

Luca Brandt

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215
papers

6,019
citations

45
h-index

69
g-index

232
ext. papers

7,336
ext. citations

3.5
avg, IF

6.43
L-index

| # | Paper | IF | Citations |
|-----|--|-----|-----------|
| 215 | On the breakdown of boundary layer streaks. <i>Journal of Fluid Mechanics</i> , 2001 , 428, 29-60 | 3.7 | 311 |
| 214 | Transition in boundary layers subject to free-stream turbulence. <i>Journal of Fluid Mechanics</i> , 2004 , 517, 167-198 | 3.7 | 263 |
| 213 | Steady solutions of the Navier-Stokes equations by selective frequency damping. <i>Physics of Fluids</i> , 2006 , 18, 068102 | 4.4 | 186 |
| 212 | Turbulent channel flow of dense suspensions of neutrally buoyant spheres. <i>Journal of Fluid Mechanics</i> , 2015 , 764, 463-487 | 3.7 | 154 |
| 211 | Delaying transition to turbulence by a passive mechanism. <i>Physical Review Letters</i> , 2006 , 96, 064501 | 7.4 | 151 |
| 210 | Experimental and theoretical investigation of the nonmodal growth of steady streaks in a flat plate boundary layer. <i>Physics of Fluids</i> , 2004 , 16, 3627-3638 | 4.4 | 139 |
| 209 | Self-propulsion in viscoelastic fluids: Pushers vs. pullers. <i>Physics of Fluids</i> , 2012 , 24, 051902 | 4.4 | 123 |
| 208 | Stabilization of Tollmien-Schlichting waves by finite amplitude optimal streaks in the Blasius boundary layer. <i>Physics of Fluids</i> , 2002 , 14, L57-L60 | 4.4 | 114 |
| 207 | On streak breakdown in bypass transition. <i>Physics of Fluids</i> , 2008 , 20, 101505 | 4.4 | 112 |
| 206 | Input-Output analysis, model reduction and control of the flat-plate boundary layer. <i>Journal of Fluid Mechanics</i> , 2009 , 620, 263-298 | 3.7 | 109 |
| 205 | On Tollmien-Schlichting-like waves in streaky boundary layers. <i>European Journal of Mechanics, B/Fluids</i> , 2004 , 23, 815-833 | 2.4 | 109 |
| 204 | Instability and sensitivity of the flow around a rotating circular cylinder. <i>Journal of Fluid Mechanics</i> , 2010 , 650, 513-536 | 3.7 | 105 |
| 203 | Transition of streamwise streaks in zero-pressure-gradient boundary layers. <i>Journal of Fluid Mechanics</i> , 2002 , 472, 229-261 | 3.7 | 100 |
| 202 | Experimental study of the stabilization of Tollmien-Schlichting waves by finite amplitude streaks. <i>Physics of Fluids</i> , 2005 , 17, 054110 | 4.4 | 99 |
| 201 | Low-Reynolds-number swimming in a capillary tube. <i>Journal of Fluid Mechanics</i> , 2013 , 726, 285-311 | 3.7 | 98 |
| 200 | Wall accumulation and spatial localization in particle-laden wall flows. <i>Journal of Fluid Mechanics</i> , 2012 , 699, 50-78 | 3.7 | 95 |
| 199 | Global three-dimensional optimal disturbances in the Blasius boundary-layer flow using time-steppers. <i>Journal of Fluid Mechanics</i> , 2010 , 650, 181-214 | 3.7 | 83 |

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| 198 | Nonequilibrium thermodynamics and the optimal path to turbulence in shear flows. <i>Physical Review Letters</i> , 2011 , 106, 134502 | 7.4 | 72 |
| 197 | The lift-up effect: The linear mechanism behind transition and turbulence in shear flows. <i>European Journal of Mechanics, B/Fluids</i> , 2014 , 47, 80-96 | 2.4 | 67 |
| 196 | Matrix-Free Methods for the Stability and Control of Boundary Layers. <i>AIAA Journal</i> , 2009 , 47, 1057-1068.1 | 8.1 | 67 |
| 195 | Laminar, turbulent, and inertial shear-thickening regimes in channel flow of neutrally buoyant particle suspensions. <i>Physical Review Letters</i> , 2014 , 113, 254502 | 7.4 | 65 |
| 194 | Shear thickening in non-Brownian suspensions: an excluded volume effect. <i>Physical Review Letters</i> , 2013 , 111, 098302 | 7.4 | 62 |
| 193 | Effect of base-flow variation in noise amplifiers: the flat-plate boundary layer. <i>Journal of Fluid Mechanics</i> , 2011 , 687, 503-528 | 3.7 | 62 |
| 192 | Locomotion by tangential deformation in a polymeric fluid. <i>Physical Review E</i> , 2011 , 83, 011901 | 2.4 | 60 |
| 191 | Transient growth on boundary layer streaks. <i>Journal of Fluid Mechanics</i> , 2005 , 537, 91 | 3.7 | 60 |
| 190 | Micropropulsion and microrheology in complex fluids via symmetry breaking. <i>Physics of Fluids</i> , 2012 , 24, 103102 | 4.4 | 57 |
| 189 | On the convectively unstable nature of optimal streaks in boundary layers. <i>Journal of Fluid Mechanics</i> , 2003 , 485, 221-242 | 3.7 | 57 |
| 188 | Numerical simulation of turbulent channel flow over a viscous hyper-elastic wall. <i>Journal of Fluid Mechanics</i> , 2017 , 830, 708-735 | 3.7 | 55 |
| 187 | Receptivity to free-stream vorticity of flow past a flat plate with elliptic leading edge. <i>Journal of Fluid Mechanics</i> , 2010 , 653, 245-271 | 3.7 | 54 |
| 186 | Streak interactions and breakdown in boundary layer flows. <i>Physics of Fluids</i> , 2008 , 20, 024107 | 4.4 | 54 |
| 185 | Sedimentation of finite-size spheres in quiescent and turbulent environments. <i>Journal of Fluid Mechanics</i> , 2016 , 788, 640-669 | 3.7 | 53 |
| 184 | Analysis of Fluid Systems: Stability, Receptivity, Sensitivity. <i>Applied Mechanics Reviews</i> , 2014 , 66, | 8.6 | 52 |
| 183 | Numerical study of the sedimentation of spheroidal particles. <i>International Journal of Multiphase Flow</i> , 2016 , 87, 16-34 | 3.6 | 51 |
| 182 | Minimal transition thresholds in plane Couette flow. <i>Physics of Fluids</i> , 2013 , 25, 084103 | 4.4 | 51 |
| 181 | Linear stability analysis of channel flow of viscoelastic Oldroyd-B and FENE-P fluids. <i>Journal of Fluid Mechanics</i> , 2013 , 737, 249-279 | 3.7 | 50 |

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| 180 | Receptivity, instability and breakdown of Görtler flow. <i>Journal of Fluid Mechanics</i> , 2011 , 682, 362-396 | 3-7 | 49 |
| 179 | The effect of particle density in turbulent channel flow laden with finite size particles in semi-dilute conditions. <i>Physics of Fluids</i> , 2016 , 28, 033301 | 4-4 | 49 |
| 178 | The effect of the Basset history force on particle clustering in homogeneous and isotropic turbulence. <i>Physics of Fluids</i> , 2014 , 26, 041704 | 4-4 | 48 |
| 177 | Continuous Growth of Droplet Size Variance due to Condensation in Turbulent Clouds. <i>Physical Review Letters</i> , 2015 , 115, 184501 | 7-4 | 48 |
| 176 | Dispersion of swimming algae in laminar and turbulent channel flows: consequences for photobioreactors. <i>Journal of the Royal Society Interface</i> , 2013 , 10, 20121041 | 4-1 | 48 |
| 175 | Receptivity mechanisms in three-dimensional boundary-layer flows. <i>Journal of Fluid Mechanics</i> , 2009 , 618, 209-241 | 3-7 | 48 |
| 174 | Turbulent channel flow over an anisotropic porous wall Drag increase and reduction. <i>Journal of Fluid Mechanics</i> , 2018 , 842, 381-394 | 3-7 | 46 |
| 173 | Accumulation of motile elongated micro-organisms in turbulence. <i>Journal of Fluid Mechanics</i> , 2014 , 739, 22-36 | 3-7 | 46 |
| 172 | Universal Scaling Laws for Dense Particle Suspensions in Turbulent Wall-Bounded Flows. <i>Physical Review Letters</i> , 2016 , 117, 134501 | 7-4 | 45 |
| 171 | Active suspensions in thin films: nutrient uptake and swimmer motion. <i>Journal of Fluid Mechanics</i> , 2013 , 733, 528-557 | 3-7 | 45 |
| 170 | DNS of a spatially developing turbulent boundary layer with passive scalar transport. <i>International Journal of Heat and Fluid Flow</i> , 2009 , 30, 916-929 | 2-4 | 45 |
| 169 | Feedback control of three-dimensional optimal disturbances using reduced-order models. <i>Journal of Fluid Mechanics</i> , 2011 , 677, 63-102 | 3-7 | 45 |
| 168 | Numerical studies of the instability and breakdown of a boundary-layer low-speed streak. <i>European Journal of Mechanics, B/Fluids</i> , 2007 , 26, 64-82 | 2-4 | 45 |
| 167 | Drag reduction in turbulent channel flow laden with finite-size oblate spheroids. <i>Journal of Fluid Mechanics</i> , 2017 , 816, 43-70 | 3-7 | 41 |
| 166 | Three-dimensional instability of the flow around a rotating circular cylinder. <i>Journal of Fluid Mechanics</i> , 2013 , 730, 5-18 | 3-7 | 41 |
| 165 | First instability of the flow of shear-thinning and shear-thickening fluids past a circular cylinder. <i>Journal of Fluid Mechanics</i> , 2012 , 701, 201-227 | 3-7 | 41 |
| 164 | Channel flow of rigid sphere suspensions: Particle dynamics in the inertial regime. <i>International Journal of Multiphase Flow</i> , 2016 , 78, 12-24 | 3-6 | 40 |
| 163 | Inertial migration of spherical and oblate particles in straight ducts. <i>Journal of Fluid Mechanics</i> , 2017 , 819, 540-561 | 3-7 | 38 |

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| 162 | A microfluidic device to sort capsules by deformability: a numerical study. <i>Soft Matter</i> , 2014 , 10, 7705-113.6 | | 37 |
| 161 | The planar X-junction flow: stability analysis and control. <i>Journal of Fluid Mechanics</i> , 2014 , 753, 1-28 | 3.7 | 37 |
| 160 | Swept wing boundary-layer receptivity to localized surface roughness. <i>Journal of Fluid Mechanics</i> , 2012 , 711, 516-544 | 3.7 | 37 |
| 159 | Turbulent bands in plane-Poiseuille flow at moderate Reynolds numbers. <i>Physics of Fluids</i> , 2015 , 27, 041702 | 4.0 | 35 |
| 158 | Flexible Fiber Reveals the Two-Point Statistical Properties of Turbulence. <i>Physical Review Letters</i> , 2018 , 121, 044501 | 7.4 | 34 |
| 157 | Rheology of suspensions of viscoelastic spheres: Deformability as an effective volume fraction. <i>Physical Review Fluids</i> , 2018 , 3, | 2.8 | 34 |
| 156 | Droplets in homogeneous shear turbulence. <i>Journal of Fluid Mechanics</i> , 2019 , 876, 962-984 | 3.7 | 32 |
| 155 | Effects of the finite particle size in turbulent wall-bounded flows of dense suspensions. <i>Journal of Fluid Mechanics</i> , 2018 , 843, 450-478 | 3.7 | 31 |
| 154 | Computational modeling of multiphase viscoelastic and elastoviscoplastic flows. <i>International Journal for Numerical Methods in Fluids</i> , 2018 , 88, 521-543 | 1.9 | 31 |
| 153 | Model Reduction of the Nonlinear Complex Ginzburg-Landau Equation. <i>SIAM Journal on Applied Dynamical Systems</i> , 2010 , 9, 1284-1302 | 2.8 | 31 |
| 152 | Secondary threshold amplitudes for sinuous streak breakdown. <i>Physics of Fluids</i> , 2011 , 23, 074103 | 4.4 | 31 |
| 151 | Numerical simulations of aggregate breakup in bounded and unbounded turbulent flows. <i>Journal of Fluid Mechanics</i> , 2015 , 766, 104-128 | 3.7 | 30 |
| 150 | Towards minimal perturbations in transitional plane Couette flow. <i>Physical Review E</i> , 2010 , 82, 026316 | 2.4 | 30 |
| 149 | DNS and LES of estimation and control of transition in boundary layers subject to free-stream turbulence. <i>International Journal of Heat and Fluid Flow</i> , 2008 , 29, 841-855 | 2.4 | 29 |
| 148 | Sedimentation of inertia-less prolate spheroids in homogenous isotropic turbulence with application to non-motile phytoplankton. <i>Journal of Fluid Mechanics</i> , 2017 , 831, 655-674 | 3.7 | 28 |
| 147 | Rheology of Confined Non-Brownian Suspensions. <i>Physical Review Letters</i> , 2016 , 116, 018301 | 7.4 | 28 |
| 146 | Enhanced secondary motion of the turbulent flow through a porous square duct. <i>Journal of Fluid Mechanics</i> , 2015 , 784, 681-693 | 3.7 | 28 |
| 145 | Transition delay in a boundary layer flow using active control. <i>Journal of Fluid Mechanics</i> , 2013 , 731, 288-311 | 3.7 | 28 |

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| 144 | Numerical simulations of emulsions in shear flows. <i>Acta Mechanica</i> , 2019 , 230, 667-682 | 2.1 | 28 |
| 143 | Self-similar transport of inertial particles in a turbulent boundary layer. <i>Journal of Fluid Mechanics</i> , 2012 , 706, 584-596 | 3.7 | 27 |
| 142 | Linear three-dimensional global and asymptotic stability analysis of incompressible open cavity flow. <i>Journal of Fluid Mechanics</i> , 2015 , 768, 113-140 | 3.7 | 26 |
| 141 | Transition to turbulence in the boundary layer over a smooth and rough swept plate exposed to free-stream turbulence. <i>Journal of Fluid Mechanics</i> , 2010 , 646, 297-325 | 3.7 | 26 |
| 140 | Interface-resolved simulations of small inertial particles in turbulent channel flow. <i>Journal of Fluid Mechanics</i> , 2020 , 883, | 3.7 | 26 |
| 139 | Reduced particle settling speed in turbulence. <i>Journal of Fluid Mechanics</i> , 2016 , 808, 153-167 | 3.7 | 26 |
| 138 | Numerical study of heat transfer in laminar and turbulent pipe flow with finite-size spherical particles. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 71, 189-199 | 2.4 | 25 |
| 137 | Linear and nonlinear evolution of a localized disturbance in polymeric channel flow. <i>Journal of Fluid Mechanics</i> , 2014 , 760, 278-303 | 3.7 | 25 |
| 136 | Suspensions of deformable particles in a Couette flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2018 , 262, 3-11 | 2.7 | 24 |
| 135 | Particle transport in turbulent curved pipe flow. <i>Journal of Fluid Mechanics</i> , 2016 , 793, 248-279 | 3.7 | 24 |
| 134 | Interface-resolved simulations of particle suspensions in Newtonian, shear thinning and shear thickening carrier fluids. <i>Journal of Fluid Mechanics</i> , 2018 , 852, 329-357 | 3.7 | 23 |
| 133 | Turbulence modulation in channel flow of finite-size spheroidal particles. <i>Journal of Fluid Mechanics</i> , 2019 , 859, 887-901 | 3.7 | 23 |
| 132 | A volume-of-fluid method for interface-resolved simulations of phase-changing two-fluid flows. <i>Journal of Computational Physics</i> , 2020 , 407, 109251 | 4.1 | 22 |
| 131 | An efficient mass-preserving interface-correction level set/ghost fluid method for droplet suspensions under depletion forces. <i>Journal of Computational Physics</i> , 2018 , 353, 435-459 | 4.1 | 22 |
| 130 | The motion of a deforming capsule through a corner. <i>Journal of Fluid Mechanics</i> , 2015 , 770, 374-397 | 3.7 | 21 |
| 129 | Large Scale Accumulation Patterns of Inertial Particles in Wall-Bounded Turbulent Flow. <i>Flow, Turbulence and Combustion</i> , 2011 , 86, 519-532 | 2.5 | 21 |
| 128 | Aspect ratio effect on particle transport in turbulent duct flows. <i>Physics of Fluids</i> , 2016 , 28, 115103 | 4.4 | 21 |
| 127 | Turbulent duct flow with polymers. <i>Journal of Fluid Mechanics</i> , 2019 , 859, 1057-1083 | 3.7 | 21 |

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| 126 | Stability of fluids with shear-dependent viscosity in the lid-driven cavity. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2012 , 173-174, 49-61 | 2.7 | 20 |
| 125 | Motion of an elastic capsule in a constricted microchannel. <i>European Physical Journal E</i> , 2015 , 38, 134 | 1.5 | 19 |
| 124 | Elastoviscoplastic flows in porous media. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2018 , 258, 10-21 | 2.7 | 19 |
| 123 | Suspensions of finite-size neutrally buoyant spheres in turbulent duct flow. <i>Journal of Fluid Mechanics</i> , 2018 , 851, 148-186 | 3.7 | 19 |
| 122 | Inertial migration of a deformable particle in pipe flow. <i>Physical Review Fluids</i> , 2019 , 4, | 2.8 | 19 |
| 121 | Numerical study of the stabilisation of boundary-layer disturbances by finite amplitude streaks. <i>International Journal of Flow Control</i> , 2010 , 2, 259-288 | | 19 |
| 120 | Turbulent channel flow of an elastoviscoplastic fluid. <i>Journal of Fluid Mechanics</i> , 2018 , 853, 488-514 | 3.7 | 18 |
| 119 | Streak instability in viscoelastic Couette flow. <i>Physical Review Fluids</i> , 2017 , 2, | 2.8 | 18 |
| 118 | Weakly nonlinear analysis of boundary layer receptivity to free-stream disturbances. <i>Physics of Fluids</i> , 2002 , 14, 1426-1441 | 4.4 | 17 |
| 117 | Flowing fibers as a proxy of turbulence statistics. <i>Meccanica</i> , 2020 , 55, 357-370 | 2.1 | 17 |
| 116 | Experimental investigation of turbulent suspensions of spherical particles in a square duct. <i>Journal of Fluid Mechanics</i> , 2018 , 857, 748-783 | 3.7 | 16 |
| 115 | An Immersed Boundary Method for flows with evaporating droplets. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 143, 118563 | 4.9 | 15 |
| 114 | Haemorheology in dilute, semi-dilute and dense suspensions of red blood cells. <i>Journal of Fluid Mechanics</i> , 2019 , 872, 818-848 | 3.7 | 15 |
| 113 | Study of hydrodynamics in wave bioreactors by computational fluid dynamics reveals a resonance phenomenon. <i>Chemical Engineering Science</i> , 2019 , 193, 53-65 | 4.4 | 15 |
| 112 | On the effect of coalescence on the rheology of emulsions. <i>Journal of Fluid Mechanics</i> , 2019 , 880, 969-993 | 3.7 | 15 |
| 111 | Statistics of polymer extensions in turbulent channel flow. <i>Physical Review E</i> , 2012 , 86, 056314 | 2.4 | 15 |
| 110 | Inertial migration in dilute and semidilute suspensions of rigid particles in laminar square duct flow. <i>Physical Review Fluids</i> , 2017 , 2, | 2.8 | 15 |
| 109 | Increase of turbulent drag by polymers in particle suspensions. <i>Physical Review Fluids</i> , 2020 , 5, | 2.8 | 15 |

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| 108 | The dynamics of a capsule in a wall-bounded oscillating shear flow. <i>Physics of Fluids</i> , 2015 , 27, 071902 | 4.4 | 14 |
| 107 | Modal and non-modal stability of particle-laden channel flow. <i>Physics of Fluids</i> , 2011 , 23, 064110 | 4.4 | 14 |
| 106 | Clustering and increased settling speed of oblate particles at finite Reynolds number. <i>Journal of Fluid Mechanics</i> , 2018 , 848, 696-721 | 3.7 | 13 |
| 105 | Turbophoresis attenuation in a turbulent channel flow with polymer additives. <i>Journal of Fluid Mechanics</i> , 2013 , 732, 706-719 | 3.7 | 13 |
| 104 | Heat transfer in laminar Couette flow laden with rigid spherical particles. <i>Journal of Fluid Mechanics</i> , 2018 , 834, 308-334 | 3.7 | 13 |
| 103 | Numerical simulations of elastic capsules with nucleus in shear flow. <i>European Journal of Computational Mechanics</i> , 2017 , 26, 131-153 | 0.5 | 12 |
| 102 | Transition and self-sustained turbulence in dilute suspensions of finite-size particles. <i>Theoretical and Applied Mechanics Letters</i> , 2015 , 5, 121-125 | 1.8 | 12 |
| 101 | Stochastic approach to the receptivity problem applied to bypass transition in boundary layers. <i>Physics of Fluids</i> , 2008 , 20, 024108 | 4.4 | 12 |
| 100 | Dispersed Fibers Change the Classical Energy Budget of Turbulence via Nonlocal Transfer. <i>Physical Review Letters</i> , 2020 , 125, 114501 | 7.4 | 12 |
| 99 | Broadening of Cloud Droplet Size Spectra by Stochastic Condensation: Effects of Mean Updraft Velocity and CCN Activation. <i>Journals of the Atmospheric Sciences</i> , 2018 , 75, 451-467 | 2.1 | 11 |
| 98 | Entropy Generation in a Boundary Layer Transitioning Under the Influence of Freestream Turbulence. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2011 , 133, | 2.1 | 11 |
| 97 | Turbulent channel flow of a dense binary mixture of rigid particles. <i>Journal of Fluid Mechanics</i> , 2017 , 818, 623-645 | 3.7 | 10 |
| 96 | Particle Velocity and Acceleration in Turbulent Bent Pipe Flows. <i>Flow, Turbulence and Combustion</i> , 2015 , 95, 539-559 | 2.5 | 10 |
| 95 | The effect of polydispersity in a turbulent channel flow laden with finite-size particles. <i>European Journal of Mechanics, B/Fluids</i> , 2018 , 67, 54-64 | 2.4 | 10 |
| 94 | Dynamics of Three-Dimensional Turbulent Wall Plumes and Implications for Estimates of Submarine Glacier Melting. <i>Journal of Physical Oceanography</i> , 2018 , 48, 1941-1950 | 2.4 | 10 |
| 93 | The breakdown of Darcy's law in a soft porous material. <i>Soft Matter</i> , 2020 , 16, 939-944 | 3.6 | 10 |
| 92 | Settling of finite-size particles in turbulence at different volume fractions. <i>Acta Mechanica</i> , 2019 , 230, 413-430 | 2.1 | 10 |
| 91 | Yield-stress fluids in porous media: a comparison of viscoplastic and elastoviscoplastic flows. <i>Meccanica</i> , 2020 , 55, 331-342 | 2.1 | 10 |

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| 90 | Numerical study of laminar-turbulent transition in particle-laden channel flow. <i>Physical Review E</i> , 2013 , 87, 043011 | 2.4 | 9 |
| 89 | Buoyant finite-size particles in turbulent duct flow. <i>Physical Review Fluids</i> , 2019 , 4, | 2.8 | 9 |
| 88 | Interaction between a Vertical Turbulent Jet and a Thermocline. <i>Journal of Physical Oceanography</i> , 2016 , 46, 3415-3437 | 2.4 | 9 |
| 87 | Turbulence modulation by finite-size spherical particles in Newtonian and viscoelastic fluids. <i>International Journal of Multiphase Flow</i> , 2019 , 112, 116-129 | 3.6 | 8 |
| 86 | Numerical simulations of vorticity banding of emulsions in shear flows. <i>Soft Matter</i> , 2020 , 16, 2854-2863 | 3.6 | 8 |
| 85 | A numerical approach for particle-vortex interactions based on volume-averaged equations. <i>International Journal of Multiphase Flow</i> , 2018 , 104, 188-205 | 3.6 | 8 |
| 84 | Corrections for one- and two-point statistics measured with coarse-resolution particle image velocimetry. <i>Experiments in Fluids</i> , 2014 , 55, 1 | 2.5 | 8 |
| 83 | Linear stability of particle laden flows: the influence of added mass, fluid acceleration and Basset history force. <i>Meccanica</i> , 2014 , 49, 811-827 | 2.1 | 8 |
| 82 | Numerical study of filament suspensions at finite inertia. <i>Journal of Fluid Mechanics</i> , 2020 , 882, | 3.7 | 8 |
| 81 | Coherent structures in the turbulent channel flow of an elastoviscoplastic fluid. <i>Journal of Fluid Mechanics</i> , 2020 , 888, | 3.7 | 7 |
| 80 | Effective slip over partially filled microcavities and its possible failure. <i>Physical Review Fluids</i> , 2018 , 3, | 2.8 | 7 |
| 79 | The impact of porous walls on the rheology of suspensions. <i>Chemical Engineering Science</i> , 2021 , 230, 116178 | 4.4 | 7 |
| 78 | Particle-Laden Turbulence: Progress and Perspectives. <i>Annual Review of Fluid Mechanics</i> , 2022 , 54, | 2.2 | 7 |
| 77 | Flow-assisted droplet assembly in a 3D microfluidic channel. <i>Soft Matter</i> , 2019 , 15, 3451-3460 | 3.6 | 6 |
| 76 | Single sediment dynamics in turbulent flow over a porous bed Insights from interface-resolved simulations. <i>Journal of Fluid Mechanics</i> , 2020 , 893, | 3.7 | 6 |
| 75 | Statistics of Particle Accumulation in Spatially Developing Turbulent Boundary Layers. <i>Flow, Turbulence and Combustion</i> , 2014 , 92, 27-40 | 2.5 | 6 |
| 74 | Numerical study of boundary-layer receptivity on a swept wing 2011 , | | 6 |
| 73 | Turbulence in a network of rigid fibers. <i>Physical Review Fluids</i> , 2020 , 5, | 2.8 | 6 |

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| 72 | GPU acceleration of CaNS for massively-parallel direct numerical simulations of canonical fluid flows. <i>Computers and Mathematics With Applications</i> , 2021 , 81, 502-511 | 2.7 | 6 |
| 71 | Buoyancy-Driven Flow through a Bed of Solid Particles Produces a New Form of Rayleigh-Taylor Turbulence. <i>Physical Review Letters</i> , 2018 , 121, 224501 | 7.4 | 6 |
| 70 | Turbulent flow of finite-size spherical particles in channels with viscous hyper-elastic walls. <i>Journal of Fluid Mechanics</i> , 2019 , 873, 410-440 | 3.7 | 5 |
| 69 | Flow structures and shear-stress predictions in the turbulent channel flow over an anisotropic porous wall. <i>Journal of Physics: Conference Series</i> , 2020 , 1522, 012016 | 0.3 | 5 |
| 68 | Numerical simulations of a sphere settling in simple shear flows of yield stress fluids. <i>Journal of Fluid Mechanics</i> , 2020 , 896, | 3.7 | 5 |
| 67 | Numerical study of hot and cold spheroidal particles in a viscous fluid. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 149, 119206 | 4.9 | 5 |
| 66 | Identifying Turbulent Spots in Transitional Boundary Layers. <i>Journal of Turbomachinery</i> , 2013 , 135, | 1.8 | 5 |
| 65 | Feedback Control of Boundary Layer Bypass Transition: Experimental and Numerical Progress 2009 , | | 5 |
| 64 | Effect of elastic walls on suspension flow. <i>Physical Review Fluids</i> , 2019 , 4, | 2.8 | 5 |
| 63 | Finite-size spherical particles in a square duct flow of an elastoviscoplastic fluid: an experimental study. <i>Journal of Fluid Mechanics</i> , 2020 , 883, | 3.7 | 5 |
| 62 | Near-wall turbulence modulation by small inertial particles. <i>Journal of Fluid Mechanics</i> , 2021 , 922, | 3.7 | 5 |
| 61 | On the time scales and structure of Lagrangian intermittency in homogeneous isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2019 , 867, 438-481 | 3.7 | 4 |
| 60 | Sedimentation of finite-size particles in quiescent wall-bounded shear-thinning and Newtonian fluids. <i>International Journal of Multiphase Flow</i> , 2020 , 129, 103291 | 3.6 | 4 |
| 59 | Feedback Control of Boundary-Layer Bypass Transition: Comparison of Simulations with Experiments. <i>AIAA Journal</i> , 2010 , 48, 1848-1851 | 2.1 | 4 |
| 58 | Effect of viscosity ratio on the self-sustained instabilities in planar immiscible jets. <i>Physical Review Fluids</i> , 2017 , 2, | 2.8 | 4 |
| 57 | Role of large-scale advection and small-scale turbulence on vertical migration of gyrotactic swimmers. <i>Physical Review Fluids</i> , 2019 , 4, | 2.8 | 4 |
| 56 | Inertial settling of flexible fiber suspensions. <i>Physical Review Fluids</i> , 2020 , 5, | 2.8 | 4 |
| 55 | Direct numerical simulation of spray droplet evaporation in hot turbulent channel flow. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 160, 120184 | 4.9 | 4 |

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| 54 | Modal and non-modal linear stability of Poiseuille flow through a channel with a porous substrate. <i>European Journal of Mechanics, B/Fluids</i> , 2019 , 75, 29-43 | 2.4 | 4 |
| 53 | Regimes of heat transfer in finite-size particle suspensions. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 177, 121514 | 4.9 | 4 |
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