

Gary S Ayton

List of Publications by Year in descending order

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29
papers

2,655
citations

331670
21
h-index

477307
29
g-index

29
all docs

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docs citations

29
times ranked

2089
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Hierarchical coarse-graining strategy for protein-membrane systems to access mesoscopic scales. Faraday Discussions, 2010, 144, 347-357. | 3.2 | 62 |
| 2 | Role of Protein Interactions in Defining HIV-1 Viral Capsid Shape and Stability: A Coarse-Grained Analysis. Biophysical Journal, 2010, 98, 18-26. | 0.5 | 74 |
| 3 | Multiscale Computer Simulation of the Immature HIV-1 Virion. Biophysical Journal, 2010, 99, 2757-2765. | 0.5 | 75 |
| 4 | Multiscale simulation of protein mediated membrane remodeling. Seminars in Cell and Developmental Biology, 2010, 21, 357-362. | 5.0 | 39 |
| 5 | Systematic multiscale simulation of membrane protein systems. Current Opinion in Structural Biology, 2009, 19, 138-144. | 5.7 | 93 |
| 6 | Hybrid Coarse-Graining Approach for Lipid Bilayers at Large Length and Time Scales. Journal of Physical Chemistry B, 2009, 113, 4413-4424. | 2.6 | 56 |
| 7 | New Insights into BAR Domain-Induced Membrane Remodeling. Biophysical Journal, 2009, 97, 1616-1625. | 0.5 | 74 |
| 8 | Membrane Binding by the Endophilin N-BAR Domain. Biophysical Journal, 2009, 97, 2746-2753. | 0.5 | 54 |
| 9 | Chapter 7 Multiscale Simulation of Membranes and Membrane Proteins: Connecting Molecular Interactions to Mesoscopic Behavior. Current Topics in Membranes, 2008, 60, 181-225. | 0.9 | 15 |
| 10 | The multiscale coarse-graining method. I. A rigorous bridge between atomistic and coarse-grained models. Journal of Chemical Physics, 2008, 128, 244114. | 3.0 | 651 |
| 11 | The multiscale coarse-graining method. II. Numerical implementation for coarse-grained molecular models. Journal of Chemical Physics, 2008, 128, 244115. | 3.0 | 326 |
| 12 | Extending the fluctuation theorem to describe reaction coordinates. Journal of Chemical Physics, 2007, 126, 051102. | 3.0 | 27 |
| 13 | Transient violations of the second law of thermodynamics in protein unfolding examined using synthetic atomic force microscopy and the fluctuation theorem. Journal of Chemical Physics, 2007, 127, 105105. | 3.0 | 6 |
| 14 | Systematic Coarse Graining of Biomolecular and Soft-Matter Systems. MRS Bulletin, 2007, 32, 929-934. | 3.5 | 36 |
| 15 | Multiscale simulation of transmembrane proteins. Journal of Structural Biology, 2007, 157, 570-578. | 2.8 | 42 |
| 16 | Atomistic and Coarse-grained Analysis of Double Spectrin Repeat Units: The Molecular Origins of Flexibility. Journal of Molecular Biology, 2007, 365, 523-534. | 4.2 | 18 |
| 17 | Multiscale Coarse-Graining and Structural Correlations: Connections to Liquid-State Theory. Journal of Physical Chemistry B, 2007, 111, 4116-4127. | 2.6 | 191 |
| 18 | Membrane Remodeling from N-BAR Domain Interactions: Insights from Multi-Scale Simulation. Biophysical Journal, 2007, 92, 3595-3602. | 0.5 | 91 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Multiscale modeling of biomolecular systems: in serial and in parallel. <i>Current Opinion in Structural Biology</i> , 2007, 17, 192-198. | 5.7 | 395 |
| 20 | Extending a Spectrin Repeat Unit. I: Linear Force-Extension Response. <i>Biophysical Journal</i> , 2006, 90, 92-100. | 0.5 | 20 |
| 21 | Extending a Spectrin Repeat Unit. II: Rupture Behavior. <i>Biophysical Journal</i> , 2006, 90, 101-111. | 0.5 | 17 |
| 22 | Mesoscopic Modeling of Bacterial Flagellar Microhydrodynamics. <i>Biophysical Journal</i> , 2006, 91, 3640-3652. | 0.5 | 19 |
| 23 | A second generation mesoscopic lipid bilayer model: Connections to field-theory descriptions of membranes and nonlocal hydrodynamics. <i>Journal of Chemical Physics</i> , 2006, 124, 064906. | 3.0 | 41 |
| 24 | Probing the Molecular-Scale Lipid Bilayer Response to Shear Flow Using Nonequilibrium Molecular Dynamics. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18673-18679. | 2.6 | 20 |
| 25 | Coupling Field Theory with Continuum Mechanics: A Simulation of Domain Formation in Giant Unilamellar Vesicles. <i>Biophysical Journal</i> , 2005, 88, 3855-3869. | 0.5 | 71 |
| 26 | Multiscale coupling of mesoscopic- and atomistic-level lipid bilayer simulations. <i>Journal of Chemical Physics</i> , 2005, 122, 244716. | 3.0 | 56 |
| 27 | A new perspective on the coarse-grained dynamics of fluids. <i>Journal of Chemical Physics</i> , 2004, 120, 4074-4088. | 3.0 | 33 |
| 28 | Mesoscopic Lateral Diffusion in Lipid Bilayers. <i>Biophysical Journal</i> , 2004, 87, 3299-3311. | 0.5 | 41 |
| 29 | Simulation of Biomolecular Systems at Multiple Length and Time Scales. <i>International Journal for Multiscale Computational Engineering</i> , 2004, 2, 291-312. | 1.2 | 12 |