Henrik Flyvbjerg

List of Publications by Year
in descending order

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138	10,137	76031	40945
papers	citations	42	97
		h-index	g-index

142	142	142	12713
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Imaging therapeutic peptide transport across intestinal barriers. RSC Chemical Biology, 2021, 2, 1115-1143.	2.0	10
2	Camera-based localization microscopy optimized with calibrated structured illumination. Communications Physics, 2021, 4, .	2.0	3
3	Past attractions set future course. Nature Physics, 2021, 17, 771-772.	6.5	2
4	Confined Brownian Motion Tracked With Motion Blur: Estimating Diffusion Coefficient and Size of Confining Space. Frontiers in Physics, 2021, 8, .	1.0	6
5	How To Characterize Individual Nanosize Liposomes with Simple Self-Calibrating Fluorescence Microscopy. Nano Letters, 2018, 18, 2844-2851.	4.5	9
6	Single-particle trajectories reveal two-state diffusion-kinetics of hOGG1 proteins on DNA. Nucleic Acids Research, 2018, 46, 2446-2458.	6.5	27
7	Single-molecule DNA-mapping and whole-genome sequencing of individual cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11192-11197.	3.3	18
8	Contributions of the glycocalyx, endothelium, and extravascular compartment to the bloodâ€“brain barrier. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9429-E9438.	3.3	152
9	Classification of DNA nucleotides with transverse tunneling currents. Nanotechnology, 2017, 28, 015502.	1.3	8
10	How to Measure Load-Dependent Kinetics of Individual Motor Molecules Without a Force-Clamp. Methods in Enzymology, 2017, 582, 1-29.	0.4	8
11	Enrichment of megabase-sized DNA molecules for single-molecule optical mapping and next-generation sequencing. Scientific Reports, 2017, 7, 17893.	1.6	5
12	How to Measure Separations and Angles Between Intramolecular Fluorescent Markers. Methods in Enzymology, 2016, 581, 147-185.	0.4	6
13	How to connect time-lapse recorded trajectories of motile microorganisms with dynamical models in continuous time. Physical Review E, 2016, 94, 062401.	0.8	28
14	Theory of optical-tweezers forces near a plane interface. Physical Review A, 2016, 94, .	1.0	11
15	How to determine local stretching and tension in a flow-stretched DNA molecule. Physical Review E, 2016, 93, 042405.	0.8	8
16	â€œCalibration-on-the-spotâ€: How to calibrate an EMCCD camera from its images. Scientific Reports, 2016, 6, 28680.	1.6	19
17	Transition state theory demonstrated at the micron scale with out-of-equilibrium transport in a confined environment. Nature Communications, 2016, 7, 10227.	5.8	11
18	New technologies for DNA analysis â€“ a review of the READNA Project. New Biotechnology, 2016, 33, 311-330.	2.4	10

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19	Configurational Statistics of Magnetic Bead Detection with Magnetoresistive Sensors. PLoS ONE, 2015, 10, e0141115.	1.1	3
20	Harmonic force spectroscopy measures load-dependent kinetics of individual human Î²-cardiac myosin molecules. Nature Communications, 2015, 6, 7931.	5.8	65
21	Sifting noisy data for truths about noisy systems. Physics of Life Reviews, 2015, 13, 141-143.	1.5	1
22	Concentrating Genomic Length DNA in a Microfabricated Array. Physical Review Letters, 2015, 114, 198303.	2.9	27
23	Error filtering, pair assembly and error correction for next-generation sequencing reads. Bioinformatics, 2015, 31, 3476-3482.	1.8	1,102
24	Optical mapping of single-molecule human DNA in disposable, mass-produced all-polymer devices. Journal of Micromechanics and Microengineering, 2015, 25, 105002.	1.5	18
25	Optimized measurements of separations and angles between intra-molecular fluorescent markers. Nature Communications, 2015, 6, 8621.	5.8	34
26	Estimation of motility parameters from trajectory data. European Physical Journal: Special Topics, 2015, 224, 1151-1168.	1.2	31
27	Thermophoretic Forces on DNA Measured with a Single-Molecule Spring Balance. Physical Review Letters, 2014, 113, 268301.	2.9	20
28	Nanofluidics to Enhance Single Molecule DNA Imaging: Detecting Genomic Structural Variation in Humans. Biophysical Journal, 2014, 106, 395a.	0.2	0
29	How to get into that â€œroom at the bottomâ€• Fig. 1.. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13249-13250.	3.3	1
30	Optimal estimation of diffusion coefficients from single-particle trajectories. Physical Review E, 2014, 89, 022726.	0.8	170
31	Harmonic Force Spectroscopy Reveals a Force-Velocity Curve from a Single Human Beta Cardiac Myosin Motor. Biophysical Journal, 2014, 106, 453a.	0.2	0
32	Optimal Estimation of Diffusion Coefficients from Noisy Single-Particle Trajectories. Biophysical Journal, 2013, 104, 174a.	0.2	1
33	Fully Streched Single DNA Molecules in a Nanofluidic Chip Show Large-Scale Structural Variation. Biophysical Journal, 2013, 104, 175a.	0.2	14
34	Calibration on the Spot of EMCCD Cameras for Super Resolution Microscopy. Biophysical Journal, 2013, 104, 668a.	0.2	0
35	Integrated view of genome structure and sequence of a single DNA molecule in a nanofluidic device. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4893-4898.	3.3	86
36	Intracellular Signaling by Diffusion: Can Waves of Hydrogen Peroxide Transmit Intracellular Information in Plant Cells?. Frontiers in Plant Science, 2012, 3, 295.	1.7	44

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37	ASSESSMENT OF AUTOMATED ANALYSES OF CELL MIGRATION ON FLAT AND NANOSTRUCTURED SURFACES. Computational and Structural Biotechnology Journal, 2012, 1, e201207004.	1.9	3
38	Biological Structure from Precise and Accurate Estimation of Fluorophore Orientations and Distances: Proof-of-Principle using Internally Labeled dsDNA. Biophysical Journal, 2012, 102, 419a-420a.	0.2	0
39	Cell motility, morphology, viability and proliferation in response to nanotopography on silicon black. Nanoscale, 2012, 4, 3739.	2.8	39
40	Harmonic oscillator in heat bath: Exact simulation of time-lapse-recorded data and exact analytical benchmark statistics. Physical Review E, 2011, 83, 041103.	0.8	46
41	Pressure-Driven DNA in Nanogroove Arrays: Complex Dynamics Leads to Length- and Topology-Dependent Separation. Nano Letters, 2011, 11, 1598-1602.	4.5	38
42	Optimal Estimation of Location and Orientation of Myosin V Lever Arm from Focused Diffraction-Limited Images of Single, Double-Bound Fluorophore. Biophysical Journal, 2011, 100, 477a.	0.2	0
43	Integrative analysis correlates donor transcripts to recipient autoantibodies in primary graft dysfunction after lung transplantation. Immunology, 2011, 132, 394-400.	2.0	12
44	â€˜Dicty dynamicsâ€™:Dictyosteliummotility as persistent random motion. Physical Biology, 2011, 8, 046006.	0.8	94
45	Chronic rejection of a lung transplant is characterized by a profile of specific autoantibodies. Immunology, 2010, 130, 427-435.	2.0	30
46	Optimized localization analysis for single-molecule tracking and super-resolution microscopy. Nature Methods, 2010, 7, 377-381.	9.0	791
47	Single-molecule denaturation mapping of DNA in nanofluidic channels. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13294-13299.	3.3	183
48	Modeling of DNA in Nanochannels using Linear Elasticity Theory. Biophysical Journal, 2010, 98, 195a.	0.2	0
49	Optimal Estimation of the Diffusion Coefficient from Noisy Time-Series Measurements. Biophysical Journal, 2010, 98, 188a.	0.2	0
50	Combining Single Molecule Optical Trapping and Small Angle X-Ray Scattering Measurements to Compute the Persistence Length of a Protein Alpha-Helix. Biophysical Journal, 2010, 98, 24a.	0.2	1
51	Optimizing Super Resolution Microscopy. Biophysical Journal, 2010, 98, 182a.	0.2	0
52	Power spectrum analysis with least-squares fitting: Amplitude bias and its elimination, with application to optical tweezers and atomic force microscope cantilevers. Review of Scientific Instruments, 2010, 81, 075103.	0.6	62
53	Data-Driven Analysis of Cell Motility on Nanostructured Surfaces. Biophysical Journal, 2010, 98, 575a.	0.2	0
54	Nanoimprinted polymer chips for light induced local heating of liquids in micro- and nanochannels. , 2010, , .		3

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55	Directed self-organization of single DNA molecules in a nanoslit via embedded nanopit arrays. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 79-84.	3.3	82
56	Combining Single-Molecule Optical Trapping and Small-Angle X-Ray Scattering Measurements to Compute the Persistence Length of a Protein ER/K Î±-Helix. Biophysical Journal, 2009, 97, 2993-2999.	0.2	46
57	Cell motility as random motion: A review. European Physical Journal: Special Topics, 2008, 157, 1-15.	1.2	100
58	530: Microarray Based Measurement of Autoantibodies Identifies Early Development of BOS in Lung Transplant Patients. Journal of Heart and Lung Transplantation, 2008, 27, S250-S251.	0.3	0
59	In situ viscometry by optical trapping interferometry. Applied Physics Letters, 2008, 93, 184102.	1.5	29
60	Comment on â€œDirect Measurement of the Oscillation Frequency in an Optical-Tweezers Trap by Parametric Excitationâ€• Physical Review Letters, 2007, 98, 189801; author reply 189803.	2.9	7
61	Nanoconfinement-Enhanced Conformational Response of Single DNA Molecules to Changes in Ionic Environment. Physical Review Letters, 2007, 99, 058302.	2.9	161
62	Strong low-pass filtering effects on water vapour flux measurements with closed-path eddy correlation systems. Agricultural and Forest Meteorology, 2007, 147, 140-156.	1.9	203
63	Brownian Motion after Einstein: Some New Applications and New Experiments. , 2007, , 181-199.		5
64	Experimental investigation of bubble formation during capillary filling of SiO2 nanoslits. Applied Physics Letters, 2007, 91, .	1.5	76
65	Why is the microtubule lattice helical?. Biology of the Cell, 2007, 99, 117-128.	0.7	36
66	A Non-Gaussian Distribution Quantifies Distances Measured with Fluorescence Localization Techniques. Biophysical Journal, 2006, 90, 668-671.	0.2	95
67	Calibration of optical tweezers with positional detection in the back focal plane. Review of Scientific Instruments, 2006, 77, 103101.	0.6	294
68	tweezercalib 2.0: Faster version of MatLab package for precise calibration of optical tweezers. Computer Physics Communications, 2006, 174, 518-520.	3.0	49
69	tweezercalib 2.1: Faster version of MatLab package for precise calibration of optical tweezers. Computer Physics Communications, 2006, 175, 572-573.	3.0	42
70	Strong physical constraints on sequence-specific target location by proteins on DNA molecules. Nucleic Acids Research, 2006, 34, 2550-2557.	6.5	36
71	QUANTITATIVE STUDIES OF SUBDIFFUSION IN LIVING CELLS AND ACTIN NETWORKS. Biophysical Reviews and Letters, 2006, 01, 411-421.	0.9	1
72	The Free NADH Concentration Is Kept Constant in Plant Mitochondria under Different Metabolic Conditions. Plant Cell, 2006, 18, 688-698.	3.1	84

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73	Power spectrum analysis for optical tweezers. II: Laser wavelength dependence of parasitic filtering, and how to achieve high bandwidth. Review of Scientific Instruments, 2006, 77, 063106.	0.6	47
74	The colour of thermal noise in classical Brownian motion: a feasibility study of direct experimental observation. New Journal of Physics, 2005, 7, 38-38.	1.2	32
75	Cell Motility as Persistent Random Motion: Theories from Experiments. Biophysical Journal, 2005, 89, 912-931.	0.2	250
76	Modelling NADH turnover in plant mitochondria. Physiologia Plantarum, 2004, 120, 370-385.	2.6	34
77	Self-organized critical pinball machine. Physica A: Statistical Mechanics and Its Applications, 2004, 340, 552-558.	1.2	5
78	MatLab program for precision calibration of optical tweezers. Computer Physics Communications, 2004, 159, 225-240.	3.0	86
79	Power spectrum analysis for optical tweezers. Review of Scientific Instruments, 2004, 75, 594-612.	0.6	842
80	Parasitic filtering in position detection systems for optical tweezers. , 2004, , .		2
81	Resonant effects in a voltage-activated channel gating. , 2004, , .		1
82	Comment on â€œFabrication of a Synthetic Nanopore Ion Pumpâ€• Physical Review Letters, 2003, 91, 179801; author reply 179802.	2.9	9
83	Unintended filtering in a typical photodiode detection system for optical tweezers. Journal of Applied Physics, 2003, 93, 3167-3176.	1.1	81
84	Single-molecule experiment with optical tweezers: improved analysis of the diffusion of the Â-receptor inE. coliÂs outer membrane. Journal of Physics Condensed Matter, 2003, 15, S1737-S1746.	0.7	11
85	Structural Microtubule Cap: Stability, Catastrophe, Rescue, andThird State. Biophysical Journal, 2002, 83, 1317-1330.	0.2	84
86	Automatic differentiation of multichannel EEG signals. IEEE Transactions on Biomedical Engineering, 2001, 48, 111-116.	2.5	113
87	Classification of movement-related EEG in a memorized delay task experiment. Clinical Neurophysiology, 2000, 111, 1353-1365.	0.7	30
88	Designing optimal spatial filters for single-trial EEG classification in a movement task. Clinical Neurophysiology, 1999, 110, 787-798.	0.7	723
89	Microtubule's Conformational Cap.. Cell Structure and Function, 1999, 24, 299-303.	0.5	30
90	Limited flexibility of the inter-protofilament bonds in microtubules assembled from pure tubulin. European Biophysics Journal, 1998, 27, 490-500.	1.2	43

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91	Modeling elastic properties of microtubule tips and walls. European Biophysics Journal, 1998, 27, 501-513.	1.2	83
92	Mining multi-channel EEG for its information content: an ANN-based method for a brainâ€“computer interface. Neural Networks, 1998, 11, 1429-1433.	3.3	43
93	Error estimates on averages of correlated data. , 1998, , 88-103.		47
94	Microtubule dynamics. II. Kinetics of self-assembly. Physical Review E, 1997, 56, 7083-7099.	0.8	17
95	Modeling Microtubule Oscillations. Physical Review Letters, 1997, 79, 519-522.	2.9	28
96	Kinetics of self-assembling microtubules: an "inverse problem" in biochemistry.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 5975-5979.	3.3	148
97	Microtubule dynamics: Caps, catastrophes, and coupled hydrolysis. Physical Review E, 1996, 54, 5538-5560.	0.8	111
98	Flyvbjerg Replies:. Physical Review Letters, 1996, 77, 4274-4274.	2.9	3
99	Simplest Possible Self-Organized Critical System. Physical Review Letters, 1996, 76, 940-943.	2.9	47
100	Evolution as a self-organized critical phenomenon.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 5209-5213.	3.3	218
101	Spontaneous nucleation of microtubules. Physical Review E, 1995, 51, 5058-5063.	0.8	55
102	A self-organized critical pin-ball machine. NATO ASI Series Series B: Physics, 1995, , 303-311.	0.2	0
103	Simple Model of Self-Organized Biological Evolution. Physical Review Letters, 1994, 73, 906-909.	2.9	105
104	Stochastic Dynamics of Microtubules: A Model for Caps and Catastrophes. Physical Review Letters, 1994, 73, 2372-2375.	2.9	115
105	Quantum mechanics on the personal computer. Computer Physics Communications, 1993, 77, 300-301.	3.0	0
106	Dynamics of soap froth. Physica A: Statistical Mechanics and Its Applications, 1993, 194, 298-306.	1.2	17
107	Self-organized critical forest-fire model: Mean-field theory and simulation results in 1 to 6 dimenisons. Physical Review Letters, 1993, 71, 2737-2740.	2.9	92
108	Mean field theory for a simple model of evolution. Physical Review Letters, 1993, 71, 4087-4090.	2.9	201

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109	What Synchronization?. Europhysics Letters, 1993, 23, 629-634.	0.7	10
110	Model for coarsening froths and foams. Physical Review E, 1993, 47, 4037-4054.	0.8	94
111	Self-organization of cellular magnetic-domain patterns. Physical Review A, 1992, 45, 2192-2200.	1.0	34
112	Exact stopping cross section of the quantum harmonic oscillator for a penetrating point charge of arbitrary strength. Physical Review A, 1992, 45, 3025-3031.	1.0	23
113	Coevolution in a rugged fitness landscape. Physical Review A, 1992, 46, 6724-6730.	1.0	40
114	Evolution in a rugged fitness landscape. Physical Review A, 1992, 46, 6714-6723.	1.0	88
115	Self-organization of magnetic domain patterns. Physica A: Statistical Mechanics and Its Applications, 1992, 185, 3-10.	1.2	4
116	Efficient evaluation of Feynman diagrams on lattices. Computer Physics Communications, 1992, 69, 59-64.	3.0	0
117	Some exact results for the O(N)-symmetric non-linear Ïƒ-model to O(1/N). Nuclear Physics B, 1991, 348, 714-736.	0.9	20
118	Interpolating between Ising, XY-, and non-linear Ïƒ-models. Nuclear Physics B, 1991, 360, 264-282.	0.9	6
119	A Solvable Model for Coarsening Soap Froths and Other Domain Boundary Networks in Two Dimensions. Physica Scripta, 1991, T38, 49-54.	1.2	22
120	Mass gap of O (N) Ïƒ-models in 2D. Support for exact results from -expansion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 266, 92-98.	1.5	20
121	Magnetic susceptibility of O(N) Ïƒ-models in 2D. Weak coupling results from expansion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 266, 99-106.	1.5	17
122	Interpolating between O(N)-symmetric Ïƒ-models with N = 1, 2, 3. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 258, 386-390.	1.5	4
123	1/N-expansions of Ïƒ-models in 2 and 4 dimensions: Taking them to their technical limits. Nuclear Physics, Section B, Proceedings Supplements, 1991, 20, 44-47.	0.5	0
124	Interpolating between O(N)-symmetric Ïƒ-models with N = 1,2,3. Nuclear Physics, Section B, Proceedings Supplements, 1991, 20, 685-688.	0.5	0
125	Computer Simulation of Vortex Formation During Domain Growth. Physica Scripta, 1990, T33, 180-184.	1.2	0
126	Scaling versus asymptotic scaling in the non-linear Ïƒ-model in 2D. continuum version. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 245, 533-544.	1.5	11

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127	1/N-expansion of the non-linear Ïƒ-model: The first three orders. Nuclear Physics, Section B, Proceedings Supplements, 1990, 17, 343-346.	0.5	2
128	Barkas effect in a central collision: Exact numerical results and the tenth-order Born series. Physical Review A, 1990, 42, 3962-3970.	1.0	16
129	Dyson-Schwinger equations for the non-linear Ïƒ-model. Nuclear Physics B, 1990, 332, 687-708.	0.9	13
130	-expansion of the non-linear Ïƒ-model: The first three orders. Nuclear Physics B, 1990, 344, 646-664.	0.9	27
131	The O (N)-Symmetric Non-Linear Ïƒ-Model to Three Leading Orders in 1/N. NATO ASI Series Series B: Physics, 1990, , 153-166.	0.2	0
132	Dynamics of ordering in highly degenerate models with anisotropic grain-boundary potential: Effects of temperature and vortex formation. Physical Review B, 1989, 40, 9070-9079.	1.1	9
133	of the non-linear Ïƒ-model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 219, 323-328.	1.5	27
134	The non-linear Ïƒ-model to. Nuclear Physics, Section B, Proceedings Supplements, 1989, 9, 653-657.	0.5	0
135	Error estimates on averages of correlated data. Journal of Chemical Physics, 1989, 91, 461-466.	1.2	1,252
136	Resummation of the of the non-linear Ïƒ-model by Dyson-Schwinger equations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 206, 285-289.	1.5	22
137	Character table for the 1080â€element pointâ€groupâ€like subgroup of SU(3). Journal of Mathematical Physics, 1985, 26, 2985-2989.	0.5	4
138	Group space decimation: A way to simulate QCD by the 1080 element subgroup of SU(3)?. Nuclear Physics B, 1984, 243, 350-364.	0.9	9