

# Chao Sun

## List of Publications by Year in descending order

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169  
papers

7,949  
citations

31949

53  
h-index

58549

82  
g-index

171  
all docs

171  
docs citations

171  
times ranked

4725  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Drop Impact on Superheated Surfaces. <i>Physical Review Letters</i> , 2012, 108, 036101.   | 2.9  | 378       |
| 2  | High-Reynolds Number Taylor-Couette Turbulence. <i>Annual Review of Fluid Mechanics</i> , 2016, 48, 53-80.   | 10.8 | 259       |
| 3  | On the spreading of impacting drops. <i>Journal of Fluid Mechanics</i> , 2016, 805, 636-655.   | 1.4  | 220       |
| 4  | Toward 3D Printing of Pure Metals by Laser-Induced Forward Transfer. <i>Advanced Materials</i> , 2015, 27, 4087-4092.  | 11.1 | 217       |
| 5  | Droplet impact on superheated micro-structured surfaces. <i>Soft Matter</i> , 2013, 9, 3272.   | 1.2  | 216       |
| 6  | Maximal Air Bubble Entrainment at Liquid-Drop Impact. <i>Physical Review Letters</i> , 2012, 109, 264501.  | 2.9  | 172       |
| 7  | Flow Reversals in Thermally Driven Turbulence. <i>Physical Review Letters</i> , 2010, 105, 034503.   | 2.9  | 165       |
| 8  | Control of slippage with tunable bubble mattresses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8422-8426.                 | 3.3  | 157       |
| 9  | Dynamics of high-speed micro-drop impact: numerical simulations and experiments at frame-to-frame times below 100 ns. <i>Soft Matter</i> , 2015, 11, 1708-1722.                    | 1.2  | 155       |
| 10 | Dynamic Leidenfrost Effect: Relevant Time and Length Scales. <i>Physical Review Letters</i> , 2016, 116, 064501.   | 2.9  | 150       |
| 11 | Direct measurements of air layer profiles under impacting droplets using high-speed color interferometry. <i>Physical Review E</i> , 2012, 85, 026315.                             | 0.8  | 128       |
| 12 | Air entrainment during impact of droplets on liquid surfaces. <i>Journal of Fluid Mechanics</i> , 2013, 726, .   | 1.4  | 125       |
| 13 | Particle image velocimetry measurement of the velocity field in turbulent thermal convection. <i>Physical Review E</i> , 2003, 68, 066303.   | 0.8  | 120       |
| 14 | Three-dimensional flow structures and dynamics of turbulent thermal convection in a cylindrical cell. <i>Physical Review E</i> , 2005, 72, 026302.                                 | 0.8  | 115       |
| 15 | Torque Scaling in Turbulent Taylor-Couette Flow with Co- and Counterrotating Cylinders. <i>Physical Review Letters</i> , 2011, 106, 024502.  | 2.9  | 115       |
| 16 | Formation of surface nanodroplets under controlled flow conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9253-9257. | 3.3  | 113       |
| 17 | On bubble clustering and energy spectra in pseudo-turbulence. <i>Journal of Fluid Mechanics</i> , 2010, 650, 287-306.  | 1.4  | 107       |
| 18 | Multiple states in highly turbulent Taylor-Couette flow. <i>Nature Communications</i> , 2014, 5, 3820.   | 5.8  | 107       |

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|----|--|-----|-----------|
| 19 | Azimuthal Symmetry, Flow Dynamics, and Heat Transport in Turbulent Thermal Convection in a Cylinder with an Aspect Ratio of 0.5. <i>Physical Review Letters</i> , 2005, 95, 074502.                          | 2.9 | 96        |
| 20 | Phase diagram for droplet impact on superheated surfaces. <i>Journal of Fluid Mechanics</i> , 2015, 779, .   | 1.4 | 95        |
| 21 | Morphological Evolution of Thermal Plumes in Turbulent Rayleigh-Bénard Convection. <i>Physical Review Letters</i> , 2007, 98, 074501.  | 2.9 | 92        |
| 22 | Needle-free injection into skin and soft matter with highly focused microjets. <i>Lab on A Chip</i> , 2013, 13, 1357.  | 3.1 | 92        |
| 23 | Bubbly and Buoyant Particle-Laden Turbulent Flows. <i>Annual Review of Condensed Matter Physics</i> , 2020, 11, 529-559.   | 5.2 | 92        |
| 24 | Experimental studies of the viscous boundary layer properties in turbulent Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2008, 605, 79-113.  | 1.4 | 90        |
| 25 | Fast Dynamics of Water Droplets Freezing from the Outside In. <i>Physical Review Letters</i> , 2017, 118, 084101.  | 2.9 | 89        |
| 26 | Statistics of kinetic and thermal energy dissipation rates in two-dimensional turbulent Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2017, 814, 165-184.                                  | 1.4 | 88        |
| 27 | Fingering patterns during droplet impact on heated surfaces. <i>Soft Matter</i> , 2015, 11, 3298-3303.   | 1.2 | 87        |
| 28 | Optimizing cell viability in droplet-based cell deposition. <i>Scientific Reports</i> , 2015, 5, 11304.  | 1.6 | 87        |
| 29 | Heat transport by turbulent Rayleigh-Bénard convection in 1 m diameter cylindrical cells of widely varying aspect ratio. <i>Journal of Fluid Mechanics</i> , 2005, 542, 165.                                 | 1.4 | 86        |
| 30 | Three-dimensional Lagrangian Voronoi analysis for clustering of particles and bubbles in turbulence. <i>Journal of Fluid Mechanics</i> , 2012, 693, 201-215.   | 1.4 | 83        |
| 31 | The importance of bubble deformability for strong drag reduction in bubbly turbulent Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2013, 722, 317-347.  | 1.4 | 81        |
| 32 | How surface roughness reduces heat transport for small roughness heights in turbulent Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2018, 836, .   | 1.4 | 80        |
| 33 | The Leidenfrost temperature increase for impacting droplets on carbon-nanofiber surfaces. <i>Soft Matter</i> , 2014, 10, 2102-2109.  | 1.2 | 78        |
| 34 | Drop Shaping by Laser-Pulse Impact. <i>Physical Review Applied</i> , 2015, 3, .  | 1.5 | 76        |
| 35 | Oscillations of the large-scale circulation in turbulent Rayleigh-Bénard convection: the sloshing mode and its relationship with the torsional mode. <i>Journal of Fluid Mechanics</i> , 2009, 630, 367-390. | 1.4 | 74        |
| 36 | Ultimate Turbulent Taylor-Couette Flow. <i>Physical Review Letters</i> , 2012, 108, 024501.  | 2.9 | 74        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Cascades of Velocity and Temperature Fluctuations in Buoyancy-Driven Thermal Turbulence. <i>Physical Review Letters</i> , 2006, 97, 144504.  | 2.9 | 73        |
| 38 | Optimal Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2012, 706, 118-149.   | 1.4 | 73        |
| 39 | Microdroplet impact at very high velocity. <i>Soft Matter</i> , 2012, 8, 10732.  | 1.2 | 70        |
| 40 | Vapour cooling of poorly conducting hot substrates increases the dynamic Leidenfrost temperature. <i>International Journal of Heat and Mass Transfer</i> , 2016, 97, 101-109.                      | 2.5 | 70        |
| 41 | Printing Functional 3D Microdevices by Laser-Induced Forward Transfer. <i>Small</i> , 2017, 13, 1602553.   | 5.2 | 70        |
| 42 | Energy spectra and bubble velocity distributions in pseudo-turbulence: Numerical simulations vs. experiments. <i>International Journal of Multiphase Flow</i> , 2011, 37, 1093-1098.               | 1.6 | 67        |
| 43 | Vibration-induced boundary-layer destabilization achieves massive heat-transport enhancement. <i>Science Advances</i> , 2020, 6, eaaz8239.   | 4.7 | 67        |
| 44 | Bubble Drag Reduction Requires Large Bubbles. <i>Physical Review Letters</i> , 2016, 117, 104502.  | 2.9 | 65        |
| 45 | Drop Fragmentation at Impact onto a Bath of an Immiscible Liquid. <i>Physical Review Letters</i> , 2013, 110, 264503.  | 2.9 | 64        |
| 46 | Crystal Nucleation by Laser-Induced Cavitation. <i>Crystal Growth and Design</i> , 2011, 11, 2311-2316.  | 1.4 | 62        |
| 47 | Highly focused supersonic microjets: numerical simulations. <i>Journal of Fluid Mechanics</i> , 2013, 719, 587-605.  | 1.4 | 62        |
| 48 | Energy spectra in turbulent bubbly flows. <i>Journal of Fluid Mechanics</i> , 2016, 791, 174-190.  | 1.4 | 62        |
| 49 | Surface Nanobubbles Nucleate Microdroplets. <i>Physical Review Letters</i> , 2014, 112, 144503.  | 2.9 | 61        |
| 50 | Optimal Taylor-Couette flow: radius ratio dependence. <i>Journal of Fluid Mechanics</i> , 2014, 747, 1-29.   | 1.4 | 61        |
| 51 | The quasi-static growth of CO <sub>2</sub> bubbles. <i>Journal of Fluid Mechanics</i> , 2014, 741, .   | 1.4 | 60        |
| 52 | The Twente turbulent Taylor-Couette (T3C) facility: Strongly turbulent (multiphase) flow between two independently rotating cylinders. <i>Review of Scientific Instruments</i> , 2011, 82, 025105. | 0.6 | 59        |
| 53 | How bulk nanobubbles are stable over a wide range of temperatures. <i>Journal of Colloid and Interface Science</i> , 2021, 596, 184-198.   | 5.0 | 58        |
| 54 | The role of Stewartson and Ekman layers in turbulent rotating Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2011, 688, 422-442.  | 1.4 | 57        |

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|----|---|-----|-----------|
| 55 | Growth and collapse of a vapour bubble in a microtube: the role of thermal effects. <i>Journal of Fluid Mechanics</i> , 2009, 632, 5-16.  | 1.4 | 53        |
| 56 | Growing bubbles in a slightly supersaturated liquid solution. <i>Review of Scientific Instruments</i> , 2013, 84, 065111.   | 0.6 | 52        |
| 57 | Microbubbles and Microparticles are Not Faithful Tracers of Turbulent Acceleration. <i>Physical Review Letters</i> , 2016, 117, 024501.   | 2.9 | 52        |
| 58 | Experimental investigation of the turbulence induced by a bubble swarm rising within incident turbulence. <i>Journal of Fluid Mechanics</i> , 2017, 825, 1091-1112.               | 1.4 | 52        |
| 59 | Highly Focused Supersonic Microjets. <i>Physical Review X</i> , 2012, 2, .  | 2.8 | 51        |
| 60 | Final fate of a Leidenfrost droplet: Explosion or takeoff. <i>Science Advances</i> , 2019, 5, eaav8081.   | 4.7 | 51        |
| 61 | Bouncing drop on liquid film: Dynamics of interfacial gas layer. <i>Physics of Fluids</i> , 2019, 31, .   | 1.6 | 51        |
| 62 | Angular momentum transport and turbulence in laboratory models of Keplerian flows. <i>Astronomy and Astrophysics</i> , 2012, 547, A64.  | 2.1 | 48        |
| 63 | Controlling Heat Transport and Flow Structures in Thermal Turbulence Using Ratchet Surfaces. <i>Physical Review Letters</i> , 2018, 120, 044501.                                  | 2.9 | 48        |
| 64 | Logarithmic Boundary Layers in Strong Taylor-Couette Turbulence. <i>Physical Review Letters</i> , 2013, 110, 264501.  | 2.9 | 46        |
| 65 | Scaling of the Reynolds number in turbulent thermal convection. <i>Physical Review E</i> , 2005, 72, 067302.  | 0.8 | 45        |
| 66 | Ion adsorption stabilizes bulk nanobubbles. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 1380-1394.   | 5.0 | 43        |
| 67 | Experimental investigation of homogeneity, isotropy, and circulation of the velocity field in buoyancy-driven turbulence. <i>Journal of Fluid Mechanics</i> , 2008, 598, 361-372. | 1.4 | 42        |
| 68 | Ejection Regimes in Picosecond Laser-Induced Forward Transfer of Metals. <i>Physical Review Applied</i> , 2015, 3, .  | 1.5 | 42        |
| 69 | Wall roughness induces asymptotic ultimate turbulence. <i>Nature Physics</i> , 2018, 14, 417-423.   | 6.5 | 40        |
| 70 | Wake-Driven Dynamics of Finite-Sized Buoyant Spheres in Turbulence. <i>Physical Review Letters</i> , 2015, 115, 124501.   | 2.9 | 39        |
| 71 | Bouncing-to-Merging Transition in Drop Impact on Liquid Film: Role of Liquid Viscosity. <i>Langmuir</i> , 2018, 34, 2654-2662.  | 1.6 | 39        |
| 72 | Leidenfrost drops cooling surfaces: theory and interferometric measurement. <i>Journal of Fluid Mechanics</i> , 2017, 827, 614-639.   | 1.4 | 38        |

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|----|---|-----|-----------|
| 73 | Lagrangian single-particle turbulent statistics through the Hilbert-Huang transform. <i>Physical Review E</i> , 2013, 87, 041003.   | 0.8 | 35        |
| 74 | How microstructures affect air film dynamics prior to drop impact. <i>Soft Matter</i> , 2014, 10, 3703.   | 1.2 | 35        |
| 75 | Hemodynamic comparison of stent configurations used for aortoiliac occlusive disease. <i>Journal of Vascular Surgery</i> , 2017, 66, 251-260.e1.  | 0.6 | 34        |
| 76 | Nonmonotonic response of drop impacting on liquid film: mechanism and scaling. <i>Soft Matter</i> , 2016, 12, 4521-4529.  | 1.2 | 33        |
| 77 | Flutter to tumble transition of buoyant spheres triggered by rotational inertia changes. <i>Nature Communications</i> , 2018, 9, 1792.  | 5.8 | 33        |
| 78 | Self-sustained biphasic catalytic particle turbulence. <i>Nature Communications</i> , 2019, 10, 3333.   | 5.8 | 33        |
| 79 | From Rayleigh-Bénard convection to porous-media convection: how porosity affects heat transfer and flow structure. <i>Journal of Fluid Mechanics</i> , 2020, 895, .                         | 1.4 | 32        |
| 80 | Measuring thin films using quantitative frustrated total internal reflection (FTIR). <i>European Physical Journal E</i> , 2017, 40, 54.   | 0.7 | 31        |
| 81 | Experimental investigation of heat transport in homogeneous bubbly flow. <i>Journal of Fluid Mechanics</i> , 2018, 845, 226-244.  | 1.4 | 31        |
| 82 | Dispersion of Air Bubbles in Isotropic Turbulence. <i>Physical Review Letters</i> , 2018, 121, 054501.  | 2.9 | 30        |
| 83 | Lagrangian statistics of light particles in turbulence. <i>Physics of Fluids</i> , 2012, 24, .  | 1.6 | 29        |
| 84 | Supergravitational turbulent thermal convection. <i>Science Advances</i> , 2020, 6, .   | 4.7 | 29        |
| 85 | Salinity transfer in bounded double diffusive convection. <i>Journal of Fluid Mechanics</i> , 2015, 768, 476-491.   | 1.4 | 27        |
| 86 | How gravity and size affect the acceleration statistics of bubbles in turbulence. <i>New Journal of Physics</i> , 2012, 14, 105017.   | 1.2 | 26        |
| 87 | Applying laser Doppler anemometry inside a Taylor-Couette geometry using a ray-tracer to correct for curvature effects. <i>European Journal of Mechanics, B/Fluids</i> , 2012, 36, 115-119. | 1.2 | 25        |
| 88 | Levitation of a drop over a moving surface. <i>Journal of Fluid Mechanics</i> , 2013, 733, .  | 1.4 | 25        |
| 89 | Exploring the phase space of multiple states in highly turbulent Taylor-Couette flow. <i>Physical Review Fluids</i> , 2016, 1, .  | 1.0 | 25        |
| 90 | Urban Land Development for Industrial and Commercial Use: A Case Study of Beijing. <i>Sustainability</i> , 2016, 8, 1323.   | 1.6 | 24        |

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|-----|--|-----|-----------|
| 91  | Translational and rotational dynamics of a large buoyant sphere in turbulence. <i>Experiments in Fluids</i> , 2016, 57, 1.   | 1.1 | 23        |
| 92  | Measured oscillations of the velocity and temperature fields in turbulent Rayleigh-Bénard convection in a rectangular cell. <i>Physical Review E</i> , 2007, 76, 036301. | 0.8 | 21        |
| 93  | Velocity profiles in strongly turbulent Taylor-Couette flow. <i>Physics of Fluids</i> , 2014, 26, .  | 1.6 | 21        |
| 94  | Heat-flux enhancement by vapour-bubble nucleation in Rayleigh-Bénard turbulence. <i>Journal of Fluid Mechanics</i> , 2016, 787, 331-366.                                 | 1.4 | 21        |
| 95  | Mass and Moment of Inertia Govern the Transition in the Dynamics and Wakes of Freely Rising and Falling Cylinders. <i>Physical Review Letters</i> , 2017, 119, 054501.   | 2.9 | 21        |
| 96  | Imaging of the Ejection Process of Nanosecond Laser-induced forward Transfer of Gold. <i>Journal of Laser Micro Nanoengineering</i> , 2015, 10, 154-157.                 | 0.4 | 21        |
| 97  | Spatial distribution of heat flux and fluctuations in turbulent Rayleigh-Bénard convection. <i>Physical Review E</i> , 2012, 86, 056315.                                 | 0.8 | 20        |
| 98  | On explosive boiling of a multicomponent Leidenfrost drop. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .         | 3.3 | 19        |
| 99  | Kinematics and dynamics of freely rising spheroids at high Reynolds numbers. <i>Journal of Fluid Mechanics</i> , 2021, 912, .  | 1.4 | 18        |
| 100 | How the growth of ice depends on the fluid dynamics underneath. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .    | 3.3 | 18        |
| 101 | Boiling regimes of impacting drops on a heated substrate under reduced pressure. <i>Physical Review Fluids</i> , 2018, 3, .  | 1.0 | 18        |
| 102 | Quantifying Cell Adhesion through Impingement of a Controlled Microjet. <i>Biophysical Journal</i> , 2015, 108, 23-31.   | 0.2 | 17        |
| 103 | Bubbly drag reduction using a hydrophobic inner cylinder in Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2020, 883, .                                  | 1.4 | 17        |
| 104 | Water entry of spheres into a rotating liquid. <i>Journal of Fluid Mechanics</i> , 2021, 912, .  | 1.4 | 17        |
| 105 | Deactivation of Microbubble Nucleation Sites by Alcohol-Water Exchange. <i>Langmuir</i> , 2013, 29, 9979-9984.   | 1.6 | 16        |
| 106 | The clustering morphology of freely rising deformable bubbles. <i>Journal of Fluid Mechanics</i> , 2013, 721, .  | 1.4 | 16        |
| 107 | Experimental techniques for turbulent Taylor-Couette flow and Rayleigh-Bénard convection. <i>Nonlinearity</i> , 2014, 27, R89-R121.                                      | 0.6 | 16        |
| 108 | Taylor-Couette turbulence at radius ratio : scaling, flow structures and plumes. <i>Journal of Fluid Mechanics</i> , 2016, 799, 334-351.                                 | 1.4 | 16        |

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|-----|--|-----|-----------|
| 109 | Origin of spray formation during impact on heated surfaces. <i>Soft Matter</i> , 2017, 13, 7514-7520.  | 1.2 | 16        |
| 110 | Periodically driven Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2018, 846, 834-845.   | 1.4 | 16        |
| 111 | Global and local statistics in turbulent emulsions. <i>Journal of Fluid Mechanics</i> , 2021, 912, .   | 1.4 | 16        |
| 112 | Drag and lift forces on a counter-rotating cylinder in rotating flow. <i>Journal of Fluid Mechanics</i> , 2010, 664, 150-173.  | 1.4 | 15        |
| 113 | Spreading and oscillation dynamics of drop impacting liquid film. <i>Journal of Fluid Mechanics</i> , 2019, 881, 859-871.  | 1.4 | 15        |
| 114 | Robustness of heat transfer in confined inclined convection at high Prandtl number. <i>Physical Review E</i> , 2019, 99, 013108.   | 0.8 | 15        |
| 115 | Leidenfrost drop impact on inclined superheated substrates. <i>Physics of Fluids</i> , 2020, 32, .   | 1.6 | 15        |
| 116 | A hybrid VOF-IBM method for the simulation of freezing liquid films and freezing drops. <i>Journal of Computational Physics</i> , 2021, 432, 110160.                     | 1.9 | 15        |
| 117 | Experimental investigation of heat transport in inhomogeneous bubbly flow. <i>Chemical Engineering Science</i> , 2019, 198, 260-267.                                     | 1.9 | 14        |
| 118 | Controlling secondary flow in Taylor-Couette turbulence through spanwise-varying roughness. <i>Journal of Fluid Mechanics</i> , 2020, 883, .                             | 1.4 | 14        |
| 119 | Azimuthal velocity profiles in Rayleigh-stable Taylor-Couette flow and implied axial angular momentum transport. <i>Journal of Fluid Mechanics</i> , 2015, 774, 342-362. | 1.4 | 13        |
| 120 | Turbulent Rayleigh-Bénard convection in an annular cell. <i>Journal of Fluid Mechanics</i> , 2019, 869, .  | 1.4 | 13        |
| 121 | Mixing induced by a bubble swarm rising through incident turbulence. <i>International Journal of Multiphase Flow</i> , 2019, 114, 316-322.                               | 1.6 | 13        |
| 122 | Turbulence strength in ultimate Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2018, 836, 397-412.   | 1.4 | 12        |
| 123 | Rotation of anisotropic particles in Rayleigh-Bénard turbulence. <i>Journal of Fluid Mechanics</i> , 2020, 901, .  | 1.4 | 12        |
| 124 | Anisotropic particles in two-dimensional convective turbulence. <i>Physics of Fluids</i> , 2020, 32, 023305.   | 1.6 | 12        |
| 125 | Catastrophic Phase Inversion in High-Reynolds-Number Turbulent Taylor-Couette Flow. <i>Physical Review Letters</i> , 2021, 126, 064501.                                  | 2.9 | 12        |
| 126 | Multi-point local temperature measurements inside the conducting plates in turbulent thermal convection. <i>Journal of Fluid Mechanics</i> , 2007, 570, 479-489.         | 1.4 | 11        |



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|-----|--|-----|-----------|
| 127 | Wall forces on a sphere in a rotating liquid-filled cylinder. <i>Physics of Fluids</i> , 2013, 25, .   | 1.6 | 11        |
| 128 | Air cavities at the inner cylinder of turbulent Taylor-Couette flow. <i>International Journal of Multiphase Flow</i> , 2018, 105, 264-273.   | 1.6 | 11        |
| 129 | Onset of fully compressible convection in a rapidly rotating spherical shell. <i>Journal of Fluid Mechanics</i> , 2019, 873, 1090-1115.  | 1.4 | 11        |
| 130 | Convective heat transfer along ratchet surfaces in vertical natural convection. <i>Journal of Fluid Mechanics</i> , 2019, 873, 1055-1071.  | 1.4 | 10        |
| 131 | Experimental study of the heat transfer properties of self-sustained biphasic thermally driven turbulence. <i>International Journal of Heat and Mass Transfer</i> , 2020, 152, 119515. | 2.5 | 10        |
| 132 | Coriolis effect on centrifugal buoyancy-driven convection in a thin cylindrical shell. <i>Journal of Fluid Mechanics</i> , 2021, 910, .  | 1.4 | 10        |
| 133 | Ice front shaping by upward convective current. <i>Physical Review Fluids</i> , 2021, 6, .   | 1.0 | 10        |
| 134 | Statistical characterization of thermal plumes in turbulent thermal convection. <i>Physical Review Fluids</i> , 2016, 1, .   | 1.0 | 10        |
| 135 | Equilibrium states of the ice-water front in a differentially heated rectangular cell <sup>(a)</sup> . <i>Europhysics Letters</i> , 2021, 135, 54001.                                  | 0.7 | 10        |
| 136 | Spectra and structure functions of the temperature and velocity fields in supergravitational thermal turbulence. <i>Physics of Fluids</i> , 2022, 34, .                                | 1.6 | 9         |
| 137 | Statistics of turbulent fluctuations in counter-rotating Taylor-Couette flows. <i>Physical Review E</i> , 2013, 88, 063001.  | 0.8 | 8         |
| 138 | Dynamics of bouncing-versus-merging response in jet collision. <i>Physical Review E</i> , 2015, 92, 023024.  | 0.8 | 8         |
| 139 | Electric field makes Leidenfrost droplets take a leap. <i>Soft Matter</i> , 2016, 12, 9622-9632.   | 1.2 | 8         |
| 140 | Finite-sized rigid spheres in turbulent Taylor-Couette flow: effect on the overall drag. <i>Journal of Fluid Mechanics</i> , 2018, 850, 246-261.                                       | 1.4 | 8         |
| 141 | Role of the large-scale structures in spanwise rotating plane Couette flow with multiple states. <i>Physical Review Fluids</i> , 2019, 4, .  | 1.0 | 8         |
| 142 | How sodium chloride extends lifetime of bulk nanobubbles in water. <i>Soft Matter</i> , 2022, 18, 2968-2978.   | 1.2 | 8         |
| 143 | Statistics of rigid fibers in strongly sheared turbulence. <i>Physical Review Fluids</i> , 2019, 4, .  | 1.0 | 7         |
| 144 | Effects of radius ratio on annular centrifugal Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2022, 930, .  | 1.4 | 7         |

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|-----|---|-----|-----------|
| 145 | How do the finite-size particles modify the drag in Taylor-Couette turbulent flow. <i>Journal of Fluid Mechanics</i> , 2022, 937, .   | 1.4 | 7         |
| 146 | Tribonucleation of bubbles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10089-10094.  | 3.3 | 6         |
| 147 | 3D Printing: Toward 3D Printing of Pure Metals by Laser-Induced Forward Transfer (Adv. Mater.) <i>Tj ETQq1 1 0.784314 rgBT /Overlock</i> 11.1/6   |     |           |
| 148 | Vapour-bubble nucleation and dynamics in turbulent Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2016, 795, 60-95.  | 1.4 | 6         |
| 149 | Drag reduction in boiling Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2019, 881, 104-118.  | 1.4 | 6         |
| 150 | Double maxima of angular momentum transport in small gap Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2020, 900, .  | 1.4 | 6         |
| 151 | Heat transfer and flow structure of two-dimensional thermal convection over ratchet surfaces. <i>Journal of Hydrodynamics</i> , 2021, 33, 970-978.  | 1.3 | 6         |
| 152 | The boiling Twente Taylor-Couette (BTTC) facility: Temperature controlled turbulent flow between independently rotating, coaxial cylinders. <i>Review of Scientific Instruments</i> , 2015, 86, 065108. | 0.6 | 5         |
| 153 | 3D spherical-cap fitting procedure for (truncated) sessile nano- and micro-droplets & -bubbles. <i>European Physical Journal E</i> , 2016, 39, 106.   | 0.7 | 5         |
| 154 | The influence of wall roughness on bubble drag reduction in Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2018, 851, 436-446.  | 1.4 | 5         |
| 155 | Statistics, plumes and azimuthally travelling waves in ultimate Taylor-Couette turbulent vortices. <i>Journal of Fluid Mechanics</i> , 2019, 876, 733-765.  | 1.4 | 5         |
| 156 | Twente mass and heat transfer water tunnel: Temperature controlled turbulent multiphase channel flow with heat and mass transfer. <i>Review of Scientific Instruments</i> , 2019, 90, 075117.           | 0.6 | 5         |
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