

# Jason Frank

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10672071/publications.pdf>

Version: 2024-02-01

20  
papers

309  
citations

840776  
11  
h-index

839539  
18  
g-index

20  
all docs

20  
docs citations

20  
times ranked

188  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometric Integrators for Classical Spin Systems. <i>Journal of Computational Physics</i> , 1997, 133, 160-172.	3.8	48
2	Linear PDEs and Numerical Methods That Preserve a Multisymplectic Conservation Law. <i>SIAM Journal of Scientific Computing</i> , 2006, 28, 260-277.	2.8	42
3	Conservation Properties of Smoothed Particle Hydrodynamics Applied to the Shallow Water Equation. <i>BIT Numerical Mathematics</i> , 2003, 43, 41-55.	2.0	31
4	On the multisymplecticity of partitioned Runge-Kutta and splitting methods. <i>International Journal of Computer Mathematics</i> , 2007, 84, 847-869.	1.8	30
5	Statistical mechanics of Arakawa's discretizations. <i>Journal of Computational Physics</i> , 2007, 227, 1286-1305.	3.8	29
6	Statistical relevance of vorticity conservation in the Hamiltonian particle-mesh method. <i>Journal of Computational Physics</i> , 2010, 229, 2634-2648.	3.8	19
7	The Langevin Limit of the NosÃ©-Hoover-Langevin Thermostat. <i>Journal of Statistical Physics</i> , 2011, 143, 715-724.	1.2	16
8	Hamiltonian Particle-Mesh Method for Two-Layer Shallow-Water Equations Subject to the Rigid-Lid Approximation. <i>SIAM Journal on Applied Dynamical Systems</i> , 2004, 3, 69-83.	1.6	13
9	Data Assimilation for Linear Parabolic Equations: Minimax Projection Method. <i>SIAM Journal of Scientific Computing</i> , 2015, 37, A1174-A1196.	2.8	13
10	Geometric space-time integration of ferromagnetic materials. <i>Applied Numerical Mathematics</i> , 2004, 48, 307-322.	2.1	11
11	Conservation of wave action under multisymplectic discretizations. <i>Journal of Physics A</i> , 2006, 39, 5479-5493.	1.6	11
12	A detectability criterion and data assimilation for nonlinear differential equations. <i>Nonlinearity</i> , 2018, 31, 5235-5257.	1.4	11
13	Symplectic M&#x00F6;bius integrators for LQ optimal control problems. , 2014, , .		10
14	Symplectic Runge-Kutta discretization of a regularized forward-backward sweep iteration for optimal control problems. <i>Journal of Computational and Applied Mathematics</i> , 2021, 383, 113133.	2.0	10
15	A Note on Statistical Consistency of Numerical Integrators for Multiscale Dynamics. <i>Multiscale Modeling and Simulation</i> , 2018, 16, 1017-1033.	1.6	4
16	Simplified Modelling of a Thermal Bath, with Application to a Fluid Vortex System. <i>Multiscale Modeling and Simulation</i> , 2010, 8, 1882-1901.	1.6	3
17	Explicit, parallel Poisson integration of point vortices on the sphere. <i>Journal of Computational and Applied Mathematics</i> , 2016, 304, 100-119.	2.0	3
18	Hydrostatic Hamiltonian particle-mesh (HPM) methods for atmospheric modelling. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2012, 138, 1388-1399.	2.7	2

#	ARTICLE	IF	CITATIONS
19	Observation-based correction of dynamical models using thermostats. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017, 473, 20160730.	2.1	2
20	Direct control of the small-scale energy balance in two-dimensional fluid dynamics. <i>Journal of Fluid Mechanics</i> , 2015, 782, 240-259.	3.4	1