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	A Generalized Definition of Caputo Derivatives and Its Application to Fractional ODEs. SIAM Journal on Mathematical Analysis, 2018, 50, 2867-2900.	0.9	68
2	Cauchy problems for Kellerâ€“Segel type timeâ€“space fractional diffusion equation. Journal of Differential Equations, 2018, 265, 1044-1096.	1.1	67
3	Random Batch Methods (RBM) for interacting particle systems. Journal of Computational Physics, 2020, 400, 108877.	1.9	62
4	The sedimentation of flexible filaments. Journal of Fluid Mechanics, 2013, 735, 705-736.	1.4	57
5	Some Compactness Criteria for Weak Solutions of Time Fractional PDEs. SIAM Journal on Mathematical Analysis, 2018, 50, 3963-3995.	0.9	54
6	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
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	Fractional Stochastic Differential Equations Satisfying Fluctuation-Dissipation Theorem. Journal of Statistical Physics, 2017, 169, 316-339.	0.5	21
9	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
10	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
11	Analytical solution for laterally loaded long piles based on Fourierâ€“Laplace integral. Applied Mathematical Modelling, 2014, 38, 5198-5216.	2.2	16
12	The instability of a sedimenting suspension of weakly flexible fibres. Journal of Fluid Mechanics, 2014, 756, 935-964.	1.4	14
13	Swimming and pumping by helical waves in viscous and viscoelastic fluids. Physics of Fluids, 2015, 27, .	1.6	14
14	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
15	Superscalability of the random batch Ewald method. Journal of Chemical Physics, 2022, 156, 014114.	1.2	14
16	On the mean field limit for Brownian particles with Coulomb interaction in 3D. Journal of Mathematical Physics, 2019, 60, .	0.5	12
17	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
18	A note on deconvolution with completely monotone sequences and discrete fractional calculus. Quarterly of Applied Mathematics, 2017, 76, 189-198.	0.5	8

#	Article	IF	Citations
19	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
20	Swimming and pumping of rigid helical bodies in viscous fluids. Physics of Fluids, 2014, 26, 041901.	1.6	7
21	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
22	Patched peakon weak solutions of the modified Camassaâ€“Holm equation. Physica D: Nonlinear Phenomena, 2019, 390, 15-35.	1.3	6
23	Scheduling fixed length quarantines to minimize the total number of fatalities during an epidemic. Journal of Mathematical Biology, 2021, 82, 69.	0.8	6
24	Complete monotonicity-preserving numerical methods for time fractional ODEs. Communications in Mathematical Sciences, 2021, 19, 1301-1336.	0.5	6
25	On the mean field limit of the Random Batch Method for interacting particle systems. Science China Mathematics, 2022, 65, 169-202.	0.8	6
26	Numerical stability of GrÃ¼nwaldâ€“Letnikov method for time fractional delay differential equations. BIT Numerical Mathematics, 2022, 62, 995-1027.	1.0	6
27	p-Euler equations and p-Navierâ€“Stokes equations. Journal of Differential Equations, 2018, 264, 4707-4748.	1.1	5
28	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
29	A note on one-dimensional time fractional ODEs. Applied Mathematics Letters, 2018, 83, 87-94.	1.5	4
30	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
31	Continuous and discrete one dimensional autonomous fractional ODEs. Discrete and Continuous Dynamical Systems - Series B, 2017, 22, 17-17.	0.5	4
32	On the Random Batch Method for Second Order Interacting Particle Systems. Multiscale Modeling and Simulation, 2022, 20, 741-768.	0.6	2
33	A Locally Gradient-Preserving Reinitialization for Level Set Functions. Journal of Scientific Computing, 2017, 71, 274-302.	1.1	1