Jinn-Liang Liu

List of Publications by Year
in descending order

17 papers	394 citations	759233 12 h-index	888059 17 g-index
17 all docs	17 docs citations	17 times ranked	205 citing authors

#	Article	IF	Citations
1	Poisson-Nernst-Planck-Fermi theory for modeling biological ion channels. Journal of Chemical Physics, 2014, 141, 22D532.	3.0	63
2	Poissonâ€“Fermi model of single ion activities in aqueous solutions. Chemical Physics Letters, 2015, 637, 1-6.	2.6	42
3	Correlated Ions in a Calcium Channel Model: A Poissonâ€“Fermi Theory. Journal of Physical Chemistry B, 2013, 117, 12051-12058.	2.6	40
4	Molecular Mean-Field Theory of Ionic Solutions: A Poisson-Nernst-Planck-Bikerman Model. Entropy, 2020, 22, 550.	2.2	40
5	Deep learning and control algorithms of direct perception for autonomous driving. Applied Intelligence, 2021, 51, 237-247.	5.3	30
6	Numerical methods for a Poisson-Nernst-Planck-Fermi model of biological ion channels. Physical Review E, 2015, 92, 012711.	2.1	29
7	End-to-end deep learning of lane detection and path prediction for real-time autonomous driving. Signal, Image and Video Processing, 2023, 17, 199-205.	2.7	28
8	Numerical methods for the Poissonâ€“Fermi equation in electrolytes. Journal of Computational Physics, 2013, 247, 88-99.	3.8	27
9	A generalized Debye-HÃ¼ckel theory of electrolyte solutions. AIP Advances, 2019, 9, .	1.3	22
10	Analytical models of calcium binding in a calcium channel. Journal of Chemical Physics, 2014, 141, 075102.	3.0	19
11	Poissonâ€“Fermi Modeling of the Ion Exchange Mechanism of the Sodium/Calcium Exchanger. Journal of Physical Chemistry B, 2016, 120, 2658-2669.	2.6	13
12	Poisson-Fermi modeling of ion activities in aqueous single and mixed electrolyte solutions at variable temperature. Journal of Chemical Physics, 2018, 148, 054501.	3.0	13
13	Nonlocal Poisson-Fermi model for ionic solvent. Physical Review E, 2016, 94, 012114.	2.1	11
14	Poisson-Fermi Formulation of Nonlocal Electrostatics in Electrolyte Solutions. Computational and Mathematical Biophysics, 2017, 5, 116-124.	1.1	7
15	Generalized Debye–HÃ¼ckel Equation From Poisson–Bikerman Theory. SIAM Journal on Applied Mathematics, 2020, 80, 2003-2023.	1.8	6
16	A GPU Poissonâ€“Fermi solver for ion channel simulations. Computer Physics Communications, 2018, 229, 99-105.	7.5	3
17	A Quantum Corrected Poisson-Nernst-Planck Model for Biological Ion Channels. Computational and Mathematical Biophysics, 2015, 3, .	1.1	1