## Eric Lauga

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

222 11,296 49 102 g-index

239 13,289 4.6 7.18 ext. papers ext. citations avg, IF L-index

| #           | Paper   | IF             | Citations |
|-------------|---|----------------|-----------|
| 222         | Order and information in the patterns of spinning magnetic micro-disks at the air-water interface <i>Science Advances</i> , <b>2022</b> , 8, eabk0685 | 14.3           | 5         |
| 221         | Jet-driven viscous locomotion of confined thermoresponsive microgels. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 104101                      | 3.4            | 0         |
| 220         | Cilia metasurfaces for electronically programmable microfluidic manipulation. <i>Nature</i> , <b>2022</b> , 605, 681-6                                | 8 <b>5</b> 0.4 | 10        |
| 219         | Fluid Mechanics of Mosaic Ciliated Tissues. <i>Physical Review Letters</i> , <b>2021</b> , 127, 198102  | 7.4            | 1         |
| 218         | Stabilizing viscous extensional flows using reinforcement learning <i>Physical Review E</i> , <b>2021</b> , 104, 05510                                | 82.4           | 1         |
| 217         | The fluid dynamics of collective vortex structures of plant-animal worms. <i>Journal of Fluid Mechanics</i> , <b>2021</b> , 914,                      | 3.7            | 2         |
| 216         | Energetics of synchronization for model flagella and cilia. <i>Physical Review E</i> , <b>2021</b> , 103, 042419                                      | 2.4            | O         |
| 215         | Geometric phase methods with Stokes theorem for a general viscous swimmer. <i>Journal of Fluid Mechanics</i> , <b>2021</b> , 916,                     | 3.7            | 1         |
| 214         | Front-back asymmetry controls the impact of viscoelasticity on helical swimming. <i>Physical Review Fluids</i> , <b>2021</b> , 6,                     | 2.8            | 3         |
| 213         | Direct measurement of unsteady microscale Stokes flow using optically driven microspheres. <i>Physical Review Fluids</i> , <b>2021</b> , 6,           | 2.8            | 1         |
| 212         | The bank of swimming organisms at the micron scale (BOSO-Micro). PLoS ONE, 2021, 16, e0252291   | 3.7            | 8         |
| 211         | Rechargeable self-assembled droplet microswimmers driven by surface phase transitions. <i>Nature Physics</i> , <b>2021</b> , 17, 1050-1055            | 16.2           | 6         |
| <b>21</b> 0 | Rebound and scattering of motile algae in confined chambers. <i>Soft Matter</i> , <b>2021</b> , 17, 4857-4873   | 3.6            | 1         |
| 209         | Hydrodynamic synchronization in strong confinement. <i>Physical Review E</i> , <b>2021</b> , 103, 022403  | 2.4            | 2         |
| 208         | Zigzag instability of biased pusher swimmers. <i>Europhysics Letters</i> , <b>2021</b> , 133, 44002   | 1.6            | 1         |
| 207         | Fluid flow in the sarcomere. Archives of Biochemistry and Biophysics, 2021, 706, 108923   | 4.1            | 2         |
| 206         | Hydrodynamics and direction change of tumbling bacteria. <i>PLoS ONE</i> , <b>2021</b> , 16, e0254551   | 3.7            |           |

## (2020-2021)

| 205                      | Purely viscous acoustic propulsion of bimetallic rods. Physical Review Fluids, 2021, 6,  | 2.8               | 3                |
|--------------------------|--|-------------------|------------------|
| 204                      | A mechanism for sarcomere breathing: volume change and advective flow within the myofilament lattice. <i>Biophysical Journal</i> , <b>2021</b> , 120, 4079-4090  | 2.9               | O                |
| 203                      | Microswimming in viscoelastic fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , <b>2021</b> , 297, 104655  | 2.7               | 7                |
| 202                      | Swirling Instability of the Microtubule Cytoskeleton. <i>Physical Review Letters</i> , <b>2021</b> , 126, 028103   | 7.4               | 11               |
| 201                      | Hydrodynamic interactions between a point force and a slender filament. <i>Physical Review Fluids</i> , <b>2021</b> , 6,   | 2.8               | 1                |
| 200                      | Light-switchable propulsion of active particles with reversible interactions. <i>Nature Communications</i> , <b>2020</b> , 11, 2628  | 17.4              | 25               |
| 199                      | Geometrical Constraints on the Tangling of Bacterial Flagellar Filaments. <i>Scientific Reports</i> , <b>2020</b> , 10, 8406   | 4.9               | 4                |
| 198                      | The 2020 motile active matter roadmap. <i>Journal of Physics Condensed Matter</i> , <b>2020</b> , 32, 193001   | 1.8               | 115              |
| 197                      | Collective stiffening of soft hair assemblies. <i>Physical Review E</i> , <b>2020</b> , 102, 010602  | 2.4               | 2                |
|                          |  |                   |                  |
| 196                      | Irreversible hydrodynamic trapping by surface rollers. <i>Soft Matter</i> , <b>2020</b> , 16, 2611-2620  | 3.6               | 4                |
| 196<br>195               | Irreversible hydrodynamic trapping by surface rollers. <i>Soft Matter</i> , <b>2020</b> , 16, 2611-2620  Stokes flow due to point torques and sources in a spherical geometry. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  | 3.6<br>2.8        | 3                |
|                          | Stokes flow due to point torques and sources in a spherical geometry. <i>Physical Review Fluids</i> , <b>2020</b> ,  |                   | <u>'</u>         |
| 195                      | Stokes flow due to point torques and sources in a spherical geometry. <i>Physical Review Fluids</i> , <b>2020</b> , 5,   | 2.8               | 3                |
| 195                      | Stokes flow due to point torques and sources in a spherical geometry. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Hydrodynamic model for Spiroplasma motility. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Traveling waves are hydrodynamically optimal for long-wavelength flagella. <i>Physical Review Fluids</i> ,  | 2.8               | 3                |
| 195<br>194<br>193        | Stokes flow due to point torques and sources in a spherical geometry. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Hydrodynamic model for Spiroplasma motility. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Traveling waves are hydrodynamically optimal for long-wavelength flagella. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Direct versus indirect hydrodynamic interactions during bundle formation of bacterial flagella.  | 2.8<br>2.8<br>2.8 | 3<br>1           |
| 195<br>194<br>193        | Stokes flow due to point torques and sources in a spherical geometry. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Hydrodynamic model for Spiroplasma motility. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Traveling waves are hydrodynamically optimal for long-wavelength flagella. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Direct versus indirect hydrodynamic interactions during bundle formation of bacterial flagella. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Cilia density and flow velocity affect alignment of motile cilia from brain cells. <i>Journal of</i>   | 2.8<br>2.8<br>2.8 | 3<br>1<br>1<br>3 |
| 195<br>194<br>193<br>192 | Stokes flow due to point torques and sources in a spherical geometry. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Hydrodynamic model for Spiroplasma motility. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Traveling waves are hydrodynamically optimal for long-wavelength flagella. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Direct versus indirect hydrodynamic interactions during bundle formation of bacterial flagella. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  Cilia density and flow velocity affect alignment of motile cilia from brain cells. <i>Journal of Experimental Biology</i> , <b>2020</b> , 223, | 2.8<br>2.8<br>2.8 | 3<br>1<br>1<br>3 |

| 187 Self-organisation and convection of confi                | ed magnetotactic bacteria. <i>Scientific Reports</i> , <b>2020</b> , 10, 135784.9 2 |
|--|---|
| 186 Biological Background <b>2020</b> , 3-11                 |   |
| 185 The Fluid Dynamics of Microscopic Locom                  | otion <b>2020</b> , 12-28   |
| 184 The Waving Sheet Model <b>2020</b> , 29-44               |   |
| 183 The Squirmer Model <b>2020</b> , 45-62                   |   |
| 182 Cellular Locomotion <b>2020</b> , 63-64                  |   |
| 181 Flagella and the Physics of Viscous Propul               | sion <b>2020</b> , 65-76  |
| 180 Hydrodynamics of Slender Filaments <b>2020</b>           | , 77-96   |
| 179 Waving of Eukaryotic Flagella <b>2020</b> , 97-11        | 9   |
| 178 Rotation of Bacterial Flagellar Filaments 2              | <b>020</b> , 120-138  |
| 177 Flows and Stresses Induced by Cells <b>2020</b> ,        | 139-156   |
| 176 Swimming Cells in Flows <b>2020</b> , 159-185            |   |
| 175 Self-Propulsion and Surfaces <b>2020</b> , 186-22        | 5   |
| 174 Hydrodynamic Synchronisation <b>2020</b> , 226-          | 268   |
| 173 Diffusion and Noisy Swimming <b>2020</b> , 269-          | 290   |
| 172 Hydrodynamics of Collective Locomotion                   | <b>2020,</b> 291-314  |
| 171 Locomotion and Transport in Complex Flu                  | ids <b>2020</b> , 315-352   |
| Selectively controlled magnetic microrobo<br>170 116, 134101 | ots with opposing helices. <i>Applied Physics Letters</i> , <b>2020</b> , 3.4 12    |

| 169 | Viscoelastic propulsion of a rotating dumbbell. <i>Microfluidics and Nanofluidics</i> , <b>2019</b> , 23, 1  | 2.8              | 7   |
|-----|--|------------------|-----|
| 168 | The near and far of a pair of magnetic capillary disks. <i>Soft Matter</i> , <b>2019</b> , 15, 1497-1507   | 3.6              | 3   |
| 167 | A stochastic model for bacteria-driven micro-swimmers. <i>Soft Matter</i> , <b>2019</b> , 15, 2605-2616  | 3.6              | 2   |
| 166 | Propulsion by stiff elastic filaments in viscous fluids. <i>Physical Review E</i> , <b>2019</b> , 99, 053107   | 2.4              | 2   |
| 165 | The -flagella problem: elastohydrodynamic motility transition of multi-flagellated bacteria. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2019</b> , 475, 2018069 | 0 <sup>2.4</sup> | 9   |
| 164 | Active Particles Powered by Quincke Rotation in a Bulk Fluid. <i>Physical Review Letters</i> , <b>2019</b> , 122, 19450.   | 3 <sub>7.4</sub> | 16  |
| 163 | Self-organization of swimmers drives long-range fluid transport in bacterial colonies. <i>Nature Communications</i> , <b>2019</b> , 10, 1792   | 17.4             | 17  |
| 162 | Stochastic dynamics of dissolving active particles. European Physical Journal E, 2019, 42, 88  | 1.5              | 5   |
| 161 | Universal optimal geometry of minimal phoretic pumps. Scientific Reports, 2019, 9, 10788   | 4.9              | 3   |
| 160 | A Light-Driven Microgel Rotor. <i>Small</i> , <b>2019</b> , 15, e1903379   | 11               | 18  |
| 159 | Shape-programmed 3D printed swimming microtori for the transport of passive and active agents. <i>Nature Communications</i> , <b>2019</b> , 10, 4932   | 17.4             | 21  |
| 158 | Transition to bound states for bacteria swimming near surfaces. <i>Physical Review E</i> , <b>2019</b> , 100, 043117   | 2.4              | 4   |
| 157 | Hydrodynamics of bacteriophage migration along bacterial flagella. Physical Review Fluids, 2019, 4,  | 2.8              | 4   |
| 156 | Method of regularized stokeslets: Flow analysis and improvement of convergence. <i>Physical Review Fluids</i> , <b>2019</b> , 4,   | 2.8              | 6   |
| 155 | Swimming eukaryotic microorganisms exhibit a universal speed distribution. <i>ELife</i> , <b>2019</b> , 8,   | 8.9              | 15  |
| 154 | Adaptive locomotion of artificial microswimmers. <i>Science Advances</i> , <b>2019</b> , 5, eaau1532   | 14.3             | 127 |
| 153 | Viscous growth and rebound of a bubble near a rigid surface. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 860, 172  | -399             | 5   |
|     |  |                  |     |

| 151 | Autophoretic motion in three dimensions. Soft Matter, 2018, 14, 3304-3314   | 3.6      | 27 |
|-----|---|----------|----|
| 150 | Leading-order Stokes flows near a corner. IMA Journal of Applied Mathematics, 2018, 83, 590-633   | 1        | 3  |
| 149 | Swimming of peritrichous bacteria is enabled by an elastohydrodynamic instability. <i>Scientific Reports</i> , <b>2018</b> , 8, 10728             | 4.9      | 35 |
| 148 | Physics of Bubble-Propelled Microrockets. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1800686  | 15.6     | 25 |
| 147 | Computing the motor torque of Escherichia coli. Soft Matter, 2018, 14, 5955-5967  | 3.6      | 10 |
| 146 | Collective dissolution of microbubbles. <i>Physical Review Fluids</i> , <b>2018</b> , 3,  | 2.8      | 25 |
| 145 | Collectives of Spinning Mobile Microrobots for Navigation and Object Manipulation at the Air-Water Interface <b>2018</b> ,                        |          | 8  |
| 144 | Artificial chemotaxis of phoretic swimmers: instantaneous and long-time behaviour. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 856, 921-957 | 3.7      | 14 |
| 143 | The swimming of a deforming helix. European Physical Journal E, 2018, 41, 119   | 1.5      | 11 |
| 142 | The boundary integral formulation of Stokes flows includes slender-body theory. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 850,            | 3.7      | 32 |
| 141 | Geometric tuning of self-propulsion for Janus catalytic particles. Scientific Reports, 2017, 7, 42264   | 4.9      | 41 |
| 140 | Swimming with a cage: low-Reynolds-number locomotion inside a droplet. <i>Soft Matter</i> , <b>2017</b> , 13, 3161-3                              | 3 13 763 | 18 |
| 139 | The non-Gaussian tops and tails of diffusing boomerangs. <i>Soft Matter</i> , <b>2017</b> , 13, 2977-2982   | 3.6      | 6  |
| 138 | Arbitrary axisymmetric steady streaming: flow, force and propulsion. <i>Journal of Engineering Mathematics</i> , <b>2017</b> , 105, 31-65         | 1.2      | 20 |
| 137 | Bubble-based acoustic micropropulsors: active surfaces and mixers. <i>Lab on A Chip</i> , <b>2017</b> , 17, 1515-1528                             | 7.2      | 23 |
| 136 | Helical propulsion in shear-thinning fluids. <i>Journal of Fluid Mechanics</i> , <b>2017</b> , 812,   | 3.7      | 30 |
| 135 | Microscale flow dynamics of ribbons and sheets. <i>Soft Matter</i> , <b>2017</b> , 13, 546-553  | 3.6      | 9  |
| 134 | Empirical resistive-force theory for slender biological filaments in shear-thinning fluids. <i>Physical Review E</i> , <b>2017</b> , 95, 062416   | 2.4      | 15 |

## (2016-2017)

| 133 | Spontaneous oscillations of elastic filaments induced by molecular motors. <i>Journal of the Royal Society Interface</i> , <b>2017</b> , 14,                  | 4.1 | 39  |
|-----|---|-----|-----|
| 132 | Active particles in periodic lattices. <i>New Journal of Physics</i> , <b>2017</b> , 19, 115001   | 2.9 | 33  |
| 131 | Autophoretic flow on a torus. Physical Review Fluids, 2017, 2,  | 2.8 | 10  |
| 130 | Analytical solutions to slender-ribbon theory. <i>Physical Review Fluids</i> , <b>2017</b> , 2,   | 2.8 | 19  |
| 129 | Two-fluid model for locomotion under self-confinement. <i>Physical Review Fluids</i> , <b>2017</b> , 2,   | 2.8 | 6   |
| 128 | Bundling of elastic filaments induced by hydrodynamic interactions. <i>Physical Review Fluids</i> , <b>2017</b> , 2,  | 2.8 | 30  |
| 127 | Micro-Tug-of-War: A Selective Control Mechanism for Magnetic Swimmers. <i>Physical Review Applied</i> , <b>2016</b> , 5,                                      | 4.3 | 9   |
| 126 | Rotation of slender swimmers in isotropic-drag media. <i>Physical Review E</i> , <b>2016</b> , 93, 043125   | 2.4 | 4   |
| 125 | Structured light enables biomimetic swimming and versatile locomotion of photoresponsive soft microrobots. <i>Nature Materials</i> , <b>2016</b> , 15, 647-53 | 27  | 558 |
| 124 | Bacterial Hydrodynamics. <i>Annual Review of Fluid Mechanics</i> , <b>2016</b> , 48, 105-130  | 22  | 231 |
| 123 | Flagellar flows around bacterial swarms. <i>Physical Review Fluids</i> , <b>2016</b> , 1,   | 2.8 | 20  |
| 122 | Flow analysis of the low Reynolds number swimmer C. elegans. <i>Physical Review Fluids</i> , <b>2016</b> , 1,   | 2.8 | 14  |
| 121 | Elastohydrodynamic Synchronization of Adjacent Beating Flagella. <i>Physical Review Fluids</i> , <b>2016</b> , 1,   | 2.8 | 32  |
| 120 | Sensing in the Mouth: A Model for Filiform Papillae as Strain Amplifiers. Frontiers in Physics, 2016, 4,  | 3.9 | 15  |
| 119 | Clustering instability of focused swimmers. <i>Europhysics Letters</i> , <b>2016</b> , 116, 64004   | 1.6 | 4   |
| 118 | Phoretic flow induced by asymmetric confinement. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 799,   | 3.7 | 3   |
| 117 | Can phoretic particles swim in two dimensions?. Physical Review E, 2016, 94, 062606   | 2.4 | 9   |
|     |   |     |     |

| 115 | Slender-ribbon theory. <i>Physics of Fluids</i> , <b>2016</b> , 28, 013101   | 4.4            | 33  |
|-----|--|----------------|-----|
| 114 | Small acoustically forced symmetric bodies in viscous fluids. <i>Journal of the Acoustical Society of America</i> , <b>2016</b> , 139, 1081-92 | 2.2            | 6   |
| 113 | A squirmer across Reynolds numbers. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 796, 233-256   | 3.7            | 45  |
| 112 | Stresslets Induced by Active Swimmers. <i>Physical Review Letters</i> , <b>2016</b> , 117, 148001  | 7.4            | 22  |
| 111 | The bearable gooeyness of swimming. Journal of Fluid Mechanics, 2015, 762, 1-4   | 3.7            | 16  |
| 110 | Complex fluids affect low-Reynolds number locomotion in a kinematic-dependent manner. <i>Experiments in Fluids</i> , <b>2015</b> , 56, 1       | 2.5            | 29  |
| 109 | The other optimal Stokes drag profile. Journal of Fluid Mechanics, 2015, 762,  | 3.7            | 6   |
| 108 | Small-amplitude swimmers can self-propel faster in viscoelastic fluids. <i>Journal of Theoretical Biology</i> , <b>2015</b> , 382, 345-55      | 2.3            | 41  |
| 107 | Geometric pumping in autophoretic channels. Soft Matter, 2015, 11, 5804-11   | 3.6            | 19  |
| 106 | Propulsion of Bubble-Based Acoustic Microswimmers. <i>Physical Review Applied</i> , <b>2015</b> , 4,   | 4.3            | 49  |
| 105 | Phase-separation models for swimming enhancement in complex fluids. <i>Physical Review E</i> , <b>2015</b> , 92, 02                            | 3 <u>0</u> 0₄4 | 41  |
| 104 | Nondecaying Hydrodynamic Interactions along Narrow Channels. <i>Physical Review Letters</i> , <b>2015</b> , 115, 038301                        | 7.4            | 30  |
| 103 | A reciprocal theorem for boundary-driven channel flows. <i>Physics of Fluids</i> , <b>2015</b> , 27, 111701                                    | 4.4            | 10  |
| 102 | Geometric capture and escape of a microswimmer colliding with an obstacle. <i>Soft Matter</i> , <b>2015</b> , 11, 339                          | 63:4611        | 111 |
| 101 | A regularised singularity approach to phoretic problems. European Physical Journal E, <b>2015</b> , 38, 139                                    | 1.5            | 19  |
| 100 | Autophoretic locomotion from geometric asymmetry. European Physical Journal E, 2015, 38, 91  | 1.5            | 46  |
| 99  | Theory of Locomotion Through Complex Fluids <b>2015</b> , 283-317  |                | 19  |
| 98  | CHAPTER 4:Theoretical Models of Low-Reynolds-Number Locomotion. <i>RSC Soft Matter</i> , <b>2015</b> , 100-167                                 | 0.5            | 10  |

| 97 | Viscous pumping inspired by flexible propulsion. <i>Bioinspiration and Biomimetics</i> , <b>2014</b> , 9, 036007                        | 2.6 | 5   |
|----|---|-----|-----|
| 96 | Sedimentation of a rotating sphere in a power-law fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , <b>2014</b> , 213, 27-30     | 2.7 | 5   |
| 95 | Rotational propulsion enabled by inertia. European Physical Journal E, 2014, 37, 16   | 1.5 | 2   |
| 94 | Generalized squirming motion of a sphere. <i>Journal of Engineering Mathematics</i> , <b>2014</b> , 88, 1-28                            | 1.2 | 92  |
| 93 | Optimal swimming of a sheet. <i>Physical Review E</i> , <b>2014</b> , 89, 060701  | 2.4 | 30  |
| 92 | Locomotion in complex fluids: Integral theorems. <i>Physics of Fluids</i> , <b>2014</b> , 26, 081902                                    | 4.4 | 56  |
| 91 | Mixing by microorganisms in stratified fluids. <i>Journal of Marine Research</i> , <b>2014</b> , 72, 47-72                              | 1.5 | 18  |
| 90 | Phoretic self-propulsion at finite Pālet numbers. <i>Journal of Fluid Mechanics</i> , <b>2014</b> , 747, 572-604                        | 3.7 | 119 |
| 89 | Optimal propulsive flapping in Stokes flows. <i>Bioinspiration and Biomimetics</i> , <b>2014</b> , 9, 016001                            | 2.6 | 19  |
| 88 | Stochastic dynamics of active swimmers in linear flows. <i>Journal of Fluid Mechanics</i> , <b>2014</b> , 742, 50-70                    | 3.7 | 40  |
| 87 | Enhanced active swimming in viscoelastic fluids. <i>Europhysics Letters</i> , <b>2014</b> , 108, 34003                                  | 1.6 | 65  |
| 86 | Dynamics of swimming bacteria at complex interfaces. <i>Physics of Fluids</i> , <b>2014</b> , 26, 071902                                | 4.4 | 100 |
| 85 | The passive diffusion of Leptospira interrogans. <i>Physical Biology</i> , <b>2014</b> , 11, 066008                                     | 3   | 30  |
| 84 | Geometry and wetting of capillary folding. <i>Physical Review E</i> , <b>2014</b> , 89, 043011  | 2.4 | 15  |
| 83 | Asymmetric steady streaming as a mechanism for acoustic propulsion of rigid bodies. <i>Physics of Fluids</i> , <b>2014</b> , 26, 082001 | 4.4 | 83  |
| 82 | The wobbling-to-swimming transition of rotated helices. <i>Physics of Fluids</i> , <b>2013</b> , 25, 071904                             | 4.4 | 32  |
| 81 | Hydrodynamic fluctuations in confined particle-laden fluids. <i>Physical Review Letters</i> , <b>2013</b> , 111, 118301                 | 7.4 | 19  |
| 80 | Elastocapillary self-folding: buckling, wrinkling, and collapse of floating filaments. <i>Soft Matter</i> , <b>2013</b> , 9, 1711-1720  | 3.6 | 21  |

| 79             | Shape of optimal active flagella. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 730,   | 3.7   | 31  |
|----------------|--|-------|-----|
| 78             | Hydrodynamics of confined active fluids. <i>Physical Review Letters</i> , <b>2013</b> , 110, 038101  | 7.4   | 93  |
| 77             | Waving transport and propulsion in a generalized Newtonian fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , <b>2013</b> , 199, 37-50                           | 2.7   | 91  |
| 76             | Crawling scallop: friction-based locomotion with one degree of freedom. <i>Journal of Theoretical Biology</i> , <b>2013</b> , 324, 42-51                               | 2.3   | 27  |
| 75             | Spontaneous autophoretic motion of isotropic particles. <i>Physics of Fluids</i> , <b>2013</b> , 25, 061701  | 4.4   | 120 |
| 74             | Fluid elasticity increases the locomotion of flexible swimmers. <i>Physics of Fluids</i> , <b>2013</b> , 25, 031701  | 4.4   | 64  |
| 73             | Unsteady feeding and optimal strokes of model ciliates. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 715, 1-31  | 3.7   | 24  |
| 7 <sup>2</sup> | Hydrodynamics of self-propulsion near a boundary: predictions and accuracy of far-field approximations. <i>Journal of Fluid Mechanics</i> , <b>2012</b> , 700, 105-147 | 3.7   | 306 |
| 71             | Dance of the microswimmers. <i>Physics Today</i> , <b>2012</b> , 65, 30-35   | 0.9   | 49  |
| 70             | Active and driven hydrodynamic crystals. European Physical Journal E, 2012, 35, 68   | 1.5   | 19  |
| 69             | Cargo-towing fuel-free magnetic nanoswimmers for targeted drug delivery. Small, 2012, 8, 460-7   | 11    | 326 |
| 68             | Viscous Marangoni propulsion. <i>Journal of Fluid Mechanics</i> , <b>2012</b> , 705, 120-133   | 3.7   | 78  |
| 67             | Hydrodynamics of the double-wave structure of insect spermatozoa flagella. <i>Journal of the Royal Society Interface</i> , <b>2012</b> , 9, 1908-24                    | 4.1   | 10  |
| 66             | Self-propulsion in viscoelastic fluids: Pushers vs. pullers. <i>Physics of Fluids</i> , <b>2012</b> , 24, 051902   | 4.4   | 123 |
| 65             | Micropropulsion and microrheology in complex fluids via symmetry breaking. <i>Physics of Fluids</i> , <b>2012</b> , 24, 103102   | 4.4   | 57  |
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| 62             | High-speed propulsion of flexible nanowire motors: Theory and experiments. <i>Soft Matter</i> , <b>2011</b> , 7, 816   | 9 3.6 | 164 |

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| 60 | A smooth future?. <i>Nature Materials</i> , <b>2011</b> , 10, 334-7   | 27     | 212 |
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| 58 | Taylor swimming sheet: Analysis and improvement of the perturbation series. <i>Physica D: Nonlinear Phenomena</i> , <b>2011</b> , 240, 1567-1573                  | 3.3    | 42  |
| 57 | Synchronization of flexible sheets. <i>Journal of Fluid Mechanics</i> , <b>2011</b> , 674, 163-173  | 3.7    | 47  |
| 56 | Life around the scallop theorem. Soft Matter, 2011, 7, 3060-3065  | 3.6    | 139 |
| 55 | Stability and non-linear response of 1D microfluidic-particle streams. Soft Matter, <b>2011</b> , 7, 11082  | 3.6    | 10  |
| 54 | Extensibility enables locomotion under isotropic drag. <i>Physics of Fluids</i> , <b>2011</b> , 23, 081702  | 4.4    | 5   |
| 53 | Locomotion by tangential deformation in a polymeric fluid. <i>Physical Review E</i> , <b>2011</b> , 83, 011901  | 2.4    | 60  |
| 52 | Fluid transport by active elastic membranes. <i>Physical Review E</i> , <b>2011</b> , 84, 031924  | 2.4    | 2   |
| 51 | Enhanced diffusion by reciprocal swimming. <i>Physical Review Letters</i> , <b>2011</b> , 106, 178101   | 7.4    | 41  |
| 50 | Comparative hydrodynamics of bacterial polymorphism. <i>Physical Review Letters</i> , <b>2011</b> , 106, 058103   | 7.4    | 66  |
| 49 | Publisher Note: Enhanced Diffusion by Reciprocal Swimming [Phys. Rev. Lett. 106, 178101 (2011)]. <i>Physical Review Letters</i> , <b>2011</b> , 106,              | 7.4    | 3   |
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| 35 | Hydrodynamic friction of fakir-like superhydrophobic surfaces. <i>Journal of Fluid Mechanics</i> , <b>2010</b> , 661, 402-411               | 3.7   | 92   |
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| 33 | The long-time dynamics of two hydrodynamically-coupled swimming cells. <i>Bulletin of Mathematical Biology</i> , <b>2010</b> , 72, 973-1005 | 2.1   | 29   |
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