

# Viktor Holubec

## List of Publications by Year in descending order

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43  
papers

1,115  
citations

430874

18  
h-index

395702

33  
g-index

45  
all docs

45  
docs citations

45  
times ranked

629  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fluctuations in heat engines. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 013001.	2.1	23
2	Equilibrium stochastic delay processes. New Journal of Physics, 2022, 24, 023021.	2.9	3
3	Maximum efficiency of low-dissipation heat pumps at given heating load. Physical Review E, 2022, 105, 024139.	2.1	1
4	Fully Steerable Symmetric Thermoplasmonic Microswimmers. ACS Nano, 2021, 15, 3434-3440.	14.6	27
5	Reinforcement learning with artificial microswimmers. Science Robotics, 2021, 6, .	17.6	85
6	Maximum efficiency of absorption refrigerators at arbitrary cooling power. Physical Review E, 2021, 103, 052125.	2.1	7
7	Polarization-density patterns of active particles in motility gradients. Physical Review E, 2021, 103, 062601.	2.1	13
8	How Activity Landscapes Polarize Microswimmers without Alignment Forces. Physical Review Letters, 2021, 126, 228001.	7.8	20
9	Density and polarization of active Brownian particles in curved activity landscapes. Physical Review E, 2021, 103, 062604.	2.1	4
10	Finite-Size Scaling at the Edge of Disorder in a Time-Delay Vicsek Model. Physical Review Letters, 2021, 127, 258001.	7.8	20
11	Underdamped active Brownian heat engine. Physical Review E, 2020, 102, 060101.	2.1	27
12	Maximum efficiency of low-dissipation refrigerators at arbitrary cooling power. Physical Review E, 2020, 101, 052124.	2.1	7
13	Statistics of work performed by optical tweezers with general time-variation of their stiffness. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 275001.	2.1	6
14	Active Brownian heat engines. Physical Review Research, 2020, 2, .	3.6	45
15	Effects of noise-induced coherence on the fluctuations of current in quantum absorption refrigerators. Journal of Chemical Physics, 2019, 151, 044108.	3.0	15
16	Brownian molecules formed by delayed harmonic interactions. New Journal of Physics, 2019, 21, 093014.	2.9	15
17	Living on the edge of instability. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 084014.	2.3	9
18	Physically consistent numerical solver for time-dependent Fokker-Planck equations. Physical Review E, 2019, 99, 032117.	2.1	28

#	ARTICLE	IF	CITATIONS
19	Brownian motion surviving in the unstable cubic potential and the role of Maxwell's demon. <i>Physical Review E</i> , 2018, 97, 032127.	2.1	18
20	Diffusing up the Hill: Dynamics and Equipartition in Highly Unstable Systems. <i>Physical Review Letters</i> , 2018, 121, 230601.	7.8	39
21	Active particles bound by information flows. <i>Nature Communications</i> , 2018, 9, 3864.	12.8	98
22	Cycling Tames Power Fluctuations near Optimum Efficiency. <i>Physical Review Letters</i> , 2018, 121, 120601.	7.8	111
23	Effects of Noise-Induced Coherence on the Performance of Quantum Absorption Refrigerators. <i>Journal of Low Temperature Physics</i> , 2018, 192, 147-168.	1.4	32
24	Anomalous shift of the most probable position of a particle in an unstable optically created potential. , 2018, , .		0
25	Work and power fluctuations in a critical heat engine. <i>Physical Review E</i> , 2017, 96, 030102.	2.1	37
26	Diverging, but negligible power at Carnot efficiency: Theory and experiment. <i>Physical Review E</i> , 2017, 96, 062107.	2.1	35
27	Thermal Ratchet Effect in Confining Geometries. <i>Entropy</i> , 2017, 19, 119.	2.2	23
28	Transport coefficients for a confined Brownian ratchet operating between two heat reservoirs. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2016, 2016, 093202.	2.3	24
29	Maximum efficiency of low-dissipation heat engines at arbitrary power. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2016, 2016, 073204.	2.3	56
30	Maximum efficiency of steady-state heat engines at arbitrary power. <i>Physical Review E</i> , 2016, 93, 050101.	2.1	52
31	Efficiency at and near maximum power of low-dissipation heat engines. <i>Physical Review E</i> , 2015, 92, 052125.	2.1	61
32	Asymptotics of work distribution for a Brownian particle in a time-dependent anharmonic potential. <i>Physica Scripta</i> , 2015, T165, 014024.	2.5	7
33	Brownian motion in time-dependent logarithmic potential: Exact results for dynamics and first-passage properties. <i>Journal of Chemical Physics</i> , 2015, 143, 114117.	3.0	19
34	On asymptotic behavior of work distributions for driven Brownian motion. <i>European Physical Journal B</i> , 2015, 88, 1.	1.5	4
35	Unfolding kinetics of periodic DNA hairpins. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 205102.	1.8	1
36	An exactly solvable model of a stochastic heat engine: optimization of power, power fluctuations and efficiency. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014, 2014, P05022.	2.3	68

#	ARTICLE	IF	CITATIONS
37	Non-equilibrium Energy Transformation Processes. Springer Theses, 2014, , .	0.1	7
38	Dynamics and energetics for a molecular zipper model under external driving. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P11009.	2.3	4
39	Four Exactly Solvable Examples in Non-Equilibrium Thermodynamics of Small Systems. , 2011, , .		2
40	Attempt time Monte Carlo: An alternative for simulation of stochastic jump processes with time-dependent transition rates. Europhysics Letters, 2011, 93, 40003.	2.0	18
41	Thermodynamics of two-stroke engine based on periodically driven two-level system. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 472-476.	2.7	6
42	Energetics and performance of a microscopic heat engine based on exact calculations of work and heat distributions. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P03002.	2.3	18
43	Thermodynamics and optimal protocols of multidimensional quadratic Brownian systems. Journal of Physics Communications, 0, , .	1.2	11