E</i> , 2006 , 74, 046212	2.4	11
634	Multiplicity of steady states in cylindrical Rayleigh-Bfiard convection. <i>Physical Review E</i> , 2006 , 74, 03730	2.4	27
633	Revealing the building blocks of spatiotemporal chaos: deviations from extensivity. 2006 , 96, 054103		19
632	Driving convection in a fluid layer by a temperature gradient or a heat current. <i>Physical Review E</i> , 2006 , 73, 037301	2.4	1
631	Bifurcation analysis of multiple steady flow patterns for Rayleigh-Bflard convection in a cubical cavity at $Pr = 130$. <i>Physical Review E</i> , 2006 , 73, 046304	2.4	12
630	Geometric diagnostics of complex patterns: spiral defect chaos. 2006 , 16, 013125		6
629	Characterization of the domain chaos convection state by the largest Lyapunov exponent. <i>Physical Review E</i> , 2006 , 74, 016209	2.4	26
628	Enhanced Faraday pattern stability with three-frequency driving. <i>Physical Review E</i> , 2006 , 73, 046305	2.4	20
627	Domain chaos puzzle and the calculation of the structure factor and its half-width. <i>Physical Review E</i> , 2006 , 73, 046209	2.4	5
626	Defect chaos and bursts: hexagonal rotating convection and the complex Ginzburg-Landau equation. 2006 , 96, 074501		9
625	Testing the Kibble-Zurek mechanism in Rayleigh-BBard convection. <i>Physical Review E</i> , 2006 , 74, 047101	2.4	20
624	INSTABILITIES OF WAVE TRAINS AND TURING PATTERNS IN LARGE DOMAINS. 2007, 17, 2679-2691		27
623	Local heat fluxes in turbulent Rayleigh-Bflard convection. <i>Physics of Fluids</i> , 2007 , 19, 085107	4.4	49
622	Apparatus for real-time acoustic imaging of Rayleigh-Benard convection. 2007, 78, 113704		
621	Irrational mode locking in quasiperiodic systems. 2007 , 98, 148001		4
620	Scaling in laminar natural convection in laterally heated cavities: is turbulence essential in the classical scaling of heat transfer?. <i>Physical Review E</i> , 2007 , 76, 026303	2.4	16

619	Direct numerical simulation of supercritical annular electroconvection. <i>Physical Review E</i> , 2007 , 76, 0263	30.54	17
618	Grain boundary dynamics in stripe phases of nonpotential systems. <i>Physical Review E</i> , 2007 , 75, 056202	2.4	9
617	Extensive chaos in Rayleigh-Blard convection. <i>Physical Review E</i> , 2007 , 75, 045203	2.4	28
616	Hexagons and spiral defect chaos in non-Boussinesq convection at low Prandtl numbers. <i>Physical Review E</i> , 2007 , 75, 026210	2.4	10
615	Convection patterns in colloidal solutions. <i>Physical Review E</i> , 2007 , 75, 036203	2.4	21
614	Effects of optimal control over thermoconvective patterns. <i>Physical Review E</i> , 2007 , 75, 067203	2.4	2
613	Homology and symmetry breaking in Rayleigh-Bflard convection: Experiments and simulations. <i>Physics of Fluids</i> , 2007 , 19, 117105	4.4	23
612	Laboratory Studies of Mantle Convection. 2007 , 89-165		8
611	Pattern Formation in the Rotating Cylindrical Annulus with an Azimuthal Magnetic Field at low Prandtl Numbers. 2007 , 13, 1321-1330		5
610	Bifurcation to chaos in the Bfiard-Marangoni instability in a confined geometry. 2007 , 64, 012005		1
609	Some Canonical Bifurcations in the SwiftHohenberg Equation. 2007 , 6, 208-235		37
608	Core dynamics of a multi-armed spiral pattern in a dielectric barrier discharge. 2007 , 9, 330-330		15
607	Thermally-Driven Nanoparticle Array Growth from Atomic Au Precursor Solutions. 2007, 111, 17993-179	996	11
606	Onset of convection in a moderate aspect-ratio rotating cylinder: Eckhaus B enjamin E eir instability. <i>Journal of Fluid Mechanics</i> , 2007 , 590, 187-208	3.7	26
605	Centrifugal effects in rotating convection: axisymmetric states and three-dimensional instabilities. Journal of Fluid Mechanics, 2007, 580, 303-318	3.7	40
604	The effect of temperature-dependent solubility on the onset of thermosolutal convection in a horizontal porous layer. <i>Journal of Fluid Mechanics</i> , 2007 , 571, 59-95	3.7	36
603	Discovery of linear asymptotic behaviour at micro-Kelvin resolution in a modulated Rayleigh B flard chamber. 2007 , 463, 2495-2504		3
602	Phase diagram of vertically shaken granular matter. <i>Physics of Fluids</i> , 2007 , 19, 123301	4.4	109

(2008-2007)

601	Asymptotic behavior of the global attractors to the Boussinesq system for Rayleigh-Bflard convection at large Prandtl number. 2007 , 60, 1293-1318	29
600	Double-component convection due to different boundary conditions in an infinite slot diversely oriented to the gravity. 2007 , 322, 1727-1770	2
599	Realistic rotating convection in a DNA suspension. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2007 , 385, 433-438	14
598	Sparse grid collocation schemes for stochastic natural convection problems. 2007 , 225, 652-685	313
597	Rayleigh B flard flow of a rarefied gas and its attractors. III. Three-dimensional computer simulations. <i>Physics of Fluids</i> , 2007 , 19, 124101	14
596	Transition to chaos via the quasi-periodicity and characterization of attractors in confined Bflard-Marangoni convection. 2007 , 59, 509-518	8
595	Reentrant and whirling hexagons in non-Boussinesq convection. 2007 , 146, 279-290	1
594	Thermal convection in a rotating binary viscoelastic liquid mixture. 2007 , 146, 291-300	25
593	Statistics of the surface temperature field of an air/water interface under air flow. 2007, 43, 509-524	4
592	A seamless approach towards stochastic modeling: Sparse grid collocation and data driven input models. 2008 , 44, 298-320	13
591	Importance of packing in spiral defect chaos. 2008 , 70, 669-678	О
590	Model for modulated and chaotic waves in zero-Prandtl-number rotating convection. 2008 , 71, 545-557	1
589	Stationary statistical properties of Rayleigh-Bflard convection at large Prandtl number. 2008, 61, 789-815	22
588	A uniformly dissipative scheme for stationary statistical properties of the infinite Prandtl number model. 2008 , 21, 1281-1285	7
587	Lattice Boltzmann model for melting with natural convection. 2008, 29, 1469-1480	185
586	Atomistic simulation of rarefied gas natural convection in a finite enclosure using a novel wall-fluid molecular collision rule for adiabatic solid walls. <i>International Journal of Heat and Mass Transfer</i> , 4.9 2008 , 51, 445-456	7
585	Patterning surfaces with functional polymers. 2008 , 7, 277-90	767
584	Stabilization of domain walls between traveling waves by nonlinear mode coupling in Taylor-Couette flow. 2008 , 100, 064501	8

583	Convection in heated fluid layers subjected to time-periodic horizontal accelerations. <i>Journal of Fluid Mechanics</i> , 2008 , 596, 313-332	3.7	6
582	Influence of wall modes on the onset of bulk convection in a rotating cylinder. <i>Physics of Fluids</i> , 2008 , 20, 024109	4.4	10
581	Mean-field equations for weakly nonlinear two-scale perturbations of forced hydromagnetic convection in a rotating layer. 2008 , 102, 489-540		3
580	Granular gas dynamics: how Maxwell's demon rules in a non-equilibrium system. 2008 , 49, 157-178		22
579	Modulated rotating convection: radially travelling concentric rolls. <i>Journal of Fluid Mechanics</i> , 2008 , 608, 357-378	3.7	13
578	Dynamic topology in spatiotemporal chaos. <i>Physics of Fluids</i> , 2008 , 20, 064104	4.4	30
577	Onset of wall-attached convection in a rotating fluid layer in the presence of a vertical magnetic field. <i>Journal of Fluid Mechanics</i> , 2008 , 600, 427-443	3.7	1
576	Galerkin method for feedback controlled Rayleigh B flard convection. 2008 , 21, 2625-2651		2
575	Nonlinear resonant characteristics of shallow fluid layers. 2008 , 366, 1331-46		5
574	Self-organization of topological defects due to applied constraints. 2008 , 101, 254102		14
573	Bifurcation analysis of steady Rayleigh B flard convection in a cubical cavity with conducting sidewalls. <i>Journal of Fluid Mechanics</i> , 2008 , 598, 393-427	3.7	24
572	Competition and bistability of ordered undulations and undulation chaos in inclined layer convection. <i>Journal of Fluid Mechanics</i> , 2008 , 597, 261-282	3.7	17
571	TEMPERATURE MODULATION IN RAYLEIGHBNARD CONVECTION. 2008, 50, 231-245		8
57°	Nonequilibrium velocity fluctuations and energy amplification in planar Couette flow. <i>Physical Review E</i> , 2009 , 79, 046308	2.4	9
569	Nonlinear defects separating spiral waves in Taylor-Couette flow. <i>Physical Review E</i> , 2009 , 80, 066308	2.4	6
568	Inclined layer Soret instabilities. <i>Physical Review E</i> , 2009 , 79, 056305	2.4	10
567	Simulation of buoyancy-driven flows in a vertical cylinder using a simple lattice Boltzmann model. <i>Physical Review E</i> , 2009 , 79, 016704	2.4	46
566	Prime modes of fluid circulation in large-aspect-ratio turbulent Rayleigh-Bflard convection. <i>Physical Review E</i> , 2009 , 80, 037301	2.4	8

(2009-2009)

565	Thermomagnetic convection in a ferrofluid layer exposed to a time-periodic magnetic field. <i>Physical Review E</i> , 2009 , 80, 026314	2.4	6
564	State and parameter estimation of spatiotemporally chaotic systems illustrated by an application to Rayleigh-BBard convection. 2009 , 19, 013108		13
563	INFLUENCE OF OPTIMAL CONTROL ON BIFURCATIONS OF 3D AXISYMMETRIC BUOYANT FLOWS. 2009 , 19, 1279-1288		
562	Bifurcation and chaos in zero-Prandtl-number convection. 2009 , 87, 54003		21
561	Effects of Slip Boundary Conditions on Rayleigh-BBard Convection. 2009, 25, 205-212		5
560	References. 609-657		
559	Scaling Properties of Temperature Spectra and Heat-Flux Cospectra in the Surface Friction Layer Beneath an Unstable Outer Layer. 2009 , 133, 219-252		16
558	Patterns and heat transfer in Rayleigh-Bfiard thermal gravitational convection in helium (3He) near the critical point. 2009 , 44, 517-527		3
557	On the onset of natural convection in differentially heated shallow fluid layers with internal heat generation. <i>International Journal of Heat and Mass Transfer</i> , 2009 , 52, 4254-4263	4.9	11
556	On numerical realizability of thermal convection. 2009 , 228, 6268-6290		52
555	Temperature modulation in ferrofluid convection. <i>Physics of Fluids</i> , 2009 , 21, 064105	4.4	17
554	Time reversal of parametrical driving and the stability of the parametrically excited pendulum. 2009 , 77, 164-168		4
553	Ionic nano-convection in anodisation of aluminium plate. 2009 , 5639-41		7
552	Heat transfer and large scale dynamics in turbulent Rayleigh-Bflard convection. 2009 , 81, 503-537		967
551	Transitions between turbulent states in rotating Rayleigh-Bflard convection. 2009, 103, 024503		82
550	The Rayleigh B Bard Shallow Thermal Convection Problem. 2009 , 133-171		
549	Summing Up the Three Significant Models Related with the Bflard Convection Problem. 2009 , 263-275		
548	Miscellaneous: Various Convection Model Problems. 2009 , 325-390		

547	A Semi-Implicit Scheme for Stationary Statistical Properties of the Infinite Prandtl Number Model. 2009 , 47, 250-270		8
546	Interacting oscillatory boundary layers and wall modes in modulated rotating convection. <i>Journal of Fluid Mechanics</i> , 2009 , 625, 75-96	3.7	12
545	Centrifugal effects in rotating convection: nonlinear dynamics. <i>Journal of Fluid Mechanics</i> , 2009 , 628, 269-297	3.7	34
544	Mean temperature profiles in turbulent Rayleigh B flard convection of water. <i>Journal of Fluid Mechanics</i> , 2009 , 633, 449-460	3.7	58
543	Numerical simulations of Rayleigh B flard convection for Prandtl numbers between 10¶ and 104 and Rayleigh numbers between 105 and 109. <i>Journal of Fluid Mechanics</i> , 2010 , 662, 409-446	3.7	53
542	Convection in colloidal suspensions with particle-concentration-dependent viscosity. 2010 , 32, 265-72		8
541	Aspect ratio dependence of heat transfer and large-scale flow in turbulent convection. <i>Journal of Fluid Mechanics</i> , 2010 , 655, 152-173	3.7	118
540	Chaotic travelling rolls in Rayleigh-BBard convection. 2010 , 74, 75-82		12
539	Microphase separation of block copolymer thin films. 2010 , 31, 591-608		33
538	A Spectral method determination of the first critical Rayleigh number in a cylindrical container. 2010 , 34, 2178-2191		1
537	Transient spatio-temporal chaos in the complex Ginzburglandau equation on long domains. 2010 , 374, 2030-2034		14
536	Onset of convection in magnetic fluids. 2010 , 9, 176-180		5
535	Computing the Karhunenlowe dimension of an extensively chaotic flow field given a finite amount of data. 2010 , 39, 1704-1710		11
534	Onset of KppersDortz-like dynamics in finite rotating thermal convection. <i>Journal of Fluid Mechanics</i> , 2010 , 644, 337-357	3.7	14
533	Strong non-Boussinesq effects near the onset of convection in a fluid near its critical point. <i>Journal of Fluid Mechanics</i> , 2010 , 642, 15-48	3.7	15
532	Extensive chaos in the Lorenz-96 model. 2010 , 20, 043105		86
531	Finite-size effects lead to supercritical bifurcations in turbulent rotating Rayleigh-BBard convection. 2010 , 105, 224501		56
530	Onset of Rayleigh-Bflard convection in cylindrical containers. <i>Physical Review E</i> , 2010 , 81, 046318	2.4	35

(2011-2010)

529	Stability of rolls in rotating magnetoconvection in a layer with no-slip electrically insulating horizontal boundaries. <i>Physical Review E</i> , 2010 , 81, 056322	2.4	14	
528	Thermal convection in a thermosensitive colloidal suspension. 2010 , 12, 053003		29	
527	Transient Rayleigh B Bard M arangoni convection due to evaporation: a linear non-normal stability analysis. <i>Journal of Fluid Mechanics</i> , 2010 , 648, 521-539	3.7	69	
526	Stationary and oscillatory convection of binary fluids in a porous medium. <i>Physical Review E</i> , 2010 , 82, 056303	2.4	9	
525	Energy relaxation for transient convection in ferrofluids. <i>Physical Review E</i> , 2010 , 82, 026311	2.4	9	
524	Onset of convection in strongly shaken granular matter. 2010 , 104, 038001		56	
523	A heteroclinic network in mode interaction with symmetry. 2010 , 25, 359-396		7	
522	Rayleigh B Bard convection in the presence of spatial temperature modulations. <i>Journal of Fluid Mechanics</i> , 2011 , 673, 318-348	3.7	37	
521	Destabilization of free convection by weak rotation. <i>Journal of Fluid Mechanics</i> , 2011 , 685, 377-412	3.7	13	
520	Investigation of Temperature Statistics in Turbulent Rayleigh-Bflard Convection using PDF Methods. 2011 , 318, 082008			
519	Measuring the departures from the Boussinesq approximation in Rayleigh B flard convection experiments. <i>Journal of Fluid Mechanics</i> , 2011 , 682, 543-557	3.7	10	
518	Complexity, segregation, and pattern formation in rotating-drum flows. 2011 , 83, 1323-1365		91	
517	The Twente turbulent Taylor-Couette (T3C) facility: strongly turbulent (multiphase) flow between two independently rotating cylinders. 2011 , 82, 025105		51	
516	The limit of the Boussinesq system of Rayleigh-Bflard convection as the Prandtl number approaches infinity. 2011 , 26, 493-502			
515	Connecting flow structures and heat flux in turbulent Rayleigh-BBard convection. <i>Physical Review E</i> , 2011 , 84, 045303	2.4	52	
5 1 4	Analytical methods for solving the time-fractional Swift出ohenberg (SH) equation. 2011 , 61, 2182-2185		24	
513	Convection in the Rayleigh-Bhard flow with all fluid properties variable. 2011 , 20, 454-459		2	
512	Combined heat and mass transfer for unsteady MHD flow of perfect conducting micropolar fluid with thermal relaxation. 2011 , 52, 934-945		31	

511	Bifurcations and chaos in large-Prandtl number Rayleigh B flard convection. 2011 , 46, 772-781		20
510	A diagrammatic derivation of (convective) pattern equations. 2011 , 240, 150-165		6
509	From steady solutions to chaotic flows in a Rayleigh B fiard problem at moderate Rayleigh numbers. 2011 , 240, 920-934		15
508	The effect of noise on patterns formed by growing sandpiles. 2011 , 2011, P03001		6
507	Temperature statistics in turbulent Rayleigh B Bard convection. 2011 , 13, 015002		10
506	Superheating field of superconductors within Ginzburg-Landau theory. 2011 , 83,		40
505	Dynamics of zero-Prandtl number convection near onset. 2011 , 21, 023118		8
504	Vortices in a cylindrical annulus nonhomogeneously heated: effect of localized heating on their stability and intensity. <i>Physical Review E</i> , 2011 , 84, 037301	2.4	4
503	Using particle tracking to measure flow instabilities in an undergraduate laboratory experiment. 2011 , 79, 267-273		55
502	Convection in nanofluids with a particle-concentration-dependent thermal conductivity. <i>Physical Review E</i> , 2011 , 83, 046315	2.4	10
501	Extensive scaling from computational homology and Karhunen-Lolle decomposition analysis of Rayleigh-Bflard convection experiments. 2011 , 107, 034503		12
500	Rayleigh-Bflard convection with phase changes in a Galerkin model. <i>Physical Review E</i> , 2011 , 84, 046303	2.4	6
499	Domain walls and vortices in linearly coupled systems. <i>Physical Review E</i> , 2011 , 84, 046602	2.4	37
498	Skew-varicose instability in two-dimensional generalized Swift-Hohenberg equations. <i>Physical Review E</i> , 2011 , 84, 036201	2.4	2
497	Exploring spiral defect chaos in generalized Swift-Hohenberg models with mean flow. <i>Physical Review E</i> , 2011 , 84, 046215	2.4	1
496	Modulated waves in a periodically driven annular cavity. <i>Journal of Fluid Mechanics</i> , 2011 , 667, 336-357	3.7	6
495	Convective instability in a ferrofluid layer with temperature-modulated rigid boundaries. <i>Fluid Dynamics Research</i> , 2011 , 43, 025502	1.2	11
494	A simple analytic approximation to the Rayleigh-Bflard stability threshold. <i>Physics of Fluids</i> , 2011 , 23, 124101	4.4	6

493	Coordinated optimization of visual cortical maps (II) numerical studies. 2012 , 8, e1002756		8
492	Pattern formation in spatially forced thermal convection. 2012 , 14, 053010		21
491	Coordinated optimization of visual cortical maps (I) symmetry-based analysis. 2012, 8, e1002466		10
490	Weakly subcritical stationary patterns: Eckhaus instability and homoclinic snaking. <i>Physical Review E</i> , 2012 , 85, 026211	2.4	12
489	Convection in multiphase fluid flows using lattice Boltzmann methods. 2012 , 108, 104502		65
488	Anisotropic velocity statistics of topological defects under shear flow. <i>Physical Review E</i> , 2012 , 85, 01115	<u>2</u> 34	12
487	The effect of rotation on the Rayleigh-Blard stability threshold. <i>Physics of Fluids</i> , 2012 , 24, 114101	4.4	7
486	Viscoelastic convection: Few-modes model and numerical simulations of field equations for Maxwellian fluids. <i>Physical Review E</i> , 2012 , 86, 046312	2.4	3
485	The Role of Flexoelectricity in Pattern Formation. 2012 , 101-135		
484	Direct numerical simulation of Rayleigh-Bflard convection in a cylindrical container of aspect ratio 1 for moderate Prandtl number fluid. <i>Physics of Fluids</i> , 2012 , 24, 074103	4.4	18
483	Quantifying spatiotemporal chaos in Rayleigh-Blard convection. <i>Physical Review E</i> , 2012 , 85, 046201	2.4	21
482	References. 2012 , 473-509		
481	Linear stability analysis of cylindrical Rayleigh B flard convection. <i>Journal of Fluid Mechanics</i> , 2012 , 711, 27-39	3.7	23
480	The complex Ginzburg[landau equation: an introduction. 2012 , 53, 79-95		71
479	Influence of Horizontal Temperature Gradients on Convective Instabilities with Geophysical Interest. 2012 ,		
478	Application of homotopy analysis method for fractional Swift Hohenberg equation (Revisited. 2012 , 36, 3630-3637		54
477	Phase separation induced ordered patterns in thin polymer blend films. 2012 , 37, 564-594		129
476	Generalized homoclinic solutions for the Swift⊞ohenberg equation. 2012 , 390, 15-26		5

475	Global stability results for temperature modulated convection in ferrofluids. 2013, 219, 6204-6211		5
474	Combined Spectral-Perturbation Approach for Systematic Mode Selection in Thermal Convection. 2013 , 135,		2
473	Rayleigh B Bard instability generated by a diffusion flame. <i>Journal of Fluid Mechanics</i> , 2013 , 736, 464-494	1 3.7	6
472	Reynolds-number measurements for low-Prandtl-number turbulent convection of large-aspect-ratio samples. <i>Journal of Fluid Mechanics</i> , 2013 , 725, 664-680	3.7	20
471	Axisymmetric propagating vortices in centrifugally stable Taylor Louette flow. <i>Journal of Fluid Mechanics</i> , 2013 , 728, 458-470	3.7	7
470	Buoyancy driven convection in vertically shaken granular matter: experiment, numerics, and theory. 2013 , 15, 893-911		17
469	Heterogeneous fluorine-containing surface macro-, micro- and nanostructures in polymer films and their applications. 2013 , 55, 652-665		9
468	Instabilities of natural convection in a periodically heated layer. <i>Journal of Fluid Mechanics</i> , 2013 , 733, 33-67	3.7	29
467	Maximization of heat transfer across micro-channels. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 66, 517-530	4.9	16
466	Optimal Taylor Louette flow: direct numerical simulations. <i>Journal of Fluid Mechanics</i> , 2013 , 719, 14-46	3.7	65
465	Faraday waves under time-reversed excitation. 2013 , 110, 094503		3
464	Simulations of Boiling Systems Using a Lattice Boltzmann Method. 2013 , 13, 696-705		8
463	Rayleigh-BBard convection for viscoplastic fluids. <i>Physics of Fluids</i> , 2013 , 25, 023101	4.4	40
462	Bioconvection in spatially extended domains. <i>Physical Review E</i> , 2013 , 87, 053016	2.4	8
461	Optical analysis of spatially periodic patterns in nematic liquid crystals: diffraction and shadowgraphy. <i>Physical Review E</i> , 2013 , 87, 052504	2.4	9
460	Convection patterns in a liquid metal under an imposed horizontal magnetic field. <i>Physical Review E</i> , 2013 , 88, 063020	2.4	19
459	Free convection in drying binary mixtures: Solutal versus thermal instabilities. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 63, 336-350	4.9	19
458	Laminar Boundary Layers in Convective Heat Transport. 2013 , 324, 995-1031		5

(2014-2013)

Double MRT-Lattice Boltzmann Simulation of Natural Convection Melting in a Rectangular Cavity. **2013**,

456	Radiation Impacts on Conditionally Unstable Moist Convection. 2013 , 70, 1187-1203		8
455	Identifying low-dimensional dynamics in type-I edge-localised-mode processes in JET plasmas. 2013 , 20, 042306		8
454	Observation of 3D defect mediated dust acoustic wave turbulence with fluctuating defects and amplitude hole filaments. 2013 , 20, 083703		15
453	Large-Scale Circulation in a Rectangular Enclosure With Periodic Boundary Temperature. 2013, 135,		1
452	Three-dimensional continuation study of convection in a tilted rectangular enclosure. <i>Physical Review E</i> , 2013 , 88, 043015	2.4	12
451	Pattern dynamics near inverse homoclinic bifurcation in fluids. <i>Physical Review E</i> , 2013 , 87, 023001	2.4	17
450	Experimental observations of Soret-driven convection in the transient diffusive boundary layer. <i>Physical Review E</i> , 2013 , 88, 053019	2.4	9
449	Effects of particle settling on Rayleigh-BEard convection. <i>Physical Review E</i> , 2013 , 87, 063014	2.4	12
448	A Multiple-Scale Analysis of Evaporation Induced Marangoni Convection. 2013 , 73, 974-1001		7
447	A bound on the vertical transport of heat in the <code>IllimateLstate</code> of slippery convection at large Prandtl numbers. <i>Journal of Fluid Mechanics</i> , 2013 , 729, 103-122	3.7	8
446	RELATION BETWEEN CONVECTIVE THERMAL PATTERNS AND HEAT FLUX THROUGH AN EVAPORATING SURFACE VIA TWO-DIMENSIONAL AND THREE-DIMENSIONAL NUMERICAL SIMULATIONS. 2014 , 2, 199-206		9
445	Analysis of swarm behaviors based on an inversion of the fluctuation theorem. 2014 , 20, 77-93		О
444	Phenomenology of nonrelativistic parity-violating hydrodynamics in 2+1 dimensions. <i>Physical Review E</i> , 2014 , 90, 063005	2.4	16
443	Convective ripening and initiation of rainfall. 2014 , 108, 49001		2
442	Low-Prandtl-number Rayleigh-BBard convection with stress-free boundaries. 2014 , 87, 1		11
441	A rigorous bound on the vertical transport of heat in Rayleigh-Bflard convection at infinite Prandtl number with mixed thermal boundary conditions. 2014 , 55, 093104		15
440	Front propagation in a chaotic flow field. <i>Physical Review E</i> , 2014 , 90, 012905	2.4	3

439	Observation of self-excited acoustic vortices in defect-mediated dust acoustic wave turbulence. <i>Physical Review E</i> , 2014 , 90, 013106	2.4	10
438	Aging of orientation fluctuations in stripe phases. <i>Physical Review E</i> , 2014 , 90, 052101	2.4	6
437	Molecular dynamics simulation: a tool for exploration and discovery using simple models. 2014 , 26, 503	104	15
436	Natural convection with mixed insulating and conducting boundary conditions: low- and high-Rayleigh-number regimes. <i>Journal of Fluid Mechanics</i> , 2014 , 742, 636-663	3.7	34
435	Stability of Kuramoto-Sivashinsky fronts in moving fluid. 2014 , 223, 3001-3010		1
434	Resonance patterns in spatially forced Rayleigh B flard convection. <i>Journal of Fluid Mechanics</i> , 2014 , 756, 293-308	3.7	12
433	Dynamical behaviors of nonlinear dust acoustic waves: From plane waves to dust acoustic wave turbulence. 2014 , 80, 809-816		2
432	Experimental techniques for turbulent Taylor Louette flow and Rayleigh Blard convection. 2014 , 27, R89-R121		10
431	Insights into Nanoscale Electrochemical Reduction in a Memristive Oxide: the Role of Three-Phase Boundaries. 2014 , 24, 4466-4472		43
430	Experimental investigation of the Rayleigh B flard convection in a yield stress fluid. 2014 , 203, 9-23		41
429	Characteristics of temperature field in a closed cavity with centrifugal acceleration. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 70, 758-763	4.9	4
428	Numerical Analysis of Rayleigh-Bhard Convection with and Without Volumetric Radiation. 2014 , 65, 144-164		10
427	Space-time correlations in turbulent Rayleigh-Bflard convection. 2014 , 30, 457-467		6
426	Supramolecular chirality induced by a weak thermal force. <i>Soft Matter</i> , 2014 , 10, 44-7	3.6	26
425	Imaging critical fluctuations of pure fluids and binary mixtures. <i>Physical Review E</i> , 2014 , 90, 022127	2.4	4
424	Rotating non-Oberbeck B oussinesq Rayleigh B Bard convection in water. <i>Physics of Fluids</i> , 2014 , 26, 055111	4.4	45
423	Turbulent boundary layer in high Rayleigh number convection in air. 2014 , 112, 124301		14
422	Flow patterns in inclined-layer turbulent convection. 2014 , 37, 19		1

The perturbed problem on the boussinesq system of Rayleigh-Bflard convection. **2014**, 30, 75-88

420	Nano/Micro and Hierarchical Structured Surfaces in Polymer Blends. 2014 , 357-421		3
419	Natural convection in a fluid layer periodically heated from above. <i>Physical Review E</i> , 2014 , 90, 023015	2.4	13
418	Instability in temperature modulated rotating Rayleigh B fiard convection. <i>Fluid Dynamics Research</i> , 2014 , 46, 015504	1.2	2
417	Electromechanical Effects. 2014 , 1-22		
416	Numerical Bifurcation Methods and their Application to Fluid Dynamics: Analysis beyond Simulation. 2014 , 15, 1-45		111
415	Optimal Taylor Couette flow: radius ratio dependence. Journal of Fluid Mechanics, 2014, 747, 1-29	3.7	49
414	Large-scale mean patterns in turbulent convection. <i>Journal of Fluid Mechanics</i> , 2015 , 776, 96-108	3.7	39
413	Can weakly nonlinear theory explain Faraday wave patterns near onset?. <i>Journal of Fluid Mechanics</i> , 2015 , 777, 604-632	3.7	16
412	Mixed convection in a periodically heated channel. <i>Journal of Fluid Mechanics</i> , 2015 , 768, 51-90	3.7	17
411	Analysis of Heat Transfer in Channel Flow Subject to Sine-Bump Heating. 2015 , 105, 192-200		
410	Natural convection in a horizontal fluid layer periodically heated from above and below. <i>Physical Review E</i> , 2015 , 92, 023015	2.4	7
409	Trapping and manipulation of microparticles using laser-induced convection currents and photophoresis. 2015 , 6, 4079-87		44
408	Oscillatory instability and routes to chaos in Rayleigh-Bāard convection: Effect of external magnetic field. 2015 , 112, 24003		11
407	Spatial Scale Effects on Rayleigh Convection and Interfacial Mass Transfer Characteristics in CO2 Absorption. 2015 , 38, 23-32		7
406	Canonical Models of Geophysical and Astrophysical Flows: Turbulent Convection Experiments in Liquid Metals. 2015 , 5, 289-335		11
405	Rayleigh-BBard convection of cold water near its density maximum in a cubical cavity. <i>Physics of Fluids</i> , 2015 , 27, 034102	4.4	14
404	Laminar Natural Convection of Bingham Fluids in Inclined Differentially Heated Square Enclosures Subjected to Uniform Wall Temperatures. 2015 , 137,		7

403	Incipient mixing by Marangoni effects in slow viscous flow of two immiscible fluid layers. 2015 , 80, 1582-1618	5
402	Route to hyperchaos in Rayleigh-BBard convection. 2015 , 112, 14001	12
401	Bicritical states in temperature-modulated Rayleigh-Bflard convection. <i>Physical Review E</i> , 2015 , 92, 0130 <u>05</u>	7
400	Wave-particle dynamics of waveform and defect evolutions in undulated nonlinear self-excited dust acoustic waves. 2015 , 22, 013701	4
399	Effect of Prandtl number on wavy rolls in Rayleigh B Bard convection. 2015 , 90, 035208	8
398	The Banach fixed point theorem application to Hopf bifurcation of a generalized Boussinesq system. 2015 , 2015,	
397	From the granular Leidenfrost state to buoyancy-driven convection. <i>Physical Review E</i> , 2015 , 91, 042202 _{2.4}	18
396	A combined spectral-amplitude-perturbation approach for systematic mode selection in thermal convection. 2015 , 25, 782-802	2
395	Laboratory Studies of Mantle Convection. 2015 , 73-144	15
394	Heat transport by coherent Rayleigh-BBard convection. <i>Physics of Fluids</i> , 2015 , 27, 051702 4.4	32
393	Observing silicic magma transport in dykes at depths of 8🛭 9km: Evidences from crustal xenoliths and numerical modelling. 2015 , 296, 69-79	6
392	Flow state multiplicity in Rayleigh B flard convection of cold water with density maximum in a cylinder of aspect ratio 2. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 86, 244-257	16
391	Electric field-induced instabilities in ferrofluid microflows. 2015 , 19, 43-52	14
390	Weakly nonlinear analysis of Rayleigh B flard convection in shear-thinning fluids: nature of the bifurcation and pattern selection. <i>Journal of Fluid Mechanics</i> , 2015 , 767, 696-734	20
389	Turbulent Thermal Convection. 2015 , 37-49	
388	Numerical study of subcritical Rayleigh ${f B}$	17
387	Material transport in a convective surface mixed layer under weak wind forcing. 2015, 96, 226-242	16
386	RayleighBenard convection in HerschelBulkley fluid. 2015 , 226, 32-45	23

385	Vividly colorful hybrid perovskite solar cells by doctor-blade coating with perovskite photonic nanostructures. 2015 , 2, 578-583	142
384	Effects of aspect ratio on laminar Rayleigh B flard convection of power-law fluids in rectangular enclosures: A numerical investigation. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 91, 1292-1309	24
383	Analysis of coherent structures in Rayleigh B flard convection. 2015 , 16, 1162-1178	7
382	Heat Transfers and Related Effects in Supercritical Fluids. 2015,	34
381	Effects of aspect ratio on natural convection of Bingham fluids in rectangular enclosures with differentially heated horizontal walls heated from below. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 80, 727-736	23
380	Non-Boussinesq rolls in 2d thermal convection. 2015 , 49, 65-70	
379	Two-particle dispersion in weakly turbulent thermal convection. 2016 , 18, 065007	4
378	Finding equilibrium in the spatiotemporal chaos of the complex Ginzburg-Landau equation. 2016 , 26, 113101	
377	Dynamical transition of heat transport in a physical gel near the sol-gel transition. 2015 , 5, 18667	7
376	Evaporation of water: evaporation rate and collective effects. <i>Journal of Fluid Mechanics</i> , 2016 , 798, 774-7.86	82
375	Spherical-shell boundaries for two-dimensional compressible convection in a star. 2016 , 593, A121	11
374	Spatio-temporal patterns in inclined layer convection. <i>Journal of Fluid Mechanics</i> , 2016 , 794, 719-745 3.7	11
373	Linear stability and energetics of rotating radial horizontal convection. <i>Journal of Fluid Mechanics</i> , 2016 , 795, 1-35	14
372	Thermal convection in inclined cylindrical containers. <i>Journal of Fluid Mechanics</i> , 2016 , 790, 3.7	52
371	Aspect ratio dependence of Rayleigh B Bard convection of cold water near its density maximum in vertical cylindrical containers. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 97, 932-942	12
370	Evaporation-Induced Pattern Formation of Decanol Droplets. 2016 , 32, 4800-5	10
369	Pattern formation and self-organization in plasmas interacting with surfaces. 2016 , 49, 393002	57
368	Nonlinear Preconditioning Techniques for Full-Space LagrangeNewton Solution of PDE-Constrained Optimization Problems. 2016 , 38, A2756-A2778	18

367	Spectrally accurate algorithm for analysis of convection in corrugated conduits. 2016, 72, 2636-2659		9
366	Large-scale thermal motions of turbulent Rayleigh B flard convection in a wide aspect-ratio cylindrical domain. 2016 , 61, 183-196		15
365	Ergodicity in randomly forced Rayleigh B Bard convection. 2016 , 29, 3309-3345		6
364	Instabilities and chaos in low-Prandtl number rayleigh-Bflard convection. 2016 , 138, 61-66		8
363	Regular flow reversals in Rayleigh-Bflard convection in a horizontal magnetic field. <i>Physical Review E</i> , 2016 , 93, 043109	2.4	18
362	Momentum and heat transport scalings in laminar vertical convection. <i>Physical Review E</i> , 2016 , 93, 05110	12 4	23
361	On the onset of horizontal convection. 2016 , 110, 96-108		7
360	Rayleigh-Bfiard convection with two-frequency temperature modulation. <i>Physical Review E</i> , 2016 , 93, 043111	2.4	6
359	Optical Rogue Waves in Vortex Turbulence. 2016 , 116, 043903		22
358	Common Dynamical Features for Thermal Convection in Golden Syrup and Gelatin Solution. <i>Journal of the Physical Society of Japan</i> , 2016 , 85, 104402	1.5	2
357	Stability analysis of Rayleigh-Bflard convection in a cylinder with internal heat generation. <i>Physical Review E</i> , 2016 , 94, 013108	2.4	2
356	Oscillatory instability of convection in ferromagnetic nanofluid and in transformer oil. <i>Fluid Dynamics Research</i> , 2016 , 48, 061407	1.2	4
355	Existence of periodic solutions of Boussinesq system. 2016 , 2016,		1
354	Analysis of Kolmogorov flow and Rayleigh B flard convection using persistent homology. 2016 , 334, 82-98		45
353	Natural convection in shear-thinning yield stress fluids in a square enclosure. 2016 , 62, 1347-1355		10
352	Horizontal rolls over localized heat source in a cylindrical layer. 2016 , 316, 23-33		19
351	Numerical study of plume patterns in a chemotaxisdiffusiondonvection coupling system. 2016 , 126, 58-70		20
350	Natural convection in shear-thinning fluids: Experimental investigations by MRI. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 95, 742-754	4.9	29

349	Onliff intermittency and spatiotemporal chaos in three-dimensional Rayleigh B liard convection. 2016 , 57, 1440-1447		3
348	Phase Structures in Thin Films of Nanostructured Polymer Blends. 2016 , 313-364		
347	Local exact controllability to the trajectories of the SwiftHohenberg equation. 2016 , 139, 169-195		6
346	Rayleigh B Bard convection driven by a long wavelength heating. 2016 , 30, 313-337		9
345	Different routes to chaos in low Prandtl-number Rayleigh B Eard convection. 2016 , 81, 261-267		3
344	Numerical investigation of Rayleigh B flard convection in a cylinder of unit aspect ratio. <i>Fluid Dynamics Research</i> , 2016 , 48, 015503	1.2	3
343	High R eynolds Number Taylor-Couette Turbulence. <i>Annual Review of Fluid Mechanics</i> , 2016 , 48, 53-80	22	186
342	Stability of differentially heated flow from a rotating sphere. 2016 , 291, 209-224		2
341	Mean flow structure in horizontal convection. <i>Journal of Fluid Mechanics</i> , 2017 , 812, 525-540	3.7	11
340	Onset of Rayleigh-Bflard convection for intermediate aspect ratio cylindrical containers. <i>Physics of Fluids</i> , 2017 , 29, 024107	4.4	10
339	Natural convection in a corrugated slot. <i>Journal of Fluid Mechanics</i> , 2017 , 815, 537-569	3.7	7
338	Phenomenology of buoyancy-driven turbulence: recent results. 2017 , 19, 025012		79
337	Thermal Convection in a Thermosensitive Viscous Fluid with Inhomogeneous Cooling. <i>Journal of the Physical Society of Japan</i> , 2017 , 86, 043402	1.5	2
336	Influences of aspect ratio on natural convection of power-law fluids in cylindrical annular space with differentially heated vertical walls. 2017 , 2, 151-164		8
335	Bursting dynamics in Rayleigh-BBard convection. 2017 , 226, 2089-2099		1
334	Scaling properties of ageing orientation fluctuations in stripe phases. 2017 , 7, 20160146		3
333	Spontaneous Rotation of Nonlinear Pattern Formed by Aqueous Colloidal Suspension between ITO Electrodes during Electrolysis Perpendicular to Gravity. 2017 , 121, 5835-5841		0
332	Spontaneous excitations of low amplitude hole filaments, acoustic vortices, and rogue wave events in weakly disordered dust acoustic waves. 2017 , 59, 054006		1

331	Boundary induced convection in a collection of polar self-propelled particles. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2017 , 477, 128-135	3.3	2
330	Heat transfer in thermally modulated two-dimensional Rayleigh Bflard convection. 2017 , 114, 35-43		4
329	Theoretical estimates of maximum fields in superconducting resonant radio frequency cavities: stability theory, disorder, and laminates. 2017 , 30, 033002		23
328	Destabilization of a liquid metal by nonuniform Joule heating. <i>Physical Review E</i> , 2017 , 96, 033103	2.4	O
327	Origin of the onset of Rayleigh-Bflard convection in a concentrated suspension of microgels with a yield stress behavior. <i>Physics of Fluids</i> , 2017 , 29, 104102	4.4	15
326	Ubiquitous transient stagnant domain formation during thermal convection in a well-mixed two component fluid with large viscosity difference. 2017 , 7, 12983		1
325	Convective heat transfer in non-uniformly heated corrugated slots. <i>Physics of Fluids</i> , 2017 , 29, 103605	4.4	4
324	The stochastic Swift⊞ohenberg equation. 2017 , 30, 3516-3559		11
323	Communication Visualization of Magnetohydrodynamic Micro-Vortices with Guanine Micro-Crystals. 2017 , 164, H584-H586		8
322	Pattern selection in ternary mushy layers. Journal of Fluid Mechanics, 2017, 825, 853-886	3.7	6
321	Natural convection and thermal drift. <i>Journal of Fluid Mechanics</i> , 2017 , 826, 553-582	3.7	6
320	Feedback control and heat transfer measurements in a Rayleigh-BBard convection cell. <i>Physics of Fluids</i> , 2017 , 29, 074103	4.4	6
319	Laboratory layered latte. 2017 , 8, 1960		14
318	Evaporation of a sessile water drop and a drop of aqueous salt solution. 2017 , 7, 14759		47
317	Instabilities of convection patterns in a shear-thinning fluid between plates of finite conductivity. <i>Physical Review E</i> , 2017 , 96, 043109	2.4	2
316	Natural convection under sub-critical conditions in the presence of heating non-uniformities. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 114, 8-19	4.9	7
315	Effects of enclosure geometry and thermal boundary condition on Rayleigh-BBard convection of cold water near its maximum density. 2017 , 120, 220-232		4
314	Forces. 2017 , 231-263		

313	Flow pattern and heat transfer in Rayleigh-Bflard convection of cold water near its density maximum in a rectangular cavity. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 107, 1065-1075	4.9	11
312	Incompressible Rayleigh Taylor Turbulence. <i>Annual Review of Fluid Mechanics</i> , 2017 , 49, 119-143	22	83
311	The use of ferrofluids for heat removal: Advantage or disadvantage?. 2017, 431, 241-244		13
310	Complex behaviour of a nanofluid near thermal convection onset: Its nature and features. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 104, 688-692	4.9	1
309	Pathways to equilibrium orientation fluctuations in finite stripe-forming systems. <i>Physical Review E</i> , 2017 , 96, 052224	2.4	1
308	Zero Prandtl-number rotating magnetoconvection. <i>Physics of Fluids</i> , 2017 , 29, 124105	4.4	8
307	Study on the Instability of Two-Phase Flow in the Heat-Absorbing Tube of Trough Solar Collector. 2017 , 2017, 1-8		1
306	Exact solutions and asymptotic solutions of one-dimensional domain walls in nonlinearly coupled system. 2018 , 92, 1665-1677		15
305	Linear and weakly nonlinear analysis of Rayleigh B flard convection of perfect gas with non-Oberbeck B oussinesq effects. <i>Journal of Fluid Mechanics</i> , 2018 , 845, 141-169	3.7	10
304	Applicability of Taylor's hypothesis in thermally driven turbulence. 2018 , 5, 172152		46
303	Spatiotemporal dynamics of the covariant Lyapunov vectors of chaotic convection. <i>Physical Review E</i> , 2018 , 97, 032216	2.4	5
302	A criterion beyond conservation equations for complex transport process modeling (A) case of Rayleigh-Bfiard convection. 2018 , 182, 44-55		4
301	Rayleigh-Bflard convection of Casson fluids. 2018 , 127, 79-90		19
300	Fluid Mechanics of Liquid Metal Batteries. 2018 , 70,		40
299	On the formation of thermal drift. <i>Physics of Fluids</i> , 2018 , 30, 043602	4.4	2
298	Linear and nonlinear aspects of Marangoni and evaporative instabilities. <i>Fluid Dynamics Research</i> , 2018 , 50, 051411	1.2	
297	Towards prediction of local corrosion on alumina refractories driven by Marangoni convection. 2018 , 44, 1675-1680		8
296	Feed flow patterns of combined Rayleigh-Bflard convection and membrane permeation. 2018 , 549, 60-66		6

295	From Patterns to Function in Living Systems: Dryland Ecosystems as a Case Study. 2018, 9, 79-103		35
294	Convective heat transport in Viscoplastic material due to localized heating: An Experimental approach. 2018 , 310, 012066		
293	Initial layer problem of the Boussinesq system for Rayleigh-Bflard convection with infinite Prandtl number limit. 2018 , 16, 1145-1160		
292	Surface Modification of Polymers: Methods and Applications. 2018 , 5, 1801247		95
291	WīlmeBertragung bei freier Konvektion: Innenstrīhungen. 2018 , 1-11		
290	Living in a trash can: turbulent convective flows impair flight performance. 2018 , 15,		3
289	Numerical parametric study of the evaporation rate of a liquid under a shear gas flow: Experimental validation and the importance of confinement on the convection cells and the evaporation rate. 2018 , 72, 8-19		9
288	Stability of temperature modulated convection in a vertical fluid layer. 2018 , 61, 408-420		2
287	Old Problems Revisited from New Perspectives in Implicit Theories of Fluids. 2018 , 45-90		
286	Turbulent superstructures in Rayleigh-Bflard convection. 2018 , 9, 2118		88
285	Bulk temperature and heat transport in turbulent Rayleigh B Bard convection of fluids with temperature-dependent properties. <i>Journal of Fluid Mechanics</i> , 2018 , 851, 374-390	3.7	21
284	Dynamic of plumes and scaling during the melting of a Phase Change Material heated from below. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 126, 206-220	4.9	26
283	Chaotic Rayleigh-Bflard convection with finite sidewalls. <i>Physical Review E</i> , 2018 , 98, 012201	2.4	3
282	Confined inclined thermal convection in low-Prandtl-number fluids. <i>Journal of Fluid Mechanics</i> , 2018 , 850, 984-1008	3.7	31
281	Convection in Ferro-Nanofluids: Experiments and Theory. 2018,		7
280	Experimental Investigation of Thermomagnetic Convection in Ferrofluids. 2018, 165-244		
279	Experimental Investigation of Thermogravitational Convection in Ferrofluids. 2018, 127-164		
278	Entropic lattice Boltzmann simulation of thermal convective turbulence. 2018 , 175, 2-19		12

(2019-2019)

277	Heated gas bubbles enrich, crystallize, dry, phosphorylate and encapsulate prebiotic molecules. 2019 , 11, 779-788		32
276	Weakly nonlinear mode interactions in spherical Rayleigh B Bard convection. <i>Journal of Fluid Mechanics</i> , 2019 , 874, 359-390	3.7	1
275	Coexisting Ordered States, Local Equilibrium-like Domains, and Broken Ergodicity in a Non-turbulent Rayleigh-Bflard Convection at Steady-state. 2019 , 9, 10615		7
274	On low-Prandtl-number convection in an inclined layer of liquid mercury. <i>Journal of Fluid Mechanics</i> , 2019 , 874, 76-101	3.7	2
273	Preface. 2019 , xix-xxii		
272	Introduction. 2019 , 3-8		
271	Basics of Hydrodynamics. 2019 , 9-22		
270	Fourier Space Description of Hydrodynamics. 2019 , 23-42		
269	Energy Transfers in Hydrodynamic Flows. 2019 , 43-78		
268	Energy Spectrum and Flux of 3D Hydrodynamics. 2019 , 79-100		
267	Enstrophy Transfers in Hydrodynamics. 2019 , 101-116		
266	Two-dimensional Turbulence. 2019 , 117-125		
265	Helical Turbulence. 2019 , 126-135		
264	Craya-Herring and Helical Basis. 2019 , 136-171		
263	Field-theoretic Treatment of Energy Transfers. 2019 , 172-186		
262	Energy Transfers in Anisotropic Flows. 2019 , 187-195		
261	Turbulence Properties in Real Space and K41 Theory. 2019 , 196-212		
260	Energy Transfers in Flows with Scalars. 2019 , 215-228		

Flows with a Passive Scalar. 2019, 229-244 259 Stably Stratified Turbulence. 2019, 245-261 258 Thermal Convection. 2019, 262-289 257 A More Complex Example of an Active Scalar: Binary Fluid Mixture. 2019, 290-292 256 Energy Transfers in Flows with Vectors. 2019, 295-304 255 Flow with a Passive Vector. 2019, 305-307 254 Magnetohydrodynamics: Formalism. 2019, 308-328 253 Energy Transfers in MHD. 2019, 329-357 252 Models of MHD Turbulence. 2019, 358-385 251 Dynamo: Magnetic Field Generation in MHD. 2019, 386-409 250 Phenomenology of Quasi-Static MHD Turbulence. 2019, 410-419 249 Electron Magnetohydrodynamics. 2019, 420-426 248 Rotating Turbulence. 2019, 429-442 247 Flow with a Tensor. 2019, 443-451 246 Shell Models of Turbulence. 2019, 452-460 245 Burgers Turbulence. **2019**, 461-466 244 Compressible Turbulence. 2019, 467-480 243

242

Miscellaneous Applications of Energy Transfers. 2019, 481-488

241 Conclusions. **2019**, 489-490

240	Power Law Physics. 2019 , 491-492		
239	Wealth Distribution and Cascade in an Economy. 2019 , 493-496		
238	Renormalization Group Analysis of Hydrodynamic Turbulence. 2019 , 497-502		
237	References. 2019 , 508-526		
236	Large Prandtl number asymptotics in randomly forced turbulent convection. 2019 , 26, 1		4
235	Optical solitons and stability analysis with coupled nonlinear schrodinger equations having double external potentials. 2019 , 15, 102707		6
234	A two-dimensional-three-component model for spanwise rotating plane Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2019 , 880, 478-496	3.7	2
233	Effects of rotation on the bulk turbulent convection. <i>Journal of Fluid Mechanics</i> , 2019 , 881, 648-659	3.7	
232	Effect of sidewall on heat transfer and flow structure in Rayleigh B flard convection. <i>Journal of Fluid Mechanics</i> , 2019 , 881, 218-243	3.7	12
231	Free convection of power-law fluids in enclosures with partially heating from bottom and symmetrical cooling from sides. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 145, 118782	4.9	8
230	Cylindrical flowing-junction cell for the investigation of fluctuations and pattern-formation in miscible fluids. 2019 , 90, 085109		1
229	Strong coupling between height of gaps and thickness of thermal boundary layer in partitioned convection system. 2019 , 28, 094701		2
228	Aspect ratio dependence of Rayleigh-Bflard convection of cold water near its maximum density in box-shaped containers. <i>Physics of Fluids</i> , 2019 , 31, 075107	4.4	2
227	Deriving phase field crystal theory from dynamical density functional theory: Consequences of the approximations. <i>Physical Review E</i> , 2019 , 100, 022140	2.4	18
226	Marangoni convection of a viscous fluid over a vibrating plate. 2019 , 475, 20190214		
225	Large-Scale Pattern Formation in the Presence of Small-Scale Random Advection. 2019 , 123, 114501		4
224	Transient flows and reorientations of large-scale convection in a cubic cell. 2019 , 108, 104319		16

223	Velocity and geometry of propagating fronts in complex convective flow fields. <i>Physical Review E</i> , 2019 , 99, 012213	2.4	2
222	On the Orientation of Convective Rolls in an Inclined Rectangular Channel. 2019 , 54, 177-183		
221	Suppression of Rayleigh-Bflard secondary instability in dielectric fluids by unipolar charge injection. <i>Physics of Fluids</i> , 2019 , 31, 064106	4.4	11
220	Thermo-compositional Diabatic Convection in the Atmospheres of Brown Dwarfs and in Earth Atmosphere and Oceans. 2019 , 876, 144		19
219	On heat transport and energy partition in thermal convection with mixed boundary conditions. <i>Physics of Fluids</i> , 2019 , 31, 066601	4.4	7
218	Growing Stripes, with and without Wrinkles. 2019 , 18, 1078-1117		6
217	Correlations between the leading Lyapunov vector and pattern defects for chaotic Rayleigh-Bflard convection. 2019 , 29, 053103		6
216	Rayleigh-Bflard type natural convection heat transfer in two-dimensional geometries. 2019 , 153, 543-5	555	11
215	Solution-Processable Perovskite Solar Cells toward Commercialization: Progress and Challenges. 2019 , 29, 1807661		87
214	A spectrally-accurate algorithm for analysis of the stability of spatially modulated convection. 2019 , 184, 119-137		1
213	Secondary instability induced by thermocapillary effect in half-zone liquid bridge of high Prandtl number fluid. 2019 , 5, 19-00014-19-00014		5
212	Effect of small inclination on binary convection in elongated rectangular cells. <i>Physical Review E</i> , 2019 , 99, 023113	2.4	1
211	Continuously variable diffraction gratings using electroconvection in liquid crystals for beam steering applications. 2019 , 126, 224505		7
210	The atmospheric Rayleigh-Bfiard problem on the f-plane. <i>Physics of Fluids</i> , 2019 , 31, 104101	4.4	
209	Statistics of coherent structures in two-dimensional turbulent Rayleigh-Bflard convection. <i>Physics of Fluids</i> , 2019 , 31, 115112	4.4	5
208	Stochastic Galerkin method for cloud simulation. 2019 , 5, 65-106		3
207	Rayleigh B Bard convection with a melting boundary. <i>Journal of Fluid Mechanics</i> , 2019 , 858, 437-473	3.7	31
206	Inherent thermal convection in a granular gas inside a box under a gravity field. <i>Journal of Fluid Mechanics</i> , 2019 , 859, 160-173	3.7	

(2020-2019)

205	A direct meshless local collocation method for solving stochastic CahnHilliardIIook and stochastic SwiftHohenberg equations. 2019 , 98, 253-264		37
204	Oberbeck-Boussinesq approximations and geometrical confinement effects of free convection in open cavity. 2019 , 55, 2095-2102		5
203	Linear stability analysis of the natural convection in inclined rotating parallel plates. 2019, 383, 859-866		4
202	Boundary layers associated with the 3-D Boussinesq system for Rayleigh B Bard convection. 2020 , 99, 2026-2044		
201	Self-organization in physical and biological systems: Comment on "Morphogenesis as Bayesian inference: A variational approach to pattern formation and control in complex biological systems" by Franz Kuchling et al. 2020 , 33, 115-118		1
200	Electroconvection Near Electrochemical Interfaces: Experiments, Modeling, and Computation. Annual Review of Fluid Mechanics, 2020 , 52, 509-529	22	29
199	Convective Phenomena in Mushy Layers. <i>Annual Review of Fluid Mechanics</i> , 2020 , 52, 93-119	22	6
198	Single phase nanofluids in fluid mechanics and their hydrodynamic linear stability analysis. 2020 , 187, 105171		124
197	Flow behavior and heat transfer characteristics in Rayleigh-Bflard laminar convection with fluid-particle interaction. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 146, 118840	1.9	3
196	Simulations of Transport in Hard Particle Systems. 2020 , 180, 474-533		O
195	Spatio-temporal characterization of thermal fluctuations in a non-turbulent Rayleigh B flard convection at steady state. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020 , 547, 123867	3.3	4
194	The influence of the cell inclination on the heat transport and large-scale circulation in liquid metal convection. <i>Journal of Fluid Mechanics</i> , 2020 , 884,	3.7	16
193	Transitions and scaling in horizontal convection driven by different temperature profiles. 2020 , 148, 106166		5
192	Quantum Faraday excitations in degenerate electron-ion plasma. 2020 , 95, 045604		4
191	Intermittent fluctuations due to Lorentzian pulses in turbulent thermal convection. <i>Physics of Fluids</i> , 2020 , 32, 085102	1.4	1
190	Elliptical Instability and Multiple-Roll Flow Modes of the Large-Scale Circulation in Confined Turbulent Rayleigh-Bfiard Convection. 2020 , 125, 054502		10
189	Toward Greener Solution Processing of Perovskite Solar Cells. 2020 , 8, 13126-13138		22
188	Performance of parallel-in-time integration for Rayleigh Bflard convection. 2020 , 23, 1		1

187	Temporal dynamics of large-scale structures for turbulent Rayleigh B flard convection in a moderate aspect-ratio cylinder. <i>Journal of Fluid Mechanics</i> , 2020 , 901,	3.7	4
186	Near wall Prandtl number effects on velocity gradient invariants and flow topologies in turbulent Rayleigh-Bflard convection. 2020 , 10, 14887		O
185	An Overview of Emergent Order in Far-from-Equilibrium Driven Systems: From Kuramoto Oscillators to Rayleigh-Bflard Convection. 2020 , 22,		5
184	Stability of hexagonal pattern in Rayleigh B fiard convection for thermodependent shear-thinning fluids. <i>Journal of Fluid Mechanics</i> , 2020 , 905,	3.7	1
183	Parallel direct numerical simulation and analysis of turbulent Rayleigh B Bard convection at moderate Rayleigh numbers using an efficient algorithm. 2020 , 213, 104754		O
182	Linear instability analysis of the onset of thermal convection in an Ekman-Couette-flow. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 154, 119635	4.9	1
181	High-frequency periodic patterns driven by non-radiative fields coupled with Marangoni convection instabilities on laser-excited metal surfaces. 2020 , 194, 93-105		34
180	Rayleigh B Bard convection of a viscoplastic liquid in a trapezoidal enclosure. 2020 , 180, 105630		5
179	Pattern formation in a driven Bose E instein condensate. 2020 , 16, 652-656		18
178	Resolved energy budget of superstructures in Rayleigh B flard convection. <i>Journal of Fluid Mechanics</i> , 2020 , 887,	3.7	12
177	The behavior of vibrated systems. 2020 , 103-126		
176	Tenacious wall states in thermal convection in rapidly rotating containers. <i>Journal of Fluid Mechanics</i> , 2020 , 898,	3.7	7
175	Fourier continuation method for incompressible fluids with boundaries. 2020 , 256, 107482		5
174	Invariant states in inclined layer convection. Part 1. Temporal transitions along dynamical connections between invariant states. <i>Journal of Fluid Mechanics</i> , 2020 , 898,	3.7	3
173	Invariant states in inclined layer convection. Part 2. Bifurcations and connections between branches of invariant states. <i>Journal of Fluid Mechanics</i> , 2020 , 898,	3.7	O
172	Numerical study of heat transfer in Rayleigh-Bāard convection under rarefied gas conditions. <i>Physical Review E</i> , 2020 , 102, 013102	2.4	О
171	Bibliography. 2020 , 227-286		
170	Effect of unipolar charge injection direction on the onset of Rayleigh-Bflard convection: a lattice Boltzmann study. 2020 , 112, 104496		8

(2021-2020)

169	Transitions near the onset of low Prandtl-number rotating convection in presence of horizontal magnetic field. <i>Physics of Fluids</i> , 2020 , 32, 024110	4.4	6
168	On non-Oberbeck B oussinesq effects in Rayleigh B flard convection of air for large temperature differences. <i>Journal of Fluid Mechanics</i> , 2020 , 889,	3.7	11
167	Bicritical states in a vertical layer of fluid under two-frequency temperature modulation. <i>Physical Review E</i> , 2020 , 101, 023109	2.4	2
166	Transitions near the onset of rotating magnetoconvection. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 149, 119247	4.9	1
165	Lattice Boltzmann method simulation of ice melting process in the gas diffusion layer of fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 149, 119121	4.9	9
164	Coherence of temperature and velocity superstructures in turbulent Rayleigh B Bard flow. <i>Journal of Fluid Mechanics</i> , 2020 , 887,	3.7	20
163	Regulation of heat transfer in Rayleigh B flard convection in Newtonian liquids and Newtonian nanoliquids using gravity, boundary temperature and rotational modulations. 2020 , 142, 1579-1600		14
162	Nonlinear Stability of Natural Convection in an Inclined Fluid Layer. 2020 , 6, 1		2
161	On the application of neural networks for temperature field measurements using thermochromic liquid crystals. 2020 , 61, 1		6
160	3D Rayleigh-BBard-type natural convection in MWCNT-nanofluid-filled L-shaped enclosures with consideration of aggregation effect. 2020 ,		6
159	Nonlinear patterns shaping the domain on which they live. 2020 , 22, 052001		4
158	Determination of Numerical Errors in Under-Resolved DNS of Turbulent Non-isothermal Flows. 2021 , 106, 357-372		1
157	Bifurcation of Symmetric Domain Walls for the BflardRayleigh Convection Problem. 2021 , 239, 733-781		3
156	Final patterns and bifurcation analysis of the odd-periodic SwiftHohenberg equation with respect to the period. 2021 , 100, 1644-1659		
155	Two-dimensional oscillation of convection roll in a finite liquid metal layer under a horizontal magnetic field. <i>Journal of Fluid Mechanics</i> , 2021 , 911,	3.7	3
154	Rayleigh-Bflard convection of a model emulsion: anomalous heat-flux fluctuations and finite-size droplet effects. <i>Soft Matter</i> , 2021 , 17, 3709-3721	3.6	2
153	Strain and Defects in Oblique Stripe Growth. 2021 , 19, 1236-1260		
152	Generation of zonal flows in convective systems by travelling thermal waves. <i>Journal of Fluid Mechanics</i> , 2021 , 913,	3.7	5

151	Transition from steady to oscillating convection rolls in Rayleigh-Bliard convection under the influence of a horizontal magnetic field. <i>Physical Review Fluids</i> , 2021 , 6,	2.8	4
150	Spectral phase transitions in optical parametric oscillators. 2021 , 12, 835		8
149	Boundary zonal flows in rapidly rotating turbulent thermal convection. <i>Journal of Fluid Mechanics</i> , 2021 , 915,	3.7	8
148	Symmetry-breaking-induced rare fluctuations in a time-delay dynamic system. 2021 , 104, 1-14		O
147	Domain Walls for the BflardRayleigh Convection Problem with RigidffreefBoundary Conditions. 1		О
146	Heat flux in turbulent Rayleigh-BBard convection: Predictions derived from a boundary layer theory. <i>Physical Review Fluids</i> , 2021 , 6,	2.8	2
145	Overstable rotating convection in the presence of a vertical magnetic field. <i>Physics of Fluids</i> , 2021 , 33, 034130	4.4	О
144	Entanglement, Symmetry Breaking and Collapse: Correspondences Between Quantum and Self-Organizing Dynamics. 1		1
143	Laminar to turbulent flow transition inside the boundary layer adjacent to isothermal wall of natural convection flow in a cubical cavity. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 167, 120822	4.9	4
142	High Rayleigh number variational multiscale large eddy simulations of Rayleigh-Bflard convection. 2021 , 112, 103614		О
141	Long-time experimental investigation of turbulent superstructures in Rayleigh B flard convection by noninvasive simultaneous measurements of temperature and velocity fields. 2021 , 62, 1		3
140	Transition in atmospheric boundary layer turbulence structure from neutral to convective, and large-scale rolls. <i>Journal of Fluid Mechanics</i> , 2021 , 913,	3.7	3
139	How the growth of ice depends on the fluid dynamics underneath. 2021, 118,		3
138	Designing nonlinear thermal devices and metamaterials under the Fourier law: A route to nonlinear thermotics. 2021 , 16, 1		14
137	Onset of thermal convection in non-colloidal suspensions. <i>Journal of Fluid Mechanics</i> , 2021 , 915,	3.7	3
136	Self-organization of nanoparticles and molecules in periodic Liesegang-type structures. 2021 , 7,		2
135	Self-Organization Regimes Induced by Ultrafast Laser on Surfaces in the Tens of Nanometer Scales. 2021 , 11,		5
134	Protein-lipid film (fuzhu) prepared from soymilk: Effects of soymilk convection on its formation, composition, and quality. 2021 , 141, 110909		O

133	Periodic patterns displace active phase separation. 2021 , 23, 042002		2
132	Mechanism of transient stagnant formation in convection of binary mixtures. 2021 , 33,		
131	Rayleigh-Bflard convection of a gas-vapor mixture with abnormal dependence of thermal expansion coefficient on temperature. 2021 , 124, 105245		1
130	Lateral migration of a neutrally buoyant particle in Couette flow with thermal convection. 2021 , 138, 103612		3
129	Systematic comparison between the generalized Lorenz equations and DNS in the two-dimensional Rayleigh-BBard convection. 2021 , 31, 073119		1
128	Modelling Rayleigh-Bflard convection coupled with electro-vortex flow in liquid metal batteries. 2021 , 501, 229988		1
127	Enhancement of Heat Transfer Using Taylor Vortices in Thermal Processing for Food Process Intensification.		
126	Effect of the aspect ratio on the dynamics of air bubbles within Rayleigh B Bard convection. <i>Physics of Fluids</i> , 2021 , 33, 095104	4.4	1
125	Idealised 3D simulations of diabatically forced Ledoux convection. 2021 , 653, A54		
124	Enhanced buoyancy of active particles in convective flows. 2021 , 3,		1
123	Ice front shaping by upward convective current. Physical Review Fluids, 2021, 6,	2.8	О
122	Rayleigh-Bflard convection: The container shape matters. <i>Physical Review Fluids</i> , 2021 , 6,	2.8	3
121	A review of fluid instabilities and control strategies with applications in microgravity. 2021 , 16, 24		6
120	Active particle diffusion in convection roll arrays. 2021 , 23, 11944-11953		2
119	The Language of Pattern and Form. 2001 , 3-33		2
118	Encyclopedia of Complexity and Systems Science. 2009 , 3611-3641		3
117	Encyclopedia of Complexity and Systems Science. 2009 , 6459-6476		5
116	Encyclopedia of Complexity and Systems Science. 2009 , 8926-8946		4

115	F3 Heat Transfer by Free Convection: Internal Flows. 2010 , 673-680		1
114	F3 Wfmeßertragung bei freier Konvektion: Innenstrfhungen. 2013, 765-772		1
113	Energy Transfers in Fluid Flows: Multiscale and Spectral Perspectives. 2019,		24
112	Conductive heat flux in measurements of the Nusselt number in turbulent Rayleigh-Bflard convection. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	8
111	Natural convection above circular disks of evaporating liquids. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	15
110	Scaling relations in large-Prandtl-number natural thermal convection. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	18
109	Mean temperature profiles in turbulent thermal convection. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	14
108	Turbulent thermal superstructures in Rayleigh-BBard convection. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	66
107	Hexagonal convection patterns and their evolutionary scenarios in electroconvection induced by a strong unipolar injection. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	13
106	Electrically switchable surface waves and bouncing droplets excited on a liquid metal bath. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	9
105	Effect of heat-flux boundary conditions on the Rayleigh-BBard instability in a rarefied gas. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	5
104	Some fluid mechanical aspects of artistic painting. Physical Review Fluids, 2019, 4,	2.8	4
103	Spiral defect chaos in Rayleigh-Bflard convection: Asymptotic and numerical studies of azimuthal flows induced by rotating spirals. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	2
102	Velocity and thermal boundary layer equations for turbulent Rayleigh-Bflard convection. 2019 , 1,		12
101	Exploration of Coriolis Force on the Linear Stability of Couple Stress Fluid Flow Induced by Double Diffusive Convection. 2019 , 141,		6
100	Thermodynamic Formulation of Living Systems and Their Evolution. 2011 , 02, 379-391		10
99	Rayleigh-BBard-Marangoni convection characteristics during mass transfer between liquid layers. 2019 , 68, 074701		1
98	Equilibrium states of the ice-water front in a differentially heated rectangular cell.		O

(2020-2021)

97	Natural convection over vertical and horizontal heated flat surfaces: A review of recent progress focusing on underpinnings and implications for heat transfer and environmental applications. <i>Physics of Fluids</i> , 2021 , 33, 101301	4.4	6
96	Laminar Rayleigh B fiard Convection of Power-Law Fluids in Trapezoidal Enclosures. 1-6		
95	Strfhungsmechanische Instabilitflen. 2001 , 287-355		1
94	An Initial Look at Acceleration-Modulated Thermal Convection. 2004 , 331-357		
93	Some Canonical Bifurcations in the SwiftBohenberg Equation. 2008 , 1, 208		
92	Fluid Dynamics, Pattern Formation. 2009 , 49-84		
91	Optimal Control of Buoyant Flows with Temperature-Dependent Viscosity. 2010, 881-886		
90	Introduction. 2013 , 1-10		
89	Genesis of BBardMarangoni Patterns in Thin Liquid Films Drying into Air. 2013, 95-104		
88	Introduction to Effects of a Steady-State Acceleration Field. 2015 , 263-265		
87	3D Numerical Simulation of Rayleigh-Bflard Convection in a Cylindrical Container. 2015 , 367-374		
86	- Vegetation pattern formation. 2015 , 242-271		
85	Konvektive WEme- und StoffBertragung. 2016 , 1-54		
84	Encyclopedia of Complexity and Systems Science. 2017 , 1-21		
83	Konvektive WEme- und StoffBertragung. 2017 , 423-475		
82	Pattern Formation in Marine Systems. 2018 , 179-196		
81	F3 Wlīmelbertragung bei freier Konvektion: Innenstrlīhungen. 2019 , 773-783		
80	Convective Instabilities and Low Dimensional Modeling. 2020 , 385-408		O

79	Transport Phenomena in Viscoplastic Materials. 2020 , 167-258
----	--

78	Numerical Analysis of Density-Driven Reactive Flows in Hele-Shaw Cell Geometry. 2020 , 10, 5434-5440		1
77	Inclined convection in a layer of liquid water with poorly conducting boundaries. 2020, 2,		0
76	Coexistence of rod-like and lamellar eutectic growth patterns. 2022 , 207, 114314		1
75	Natural convection in phase change material: Experimental study. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 183, 122047	4.9	1
74	Pattern formation in clouds via Turing instabilities. 2020 , 6, 75-96		
73	Dynamic Mode Decomposition for Large-Scale Coherent Structure Extraction in Shear Flows. 2021 , PP,		0
72	Patterns and Interfaces in Dissipative Dynamics. 2020 , 85-105		
71	Characteristics of heat flow as well as process of heat conduction and transport in partitioned thermal convection. 2020 , 69, 014401		1
70	Convection partition and dynamics in inclined Poiseuille-Rayleigh-Bflard flow. 2020 , 69, 124401		
69	Konvektive WEme- und StoffBertragung. 2020 , 1-54		
68	Dynamics of flow reversals in the presence of a vertical magnetic field (a). 2021 , 135, 54005		Ο
67	GENERAL ASPECTS OF PATTERN FORMATION. 2006 , 1-54		
66	Spatial distribution of the heat transport in turbulent Rayleigh B Bard convection. 2007 , 506-508		
65	Blockchain as a Dissipative System and Cognitive Space. 2020 ,		
64	Thermal boundary layer structure in convection with and without rotation. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	Ο
63	On the bandwidth of stable nonlinear stripe patterns in finite size systems. 2021 , 31, 113136		
62	Transient nonlinear Rayleigh B fiard convection with single-mode initiation. <i>Physics of Fluids</i> , 2021 , 33, 114111	4.4	

61	Rayleigh B Bard convection in non-Newtonian fluids: Experimental and theoretical investigations. <i>Physics of Fluids</i> , 2021 , 33, 114112	4.4	О
60	Dynamics and length scales in vertical convection of liquid metals. <i>Journal of Fluid Mechanics</i> , 2022 , 932,	3.7	2
59	A Simple Thermal Convection System Showing Subcritical Transition and Localized Turbulences in Two-Dimensional Periodic Domains. <i>Journal of the Physical Society of Japan</i> , 2022 , 91,	1.5	
58	Energy-conserving model of hexagonal pattern in Rayleigh-Bflard convection. <i>Fluid Dynamics Research</i> ,	1.2	
57	Electric field induced macroscopic cellular phase of nanoparticles Soft Matter, 2022,	3.6	1
56	Evidence of local equilibrium in a non-turbulent Rayleigh B fiard convection at steady-state. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2022 , 593, 126985	3.3	1
55	Rayleigh B Bard flow for a Carreau fluid in a parallelepiped cavity. <i>Journal of Fluid Mechanics</i> , 2022 , 936,	3.7	О
54	Investigation of Magneto-Convection in Viscoelastic Fluid Saturated Anisotropic Porous Layer Under Local Thermal Non-Equilibrium Condition. <i>SSRN Electronic Journal</i> ,	1	
53	Flow states and heat transport in Rayleigh B Bard convection with different sidewall boundary conditions. <i>Journal of Fluid Mechanics</i> , 2022 , 936,	3.7	
52	Effect of horizontal aspect ratio on magnetoconvective instabilities in liquid metals. <i>Physical Review Fluids</i> , 2022 , 7,	2.8	
51	Measurement and memory in the periodically driven complex Ginzburg-Landau equation <i>Physical Review E</i> , 2022 , 105, 034210	2.4	O
50	Spiral Thermal Plumes in Water under Conventional Heating: Numerical Results on the Effect of Rotation. <i>Mathematics</i> , 2022 , 10, 1052	2.3	
49	Coriolis force effects on radial convection in a cylindrical annulus. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 189, 122650	4.9	
48	Numerical study of the Rayleigh B Bard convection in two-dimensional cavities heated by elliptical heat sources using the lattice Boltzmann method. <i>Physics of Fluids</i> , 2021 , 33, 123605	4.4	5
47	On the Thermodynamics of Self-Organization in Dissipative Systems: Reflections on the Unification of Physics and Biology. <i>Fluids</i> , 2022 , 7, 141	1.6	O
46	Formation of dissipative structures in a three-dimensional electro-thermo-convective flow. <i>Physical Review Fluids</i> , 2022 , 7,	2.8	O
45	A Rayleigh-BBard convection instability analog in vibrated gas-fluidized granular particles <i>Soft Matter</i> , 2022 ,	3.6	О
44	Rayleigh-Bflard convection with thermal boundary inhomogeneities <i>Physical Review E</i> , 2022 , 105, 025	- 10:8 ₄	O

43	Investigation of flow dynamics and heat transfer mechanism in turbulent Rayleigh B flard convection over multi-scale rough surfaces. <i>Journal of Fluid Mechanics</i> , 2022 , 941,	3.7	O
42	Measurement error of tracer-based velocimetry in single-phase turbulent flows with inhomogeneous refractive indices. <i>Experimental Thermal and Fluid Science</i> , 2022 , 136, 110681	3	1
41	Bifurcation analysis of two-dimensional Rayleigh-Bflard convection using deflation. <i>Physical Review E</i> , 2022 , 105,	2.4	
40	The fluid dynamics of propagating fronts with solutal and thermal coupling. <i>Journal of Fluid Mechanics</i> , 2022 , 942,	3.7	O
39	Flow patterns of Rayleigh-Bflard convection in cold water at maximum density in vertical cylindrical containers under conducting sidewall conditions. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 194, 123122	4.9	
38	The role of self-maintaining resilient reaction networks in the origin and evolution of life. <i>BioSystems</i> , 2022 , 219, 104720	1.9	О
37	Representative Velocity Scale of Rayleigh-Bflard Convection with Shear-Thinning Fluids. <i>SSRN Electronic Journal</i> ,	1	
36	Wavenumber lock-in and spatial parametric resonance in convection. <i>Journal of Fluid Mechanics</i> , 2022 , 944,	3.7	O
35	Study of turbulent dispersion of a concentration plume emitting from a line source over a rib-roughened surface. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 195, 123132	4.9	
34	Combined particle image velocimetry and thermometry of turbulent superstructures in thermal convection. <i>Journal of Fluid Mechanics</i> , 2022 , 945,	3.7	1
33	Molecular hints of two-step transition to convective flow via streamline percolation. 2022, 106,		
32	Onset of large-scale convection in wall-bounded turbulent shear flows. 2022 , 945,		
31	Analyzing Slightly Inclined Cylindrical Binary Fluid Convection via Higher Order Dynamic Mode Decomposition. 2022 , 21, 2148-2186		0
30	LAMINAR NATURAL CONVECTION OF POWER-LAW FLUIDS IN A TRAPEZOIDAL ENCLOSURE HEATED FROM THE BOTTOM. 2022 ,		O
29	EFFECTS OF WALL-SHEARING ON WEAKLY TURBULENT RAYLEIGH-BNARD CONVECTION. 2022,		0
28	Konvektive WEme- und StoffBertragung. 2022 , 425-478		О
27	Evaporation of a water layer under local non-isothermal heating. 2022, 119383		1
26	Large-scale circulations in a shear-free convective turbulence: Mean-field simulations.		O

25	Rayleigh B Bard instability in the presence of phase boundary and shear. 2022 , 948,	1
24	Supercritical and subcritical rotating convection in a horizontally periodic box with no-slip walls at the top and bottom.	O
23	Influence of Prandtl number in turbulent Rayleigh-Bflard convection over rough surfaces. 2022, 7,	О
22	Vortex patterns in rapidly rotating Rayleigh \mathbf{B} flard convection under spatial periodic forcing. 2022 , 950,	O
21	Temperature statistics in turbulent Rayleigh \mathbf{B} flard convection with a Prandtl number of Pr = 12.3. 2022 , 12, 105228	О
20	Stochastic chaos in chemical Lorenz system: Interplay of intrinsic noise and nonlinearity. 2022 , 165, 112763	O
19	The behavior of heat transfer and entropy in a thin layer of liquid under laser heating. 2023, 185, 108048	1
18	Pattern wavelengths and transport characteristics in three-dimensional bioconvection generated by chemotactic bacteria. 2022 , 952,	O
17	Pattern selection and heat transfer in the Rayleigh-BBard convection near the vicinity of the convection onset with viscoelastic fluids.	0
16	Turing patterns with high-resolution formed without chemical reaction in thin-film solution of organic semiconductors. 2022 , 13,	O
15	Directed Autonomous Motion and Chiral Separation of Self-Propelled Janus Particles in Convection Roll Arrays. 2022 , 13, 11413-11418	О
14	Numerical investigation of steady state laminar natural convection of power-law fluids in side-cooled trapezoidal enclosures heated from the bottom. 1-20	Ο
13	Staggered scheme for the compressible fluctuating hydrodynamics of multispecies fluid mixtures. 2023 , 107,	О
12	Oscillating onset of the Rayleigh-Bfiard convection with viscoelastic fluids in a slightly tilted cavity.	O
11	Heteroclinic orbits for a system of amplitude equations for orthogonal domain walls. 2023 , 355, 193-218	0
10	Odd Viscosity and Odd Elasticity. 2023 , 14, 471-510	Ο
9	Turbulence spectra in natural and forced convection. 2023 , 208, 124032	O
8	Multicellular structures in thin free liquid films induced by thermocapillary effect. 2023 , 641, 187-196	Ο

7	Experimental characterization of diffusive-thermal instabilities in CO2-diluted H2CH4CO unstrained diffusion flames. 2023 , 250, 112636	О
6	Single sidewall cooling modulation on Rayleigh B flard convection. 2023 , 957,	O
5	Time-dependent oscillating viscoelastic Rayleigh-Bflard convection: Viscoelastic kinetic energy budget analysis. 2023 , 8,	O
4	The influence of the liquid layer height on the velocity field and evaporation during local heating. 1-21	O
3	Stochastic model for the residence time of solid particles in turbulent Rayleigh-Bflard flow. 2023 , 8,	О
2	Investigation of turbulent superstructures in Rayleigh B flard convection by Lagrangian particle tracking of fluorescent microspheres. 2023 , 64,	O
1	Longitudinal and transverse modes of temperature-modulated inclined layer convection. 2023 , 107,	О