Lei Li

List of Publications by Year
in descending order

33	608	686830 13	642321 23
papers	citations	h-index	g-index

33	33	33	323
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On the mean field limit of the Random Batch Method for interacting particle systems. Science China Mathematics, 2022, 65, 169-202.	0.8	6
2	Numerical stability of GrÃ¼nwaldâ€“Letnikov method for time fractional delay differential equations. BIT Numerical Mathematics, 2022, 62, 995-1027.	1.0	6
3	Superscalability of the random batch Ewald method. Journal of Chemical Physics, 2022, 156, 014114.	1.2	14
4	Random Batch Methods for Classical and Quantum Interacting Particle Systems and Statistical Samplings. Modeling and Simulation in Science, Engineering and Technology, 2022, , 153-200.	0.4	5
5	On the Random Batch Method for Second Order Interacting Particle Systems. Multiscale Modeling and Simulation, 2022, 20, 741-768.	0.6	2
6	Convergence of the Random Batch Method for Interacting Particles with Disparate Species and Weights. SIAM Journal on Numerical Analysis, 2021, 59, 746-768.	1.1	21
7	A Random Batch Ewald Method for Particle Systems with Coulomb Interactions. SIAM Journal of Scientific Computing, 2021, 43, B937-B960.	1.3	22
8	Scheduling fixed length quarantines to minimize the total number of fatalities during an epidemic. Journal of Mathematical Biology, 2021, 82, 69.	0.8	6
9	Complete monotonicity-preserving numerical methods for time fractional ODEs. Communications in Mathematical Sciences, 2021, 19, 1301-1336.	0.5	6
10	A consensus-based global optimization method for high dimensional machine learning problems. ESAIM - Control, Optimisation and Calculus of Variations, 2021, 27, S5.	0.7	39
11	Random Batch Methods (RBM) for interacting particle systems. Journal of Computational Physics, 2020, 400, 108877.	1.9	62
12	A Random-Batch Monte Carlo Method for Many-Body Systems with Singular Kernels. SIAM Journal of Scientific Computing, 2020, 42, A1486-A1509.	1.3	19
13	A stochastic version of Stein variational gradient descent for efficient sampling. Communications in Applied Mathematics and Computational Science, 2020, 15, 37-63.	0.7	14
14	Large time behaviors of upwind schemes and B-schemes for Fokker-Planck equations on $mathbb {R}$ by jump processes. Mathematics of Computation, 2020, 89, 2283-2320.	1.1	9
15	Numerical approximation and fast evaluation of the overdamped generalized Langevin equation with fractional noise. ESAIM: Mathematical Modelling and Numerical Analysis, 2020, 54, 431-463.	0.8	8
16	A Discretization of Caputo Derivatives with Application to Time Fractional SDEs and Gradient Flows. SIAM Journal on Numerical Analysis, 2019, 57, 2095-2120.	1.1	4
17	On the mean field limit for Brownian particles with Coulomb interaction in 3D. Journal of Mathematical Physics, 2019, 60, .	0.5	12
18	Patched peakon weak solutions of the modified Camassaâ€“Holm equation. Physica D: Nonlinear Phenomena, 2019, 390, 15-35.	1.3	6

#	Article	IF	Citations
19	Cauchy problems for Kellerâ€“Segel type timeâ€“space fractional diffusion equation. Journal of Differential Equations, 2018, 265, 1044-1096.	1.1	67
20	p-Euler equations and p-Navierâ€“Stokes equations. Journal of Differential Equations, 2018, 264, 4707-4748.	1.1	5
21	A note on one-dimensional time fractional ODEs. Applied Mathematics Letters, 2018, 83, 87-94.	1.5	4
22	Some Compactness Criteria for Weak Solutions of Time Fractional PDEs. SIAM Journal on Mathematical Analysis, 2018, 50, 3963-3995.	0.9	54
23	A Generalized Definition of Caputo Derivatives and Its Application to Fractional ODEs. SIAM Journal on Mathematical Analysis, 2018, 50, 2867-2900.	0.9	68
24	Semigroups of stochastic gradient descent and online principal component analysis: properties and diffusion approximations. Communications in Mathematical Sciences, 2018, 16, 777-789.	0.5	7
25	Fractional Stochastic Differential Equations Satisfying Fluctuation-Dissipation Theorem. Journal of Statistical Physics, 2017, 169, 316-339.	0.5	21
26	A note on deconvolution with completely monotone sequences and discrete fractional calculus. Quarterly of Applied Mathematics, 2017, 76, 189-198.	0.5	8
27	A Locally Gradient-Preserving Reinitialization for Level Set Functions. Journal of Scientific Computing, 2017, 71, 274-302.	1.1	1
28	Continuous and discrete one dimensional autonomous fractional ODEs. Discrete and Continuous Dynamical Systems - Series B, 2017, 22, 17-17.	0.5	4
29	Swimming and pumping by helical waves in viscous and viscoelastic fluids. Physics of Fluids, 2015, 27, .	1.6	14
30	The instability of a sedimenting suspension of weakly flexible fibres. Journal of Fluid Mechanics, 2014, 756, 935-964.	1.4	14
31	Analytical solution for laterally loaded long piles based on Fourierâ€“Laplace integral. Applied Mathematical Modelling, 2014, 38, 5198-5216.	2.2	16
32	Swimming and pumping of rigid helical bodies in viscous fluids. Physics of Fluids, 2014, 26, 041901.	1.6	7
33	The sedimentation of flexible filaments. Journal of Fluid Mechanics, 2013, 735, 705-736.	1.4	57