Zhongming Wang

List of Publications by Year
in descending order

12 papers	246 citations	1163117 8 h-index	1199594 12 g-index
12 all docs	12 docs citations	12 times ranked	147 citing authors

#	Article	IF	Citations
1	Mean-field description of ionic size effects with nonuniform ionic sizes: A numerical approach. Physical Review E, 2011, 84, 021901.	2.1	87
2	A free energy satisfying finite difference method for Poisson–Nernst–Planck equations. Journal of Computational Physics, 2014, 268, 363-376.	3.8	45
3	A free energy satisfying discontinuous Galerkin method for one-dimensional Poisson–Nernst–Planck systems. Journal of Computational Physics, 2017, 328, 413-437.	3.8	31
4	Positivity preserving finite difference methods for Poisson–Nernst–Planck equations with steric interactions: Application to slit-shaped nanopore conductance. Journal of Computational Physics, 2019, 397, 108864.	3.8	20
5	An Entropy Satisfying Discontinuous Galerkin Method for Nonlinear Fokker–Planck Equations. Journal of Scientific Computing, 2016, 68, 1217-1240.	2.3	14
6	Structure-preserving and efficient numerical methods for ion transport. Journal of Computational Physics, 2020, 418, 109597.	3.8	11
7	A modified Poisson–Nernst–Planck model with excluded volume effect: theory and numerical implementation. Communications in Mathematical Sciences, 2018, 16, 251-271.	1.0	11
8	A conservative, free energy dissipating, and positivity preserving finite difference scheme for multi-dimensional nonlocal Fokker–Planck equation. Journal of Computational Physics, 2019, 386, 22-36.	3.8	9
9	Dynamics of solutions in the generalized Benjamin-Ono equation: A numerical study. Journal of Computational Physics, 2021, 445, 110570.	3.8	8
10	Computational Study on Hysteresis of Ion Channels: Multiple Solutions to Steady-State Poisson-Nernst-Planck Equations. Communications in Computational Physics, 2018, 23, .	1.7	5
11	Positivity-preserving third order DG schemes for Poisson–Nernst–Planck equations. Journal of Computational Physics, 2022, 452, 110777.	3.8	4
12	Variational Inference of Linear Regression with Nonzero Prior Means. Communications in Statistics Part B: Simulation and Computation, 2016, 45, 2241-2248.	1.2	1