Arnold Jâ**€‱** Mathijssen

List of Publications by Year in descending order

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#	Article	lF	CITATIONS
1	Upstream Swimming in Microbiological Flows. Physical Review Letters, 2016, 116, 028104.	2.9	84
2	Oscillatory surface rheotaxis of swimming E. coli bacteria. Nature Communications, 2019, 10, 3434.	5.8	73
3	Hydrodynamics of micro-swimmers in films. Journal of Fluid Mechanics, 2016, 806, 35-70.	1.4	65
4	Extended parameterisations for MSTW PDFs and their effect on lepton charge asymmetry from W decays. European Physical Journal C, 2013, 73, 1.	1.4	55
5	Collective intercellular communication through ultra-fast hydrodynamic trigger waves. Nature, 2019, 571, 560-564.	13.7	52
6	Multi-scale spatial heterogeneity enhances particle clearance in airway ciliary arrays. Nature Physics, 2020, 16, 958-964.	6.5	52
7	Lattice-Boltzmann hydrodynamics of anisotropic active matter. Journal of Chemical Physics, 2016, 144, 134106.	1.2	40
8	Tracer trajectories and displacement due to a micro-swimmer near a surface. Journal of Fluid Mechanics, 2015, 773, 498-519.	1.4	37
9	Nutrient Transport Driven by Microbial Active Carpets. Physical Review Letters, 2018, 121, 248101.	2.9	33
10	Collective Entrainment and Confinement Amplify Transport by Schooling Microswimmers. Physical Review Letters, 2021, 127, 088006.	2.9	31
11	Amphibious Transport of Fluids and Solids by Soft Magnetic Carpets. Advanced Science, 2021, 8, e2102510.	5.6	31
12	Hotspots of boundary accumulation: dynamics and statistics of micro-swimmers in flowing films. Journal of the Royal Society Interface, 2016, 13, 20150936.	1.5	28
13	State diagram of a three-sphere microswimmer in a channel. Journal of Physics Condensed Matter, 2018, 30, 254004.	0.7	27
14	Universal entrainment mechanism controls contact times with motile cells. Physical Review Fluids, 2018, 3, .	1.0	27
15	Understanding the onset of oscillatory swimming in microchannels. Soft Matter, 2016, 12, 4704-4708.	1.2	25
16	Membrane penetration and trapping of an active particle. Journal of Chemical Physics, 2019, 150, 064906.	1.2	22
17	Towards an analytical description of active microswimmers in clean and in surfactant-covered drops. European Physical Journal E, 2020, 43, 58.	0.7	17
18	Active carpets drive non-equilibrium diffusion and enhanced molecular fluxes. Nature Communications, 2021, 12, 1906.	5.8	14

#	Article	IF	CITATIONS
19	Tuning the Upstream Swimming of Microrobots by Shape and Cargo Size. Physical Review Applied, 2020, 14, .	1.5	11
20	Engineering reconfigurable flow patterns via surface-driven light-controlled active matter. Physical Review Fluids, 2021, 6, .	1.0	2