

Michael A Lomholt

List of Publications by Year in descending order

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Version: 2024-02-01

45
papers

1,855
citations

304743

22
h-index

254184

43
g-index

46
all docs

46
docs citations

46
times ranked

1302
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Bayesian inference of scaled versus fractional Brownian motion. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 194003. | 2.1 | 15 |
| 2 | Bayesian inference of Lévy walks via hidden Markov models. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 484001. | 2.1 | 12 |
| 3 | Objective comparison of methods to decode anomalous diffusion. Nature Communications, 2021, 12, 6253. | 12.8 | 109 |
| 4 | First passage and first hitting times of Lévy flights and Lévy walks. New Journal of Physics, 2019, 21, 103028. | 2.9 | 54 |
| 5 | Stochastic unfolding of nanoconfined DNA: Experiments, model and Bayesian analysis. Journal of Chemical Physics, 2018, 149, 215101. | 3.0 | 9 |
| 6 | Bayesian model selection with fractional Brownian motion. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 093501. | 2.3 | 19 |
| 7 | Bayesian analysis of single-particle tracking data using the nested-sampling algorithm: maximum-likelihood model selection applied to stochastic-diffusivity data. Physical Chemistry Chemical Physics, 2018, 20, 29018-29037. | 2.8 | 99 |
| 8 | Fitting a function to time-dependent ensemble averaged data. Scientific Reports, 2018, 8, 6984. | 3.3 | 9 |
| 9 | Bayesian inference with information content model check for Langevin equations. Physical Review E, 2017, 96, 062106. | 2.1 | 18 |
| 10 | Tracer particles in two-dimensional elastic networks diffuse logarithmically slow. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 034001. | 2.1 | 1 |
| 11 | Optimization and modeling of the remote loading of luciferin into liposomes. International Journal of Pharmaceutics, 2016, 508, 128-134. | 5.2 | 3 |
| 12 | Quantifying the Relationship between Curvature and Electric Potential in Lipid Bilayers. Journal of Physical Chemistry B, 2016, 120, 4812-4817. | 2.6 | 24 |
| 13 | Imaging approaches for analysis of cholesterol distribution and dynamics in the plasma membrane. Chemistry and Physics of Lipids, 2016, 199, 106-135. | 3.2 | 22 |
| 14 | Real sequence effects on the search dynamics of transcription factors on DNA. Scientific Reports, 2015, 5, 10072. | 3.3 | 46 |
| 15 | Stochastic thermodynamics of a tagged particle within a harmonic chain. Physical Review E, 2015, 91, 022114. | 2.1 | 5 |
| 16 | Severe slowing-down and universality of the dynamics in disordered interacting many-body systems: ageing and ultraslow diffusion. New Journal of Physics, 2014, 16, 113050. | 2.9 | 44 |
| 17 | Universality and nonuniversality of mobility in heterogeneous single-file systems and Rouse chains. Physical Review E, 2014, 89, 032101. | 2.1 | 6 |
| 18 | Single-file diffusion with non-thermal initial conditions. Physica A: Statistical Mechanics and Its Applications, 2014, 395, 148-153. | 2.6 | 13 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Tension moderation and fluctuation spectrum in simulated lipid membranes under an applied electric potential. <i>Journal of Chemical Physics</i> , 2013, 139, 164902. | 3.0 | 7 |
| 20 | Microscopic Origin of the Logarithmic Time Evolution of Aging Processes in Complex Systems. <i>Physical Review Letters</i> , 2013, 110, 208301. | 7.8 | 48 |
| 21 | Electromechanics of a membrane with spatially distributed fixed charges: Flexoelectricity and elastic parameters. <i>Physical Review E</i> , 2013, 88, 062715. | 2.1 | 12 |
| 22 | Effective tension and fluctuations in active membranes. <i>Physical Review E</i> , 2012, 85, 031913. | 2.1 | 30 |
| 23 | Bulk-mediated diffusion on a planar surface: Full solution. <i>Physical Review E</i> , 2012, 86, 041101. | 2.1 | 50 |
| 24 | Two-photon time-lapse microscopy of BODIPY-cholesterol reveals anomalous sterol diffusion in chinese hamster ovary cells. <i>BMC Biophysics</i> , 2012, 5, 20. | 4.4 | 16 |
| 25 | Quantitative fluorescence loss in photobleaching for analysis of protein transport and aggregation. <i>BMC Bioinformatics</i> , 2012, 13, 296. | 2.6 | 46 |
| 26 | Elastic moderation of intrinsically applied tension in lipid membranes. <i>Physical Review E</i> , 2011, 83, 011913. | 2.1 | 9 |
| 27 | Dissimilar bouncy walkers. <i>Journal of Chemical Physics</i> , 2011, 134, 045101. | 3.0 | 10 |
| 28 | Effective surface motion on a reactive cylinder of particles that perform intermittent bulk diffusion. <i>Journal of Chemical Physics</i> , 2011, 134, 204116. | 3.0 | 24 |
| 29 | Foundation of fractional Langevin equation: Harmonization of a many-body problem. <i>Physical Review E</i> , 2010, 81, 051118. | 2.1 | 120 |
| 30 | And did he search for you, and could not find you?. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 434005. | 2.1 | 19 |
| 31 | Bulk-mediated surface diffusion along a cylinder: Propagators and crossovers. <i>Physical Review E</i> , 2009, 79, 040105. | 2.1 | 43 |
| 32 | How Subdiffusion Changes the Kinetics of Binding to a Surface. <i>Biophysical Journal</i> , 2009, 97, 710-721. | 0.5 | 48 |
| 33 | Facilitated diffusion with DNA coiling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 8204-8208. | 7.1 | 176 |
| 34 | Single-file dynamics with different diffusion constants. <i>Journal of Chemical Physics</i> , 2008, 129, 185106. | 3.0 | 26 |
| 35 | Langevin formulation for single-file diffusion. <i>Physical Review E</i> , 2008, 78, 051116. | 2.1 | 59 |
| 36 | Applying a potential across a biomembrane: Electrostatic contribution to the bending rigidity and membrane instability. <i>Physical Review E</i> , 2007, 75, 051916. | 2.1 | 33 |

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|----|--|-----|-----------|
| 37 | Leapover Lengths and First Passage Time Statistics for Lévy Flights. <i>Physical Review Letters</i> , 2007, 99, 160602. | 7.8 | 113 |
| 38 | Master equation approach to DNA breathing in heteropolymer DNA. <i>Physical Review E</i> , 2007, 75, 021908. | 2.1 | 19 |
| 39 | Manipulating Single Enzymes by an External Harmonic Force. <i>Physical Review Letters</i> , 2007, 98, 168302. | 7.8 | 20 |
| 40 | Subdiffusion and Weak Ergodicity Breaking in the Presence of a Reactive Boundary. <i>Physical Review Letters</i> , 2007, 98, 200603. | 7.8 | 111 |
| 41 | Descriptions of membrane mechanics from microscopic and effective two-dimensional perspectives. <i>Journal of Physics A</i> , 2006, 39, 10323-10354. | 1.6 | 23 |
| 42 | Mechanics of nonplanar membranes with force-dipole activity. <i>Physical Review E</i> , 2006, 73, 061913. | 2.1 | 16 |
| 43 | Fluctuation spectrum of quasispherical membranes with force-dipole activity. <i>Physical Review E</i> , 2006, 73, 061914. | 2.1 | 19 |
| 44 | Optimal Target Search on a Fast-Folding Polymer Chain with Volume Exchange. <i>Physical Review Letters</i> , 2005, 95, 260603. | 7.8 | 207 |
| 45 | Directed motion emerging from two coupled random processes: translocation of a chain through a membrane nanopore driven by binding proteins. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S3945-S3964. | 1.8 | 43 |