# Zhen-Nan Zhou

List of Publications by Year
in descending order

| 27 papers | 314 citations | 933447 10 h-index | 888059 17 g-index |
|---|---|---|---|
| 27 all docs | 27 docs citations | 27 times ranked | 339 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Dimeric Cycloparaphenylenes with a Rigid Aromatic Linker. Angewandte Chemie - International Edition, 2021, 60, 7649-7653. | 13.8 | 47 |
| 2 | Association of pre-treatment radiomic features with lung cancer recurrence following stereotactic body radiation therapy. Physics in Medicine and Biology, 2019, 64, 025007. | 3.0 | 41 |
| 3 | Positivity-preserving and asymptotic preserving method for 2D Keller-Segal equations. Mathematics of Computation, 2017, 87, 1165-1189. | 2.1 | 32 |
| 4 | An Exploratory Radiomics Approach to Quantifying Pulmonary Function in CT Images. Scientific Reports, 2019, 9, 11509. | 3.3 | 30 |
| 5 | Path integral molecular dynamics with surface hopping for thermal equilibrium sampling of nonadiabatic systems. Journal of Chemical Physics, 2017, 146, 154110. | 3.0 | 18 |
| 6 | An accurate front capturing scheme for tumor growth models with a free boundary limit. Journal of Computational Physics, 2018, 364, 73-94. | 3.8 | 17 |
| 7 | Second-order semi-implicit projection methods for micromagnetics simulations. Journal of Computational Physics, 2020, 404, 109104. | 3.8 | 15 |
| 8 | Frozen Gaussian approximation with surface hopping for mixed quantum-classical dynamics: A mathematical justification of fewest switches surface hopping algorithms. Mathematics of Computation, 2017, 87, 2189-2232. | 2.1 | 12 |
| 9 | Improved sampling and validation of frozen Gaussian approximation with surface hopping algorithm for nonadiabatic dynamics. Journal of Chemical Physics, 2016, 145, 124109. | 3.0 | 11 |
| 10 | Data clustering based on Langevin annealing with a self-consistent potential. Quarterly of Applied Mathematics, 2019, 77, 591-613. | 0.7 | 11 |
| 11 | A semi-Lagrangian time splitting method for the Schrödinger equation with vector potentials. Communications in Information and Systems, 2013, 13, 247-289. | 0.5 | 11 |
| 12 | Explicit and Implicit TVD Schemes for Conservation Laws with Caputo Derivatives. Journal of Scientific Computing, 2017, 72, 291-313. | 2.3 | 10 |
| 13 | A structure preserving numerical scheme for Fokker-Planck equations of neuron networks: Numerical analysis and exploration. Journal of Computational Physics, 2021, 433, 110195. | 3.8 | 10 |
| 14 | On a Schrödinger--Landau--Lifshitz System: Variational Structure and Numerical Methods. Multiscale Modeling and Simulation, 2016, 14, 1463-1487. | 1.6 | 8 |
| 15 | Numerical approximation of the Schrödinger equation with the electromagnetic field by the Hagedorn wave packets. Journal of Computational Physics, 2014, 272, 386-407. | 3.8 | 6 |
| 16 | An improved semi-Lagrangian time splitting spectral method for the semi-classical Schrödinger equation with vector potentials using NUFFT. Applied Numerical Mathematics, 2017, 111, 144-159. | 2.1 | 6 |
| 17 | Accelerated sampling by infinite swapping of path integral molecular dynamics with surface hopping. Journal of Chemical Physics, 2018, 148, 064110. | 3.0 | 5 |
| 18 | Efficient sampling of thermal averages of interacting quantum particle systems with random batches. Journal of Chemical Physics, 2021, 154, 204106. | 3.0 | 5 |

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|---|---------|----|-----------|
| 19 | Analysis and computation of some tumor growth models with nutrient: From cell density models to free boundary dynamics. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 3011-3035. | 0.9 | 5 |
| 20 | Rigorous Justification of the Fokker--Planck Equations of Neural Networks Based on an Iteration Perspective. SIAM Journal on Mathematical Analysis, 2022, 54, 1270-1312. | 1.9 | 4 |
| 21 | Gaussian wave packet transform based numerical scheme for the semi-classical Schrödinger equation with random inputs. Journal of Computational Physics, 2020, 401, 109015. | 3.8 | 3 |
| 22 | Toward Understanding the Boundary Propagation Speeds in Tumor Growth Models. SIAM Journal on Applied Mathematics, 2021, 81, 1052-1076. | 1.8 | 3 |
| 23 | Continuum limit and preconditioned Langevin sampling of the path integral molecular dynamics. Journal of Computational Physics, 2020, 423, 109788. | 3.8 | 1 |
| 24 | The Bayesian inversion problem for thermal average sampling of quantum systems. Journal of Computational Physics, 2020, 413, 109448. | 3.8 | 1 |
| 25 | A Unified Structure Preserving Scheme for a Multispecies Model with a Gradient Flow Structure and Nonlocal Interactions via Singular Kernels. SIAM Journal of Scientific Computing, 2021, 43, B539-B569. | 2.8 | 1 |
| 26 | A novel spectral method for the semiclassical Schrödinger equation based on the Gaussian wave-packet transform. IMA Journal of Numerical Analysis, 0, , . | 2.9 | 1 |
| 27 | Approximation of the Shannon Capacity Via Matrix Cone Programming. Journal of the Operations Research Society of China, 0, , 1. | 1.4 | 0 |

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