Weihua Geng

List of Publications by Year
in descending order

22 papers	2,018 citations	840776 11 h-index	752698 20 g-index
22 all docs	22 docs citations	22 times ranked	2977 citing authors

#	Article	IF	Citations
1	Computing electrostatic binding energy with the TABI Poisson–Boltzmann solver. Communications in Information and Systems, 2022, 22, 247-273.	0.5	1
2	Cyclically parallelized treecode for fast computations of electrostatic interactions on molecular surfaces. Computer Physics Communications, 2021, 260, 107742.	7.5	3
3	Regularization methods for the Poisson-Boltzmann equation: Comparison and accuracy recovery. Journal of Computational Physics, 2021, 426, 109958.	3.8	11
4	Computing Protein pKas Using the TABI Poisson–Boltzmann Solver. Journal of Computational Biophysics and Chemistry, 2021, 20, 175-187.	1.7	9
5	MLIMC: Machine learning-based implicit-solvent Monte Carlo. Chinese Journal of Chemical Physics, 2021, 34, 683-694.	1.3	8
6	Improvements to the <scp>APBS</scp> biomolecular solvation software suite. Protein Science, 2018, 27, 112-128.	7.6	1,399
7	On preconditioning the treecode-accelerated boundary integral (TABI) Poisson–Boltzmann solver. Journal of Computational Physics, 2018, 373, 750-762.	3.8	13
8	Role of combinatorial complexity in genetic networks. Communications in Information and Systems, 2018, 18, 209-228.	0.5	0
9	Accurate PKa Computation Using Matched Interface and Boundary (MIB) Method Based Poisson-Boltzmann Solver. Communications in Computational Physics, 2018, 23, .	1.7	3
10	A two-component Matched Interface and Boundary (MIB) regularization for charge singularity in implicit solvation. Journal of Computational Physics, 2017, 351, 25-39.	3.8	24
11	Parallel Computing of the Adaptive N-Body Treecode Algorithm for Solving Boundary Integral Poisson-Boltzmann Equation. Lecture Notes in Computer Science, 2016, , 82-89.	1.3	0
12	A boundary integral Poisson-Boltzmann solvers package for solvated bimolecular simulations. Computational and Mathematical Biophysics, 2015, 3, .	1.1	6
13	It is not the parts, but how they interact that determines the behaviour of circadian rhythms across scales and organisms. Interface Focus, 2014, 4, 20130076.	3.0	28
14	A treecode-accelerated boundary integral Poisson–Boltzmann solver for electrostatics of solvated biomolecules. Journal of Computational Physics, 2013, 247, 62-78.	3.8	75
15	Parallel higher-order boundary integral electrostatics computation on molecular surfaces with curved triangulation. Journal of Computational Physics, 2013, 241, 253-265.	3.8	13
16	A GPU-accelerated direct-sum boundary integral Poisson–Boltzmann solver. Computer Physics Communications, 2013, 184, 1490-1496.	7.5	19
17	Fully implicit ADI schemes for solving the nonlinear Poisson-Boltzmann equation. Computational and Mathematical Biophysics, 2013, 1, 109-123.	1.1	7
18	MIBPB: A software package for electrostatic analysis. Journal of Computational Chemistry, 2011, 32, 756-770.	3.3	127

#	Article	IF	Citations
19	Multiscale molecular dynamics using the matched interface and boundary method. Journal of Computational Physics, 2011, 230, 435-457.	3.8	60
20	Treatment of geometric singularities in implicit solvent models. Journal of Chemical Physics, 2007, 126, 244108.	3.0	74
21	Treatment of charge singularities in implicit solvent models. Journal of Chemical Physics, 2007, 127, 114106.	3.0	128
22	The shift-invariant discrete wavelet transform and application to speech waveform analysis. Journal of the Acoustical Society of America, 2005, 117, 2122-2133.	1.1	10