

Molei Tao

List of Publications by Year in descending order

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13
papers

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citations

1307594

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1281871

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times ranked

218
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonintrusive and Structure Preserving Multiscale Integration of Stiff ODEs, SDEs, and Hamiltonian Systems with Hidden Slow Dynamics via Flow Averaging. <i>Multiscale Modeling and Simulation</i> , 2010, 8, 1269-1324.	1.6	66
2	Explicit symplectic approximation of nonseparable Hamiltonians: Algorithm and long time performance. <i>Physical Review E</i> , 2016, 94, 043303.	2.1	59
3	Explicit high-order symplectic integrators for charged particles in general electromagnetic fields. <i>Journal of Computational Physics</i> , 2016, 327, 245-251.	3.8	43
4	Dynamic mode decomposition for multiscale nonlinear physics. <i>Physical Review E</i> , 2019, 99, 063311.	2.1	24
5	Space-time phononic crystals with anomalous topological edge states. <i>Physical Review Research</i> , 2019, 1, .	3.6	18
6	Analysis and Design of Capacitive Parametric Ultrasonic Transducers for Efficient Ultrasonic Power Transfer Based on a 1-D Lumped Model. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018, 65, 2103-2112.	3.0	14
7	A Derivative-Free Optimization Method With Application to Functions With Exploding and Vanishing Gradients. , 2021, 5, 587-592.		12
8	From Efficient Symplectic Exponentiation of Matrices to Symplectic Integration of High-dimensional Hamiltonian Systems with Slowly Varying Quadratic Stiff Potentials. <i>Applied Mathematics Research EXpress</i> , 2011, 2011, 242-280.	1.0	9
9	Simply improved averaging for coupled oscillators and weakly nonlinear waves. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019, 71, 1-21.	3.3	7
10	Temporal Homogenization of Linear ODEs, with Applications to Parametric Super-Resonance and Energy Harvest. <i>Archive for Rational Mechanics and Analysis</i> , 2016, 220, 261-296.	2.4	5
11	Metastable transitions in inertial Langevin systems: What can be different from the overdamped case?. <i>European Journal of Applied Mathematics</i> , 2019, 30, 830-852.	2.9	2
12	Accurate and efficient simulations of Hamiltonian mechanical systems with discontinuous potentials. <i>Journal of Computational Physics</i> , 2022, 450, 110846.	3.8	2
13	Parametric Resonance for Enhancing the Rate of Metastable Transition. <i>SIAM Journal on Applied Mathematics</i> , 2022, 82, 1068-1090.	1.8	0