

Carsten Kutzner

List of Publications by Year in descending order

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Version: 2024-02-01

18
papers

16,264
citations

516710

16
h-index

839539

18
g-index

18
all docs

18
docs citations

18
times ranked

20359
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | GROMACS 4: Algorithms for Highly Efficient, Load-Balanced, and Scalable Molecular Simulation. <i>Journal of Chemical Theory and Computation</i> , 2008, 4, 435-447. | 5.3 | 13,875 |
| 2 | Tackling Exascale Software Challenges in Molecular Dynamics Simulations with GROMACS. <i>Lecture Notes in Computer Science</i> , 2015, , 3-27. | 1.3 | 581 |
| 3 | Anatomy and Dynamics of a Supramolecular Membrane Protein Cluster. <i>Science</i> , 2007, 317, 1072-1076. | 12.6 | 405 |
| 4 | More bang for your buck: Improved use of GPU nodes for GROMACS 2018. <i>Journal of Computational Chemistry</i> , 2019, 40, 2418-2431. | 3.3 | 286 |
| 5 | Computational Electrophysiology: The Molecular Dynamics of Ion Channel Permeation and Selectivity in Atomistic Detail. <i>Biophysical Journal</i> , 2011, 101, 809-817. | 0.5 | 214 |
| 6 | Best bang for your buck: GPU nodes for <scp>GROMACS</scp> biomolecular simulations. <i>Journal of Computational Chemistry</i> , 2015, 36, 1990-2008. | 3.3 | 195 |
| 7 | Caught in the Act: Visualization of SNARE-Mediated Fusion Events in Molecular Detail. <i>ChemBioChem</i> , 2011, 12, 1049-1055. | 2.6 | 134 |
| 8 | Speeding up parallel GROMACS on high-latency networks. <i>Journal of Computational Chemistry</i> , 2007, 28, 2075-2084. | 3.3 | 107 |
| 9 | Automated cryo-EM structure refinement using correlation-driven molecular dynamics. <i>ELife</i> , 2019, 8, . | 6.0 | 83 |
| 10 | effects of driving mechanisms in geodynamo models. <i>Geophysical Research Letters</i> , 2000, 27, 29-32. | 4.0 | 78 |
| 11 | GROMaïs: A GROMACS-Based Toolset to Analyze Density Maps Derived from Molecular Dynamics Simulations. <i>Biophysical Journal</i> , 2019, 116, 4-11. | 0.5 | 73 |
| 12 | A GPU-Accelerated Fast Multipole Method for GROMACS: Performance and Accuracy. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 6938-6949. | 5.3 | 68 |
| 13 | Insights into the function of ion channels by computational electrophysiology simulations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 1741-1752. | 2.6 | 60 |
| 14 | Keep It Flexible: Driving Macromolecular Rotary Motions in Atomistic Simulations with GROMACS. <i>Journal of Chemical Theory and Computation</i> , 2011, 7, 1381-1393. | 5.3 | 42 |
| 15 | GROMACS in the Cloud: A Global Supercomputer to Speed Up Alchemical Drug Design. <i>Journal of Chemical Information and Modeling</i> , 2022, 62, 1691-1711. | 5.4 | 37 |
| 16 | Molecular Dynamics in Principal Component Space. <i>Journal of Physical Chemistry B</i> , 2012, 116, 8350-8354. | 2.6 | 21 |
| 17 | A CUDA fast multipole method with highly efficient M2L far field evaluation. <i>International Journal of High Performance Computing Applications</i> , 2021, 35, 97-117. | 3.7 | 3 |
| 18 | GROMEX: A Scalable and Versatile Fast Multipole Method for Biomolecular Simulation. <i>Lecture Notes in Computational Science and Engineering</i> , 2020, , 517-543. | 0.3 | 2 |