

# Grant M Rotskoff

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6114916/publications.pdf>

Version: 2024-02-01

20  
papers

903  
citations

516710

16  
h-index

839539

18  
g-index

20  
all docs

20  
docs citations

20  
times ranked

1331  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Single-particle mapping of nonequilibrium nanocrystal transformations. <i>Science</i> , 2016, 354, 874-877.  | 12.6 | 204       |
| 2  | Inferring dissipation from current fluctuations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 184004.   | 2.1  | 113       |
| 3  | Transition-Tempered Metadynamics: Robust, Convergent Metadynamics via On-the-Fly Transition Barrier Estimation. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 3626-3633.   | 5.3  | 70        |
| 4  | Optimal control in nonequilibrium systems: Dynamic Riemannian geometry of the Ising model. <i>Physical Review E</i> , 2015, 92, 060102.  | 2.1  | 53        |
| 5  | Geometric approach to optimal nonequilibrium control: Minimizing dissipation in nanomagnetic spin systems. <i>Physical Review E</i> , 2017, 95, 012148.  | 2.1  | 53        |
| 6  | Structural asymmetry in a conserved signaling system that regulates division, replication, and virulence of an intracellular pathogen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E3709-18. | 7.1  | 52        |
| 7  | Efficiency and large deviations in time-asymmetric stochastic heat engines. <i>New Journal of Physics</i> , 2014, 16, 102003.  | 2.9  | 47        |
| 8  | Robust nonequilibrium pathways to microcompartment assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6341-6346.  | 7.1  | 45        |
| 9  | Structural basis of a protein partner switch that regulates the general stress response of $\beta$ -proteobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E1415-23.                    | 7.1  | 42        |
| 10 | Molecular Simulation Workflows as Parallel Algorithms: The Execution Engine of Copernicus, a Distributed High-Performance Computing Platform. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 2600-2608.                               | 5.3  | 40        |
| 11 | Near-optimal protocols in complex nonequilibrium transformations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 10263-10268.   | 7.1  | 36        |
| 12 | Adaptive Monte Carlo augmented with normalizing flows. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2109420119.  | 7.1  | 35        |
| 13 | Necessity of capillary modes in a minimal model of nanoscale hydrophobic solvation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E2224-30.  | 7.1  | 30        |
| 14 | Mapping current fluctuations of stochastic pumps to nonequilibrium steady states. <i>Physical Review E</i> , 2017, 95, 030101.   | 2.1  | 24        |
| 15 | On the Role of Nonspherical Cavities in Short Length-Scale Density Fluctuations in Water. <i>Journal of Physical Chemistry A</i> , 2017, 121, 370-380.   | 2.5  | 24        |
| 16 | Learning nonequilibrium control forces to characterize dynamical phase transitions. <i>Physical Review E</i> , 2022, 105, 024115.  | 2.1  | 18        |
| 17 | Dynamical Computation of the Density of States and Bayes Factors Using Nonequilibrium Importance Sampling. <i>Physical Review Letters</i> , 2019, 122, 150602.   | 7.8  | 8         |
| 18 | Probing the theoretical and computational limits of dissipative design. <i>Journal of Chemical Physics</i> , 2021, 155, 194114.  | 3.0  | 7         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Physics-informed graph neural networks enhance scalability of variational nonequilibrium optimal control. <i>Journal of Chemical Physics</i> , 0, , . | 3.0 | 2         |
| 20 | Ligand-Gated Ion Channel Opening and Closing Mechanism from Molecular Simulations. <i>Biophysical Journal</i> , 2013, 104, 271a.                      | 0.5 | 0         |