

# Thomas Barois

## List of Publications by Year in descending order

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Version: 2024-02-01

28  
papers

560  
citations

687363

13  
h-index

610901

24  
g-index

28  
all docs

28  
docs citations

28  
times ranked

687  
citing authors

#	ARTICLE	IF	CITATIONS
1	Digital and FM Demodulation of a Doubly Clamped Single-Walled Carbon Nanotube Oscillator: Towards a Nanotube Cell Phone. <i>Small</i> , 2010, 6, 1060-1065.	10.0	139
2	Boundaries Control Collective Dynamics of Inertial Self-Propelled Robots. <i>Physical Review Letters</i> , 2018, 120, 188002.	7.8	96
3	From collections of independent, mindless robots to flexible, mobile, and directional superstructures. <i>Science Robotics</i> , 2021, 6, .	17.6	32
4	Performance of field-emitting resonating carbon nanotubes as radio-frequency demodulators. <i>Physical Review B</i> , 2011, 83, .	3.2	29
5	Beyond the linear and Duffing regimes in nanomechanics: Circularly polarized mechanical resonances of nanocantilevers. <i>Physical Review B</i> , 2010, 81, .	3.2	26
6	How a Curved Elastic Strip Opens. <i>Physical Review Letters</i> , 2014, 113, 214301.	7.8	26
7	Columnar structure formation of a dilute suspension of settling spherical particles in a quiescent fluid. <i>Physical Review Fluids</i> , 2016, 1, .	2.5	23
8	Electron Fluctuation Induced Resonance Broadening in Nano Electromechanical Systems: The Origin of Shear Force in Vacuum. <i>Nano Letters</i> , 2012, 12, 3551-3556.	9.1	20
9	Investigation of the small-scale statistics of turbulence in the Modane S1MA wind tunnel. <i>CEAS Aeronautical Journal</i> , 2018, 9, 269-281.	1.7	20
10	Ohmic electromechanical dissipation in nanomechanical cantilevers. <i>Physical Review B</i> , 2012, 85, .	3.2	18
11	Simple modeling of self-oscillations in nanoelectromechanical systems. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	15
12	Sorting and Extraction of Self-Propelled Chiral Particles by Polarized Wall Currents. <i>Physical Review Letters</i> , 2020, 125, 238003.	7.8	15
13	The mechanical resonances of electrostatically coupled nanocantilevers. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	14
14	Ultra Low Power Consumption for Self-Oscillating Nanoelectromechanical Systems Constructed by Contacting Two Nanowires. <i>Nano Letters</i> , 2013, 13, 1451-1456.	9.1	14
15	Lagrangian diffusion properties of a free shear turbulent jet. <i>Journal of Fluid Mechanics</i> , 2021, 918, .	3.4	13
16	Role of fluctuations and nonlinearities on field emission nanomechanical self-oscillators. <i>Physical Review B</i> , 2013, 88, .	3.2	12
17	Frequency modulated self-oscillation and phase inertia in a synchronized nanowire mechanical resonator. <i>New Journal of Physics</i> , 2014, 16, 083009.	2.9	12
18	Flexible body with drag independent of the flow velocity. <i>Journal of Fluid Mechanics</i> , 2013, 735, .	3.4	9

#	ARTICLE	IF	CITATIONS
19	Characterization and control of a bottleneck-induced traffic-jam transition for self-propelled particles in a track. <i>Physical Review E</i> , 2019, 99, 052605.	2.1	9
20	Quality-Factor Enhancement of Nanoelectromechanical Systems by Capacitive Driving Beyond Resonance. <i>Physical Review Applied</i> , 2016, 6, .	3.8	5
21	Equilibrium position of a rigid sphere in a turbulent jet: A problem of elastic reconfiguration. <i>Physical Review E</i> , 2017, 96, 033105.	2.1	5
22	Probing fluid torque with a hydrodynamical trap: Rotation of chiral particles levitating in a turbulent jet. <i>Physics of Fluids</i> , 2019, 31, 125116.	4.0	3
23	Carbon nanotube nanoradios: The field emission and transistor configurations. <i>Comptes Rendus Physique</i> , 2012, 13, 395-409.	0.9	2
24	Signal amplification in a synchronized field emission NEMS. , 2012, , .		1
25	The levitation of a sphere by two parallel turbulent jets. <i>Physics of Fluids</i> , 2020, 32, .	4.0	1
26	Transition to stress focusing for locally curved sheets. <i>Physical Review E</i> , 2021, 104, 014801.	2.1	1
27	Synchronization of nanowire self-oscillators. , 2014, , .		0
28	Field emission as a tool for exploring new phenemena in nanomechanics. , 2015, , .		0