

Marcel Oliver

List of Publications by Year in descending order

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citations

516710

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62
docs citations

62
times ranked

473
citing authors

#	ARTICLE	IF	CITATIONS
1	Remark on the Rate of Decay of Higher Order Derivatives for Solutions to the Navier–Stokes Equations in R^n . <i>Journal of Functional Analysis</i> , 2000, 172, 1-18.	1.4	116
2	Analyticity of Solutions for a Generalized Euler Equation. <i>Journal of Differential Equations</i> , 1997, 133, 321-339.	2.2	112
3	Global well-posedness for models of shallow water in a basin with a varying bottom. <i>Indiana University Mathematics Journal</i> , 1996, 45, 0-0.	0.9	57
4	On the Domain of Analyticity for Solutions of Second Order Analytic Nonlinear Differential Equations. <i>Journal of Differential Equations</i> , 2001, 174, 55-74.	2.2	41
5	Length scales in solutions of the complex Ginzburg-Landau equation. <i>Physica D: Nonlinear Phenomena</i> , 1996, 89, 267-286.	2.8	39
6	THE VORTEX BLOB METHOD AS A SECOND-GRADE NON-NEWTONIAN FLUID. <i>Communications in Partial Differential Equations</i> , 2001, 26, 295-314.	2.2	39
7	Approximate momentum conservation for spatial semidiscretizations of semilinear wave equations. <i>Numerische Mathematik</i> , 2004, 97, 493-535.	1.9	38
8	Analyticity of the attractor and the number of determining nodes for a weakly damped driven nonlinear Schrödinger equation. <i>Indiana University Mathematics Journal</i> , 1998, 47, 0-0.	0.9	33
9	Classical Solutions for a Generalized Euler Equation in Two Dimensions. <i>Journal of Mathematical Analysis and Applications</i> , 1997, 215, 471-484.	1.0	31
10	Global well-posedness for the lake equations. <i>Physica D: Nonlinear Phenomena</i> , 1996, 98, 492-509.	2.8	30
11	Variational asymptotics for rotating shallow water near geostrophy: a transformational approach. <i>Journal of Fluid Mechanics</i> , 2006, 551, 197.	3.4	30
12	Sustaining diversity in trait-based models of phytoplankton communities. <i>Frontiers in Ecology and Evolution</i> , 2014, 2, .	2.2	29
13	Ocean kinetic energy backscatter parametrizations on unstructured grids: Impact on mesoscale turbulence in a channel. <i>Ocean Modelling</i> , 2019, 138, 51-67.	2.4	23
14	Boltzmann's Dilemma: An Introduction to Statistical Mechanics via the Kac Ring. <i>SIAM Review</i> , 2009, 51, 613-635.	9.5	22
15	Distribution-valued initial data for the complex ginzburg-landau equation. <i>Communications in Partial Differential Equations</i> , 1997, 22, 39-48.	2.2	17
16	Numerical Evaluation of the Evans Function by Magnus Integration. <i>BIT Numerical Mathematics</i> , 2005, 45, 219-258.	2.0	17
17	Ocean Kinetic Energy Backscatter Parametrization on Unstructured Grids: Impact on Global Eddy-permitting Simulations. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001855.	3.8	16
18	Parcel Eulerian–Lagrangian fluid dynamics of rotating geophysical flows. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2006, 462, 2575-2592.	2.1	15

#	ARTICLE	IF	CITATIONS
19	Gevrey Regularity for the Attractor of a Partially Dissipative Model of Bénard Convection in a Porous Medium. <i>Journal of Differential Equations</i> , 2000, 163, 292-311.	2.2	14
20	A Kinematic Kinetic Energy Backscatter Parametrization: From Implementation to Global Ocean Simulations. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2020MS002175.	3.8	11
21	Justification of the Shallow-Water Limit for a Rigid-Lid Flow with Bottom Topography. <i>Theoretical and Computational Fluid Dynamics</i> , 1997, 9, 311-324.	2.2	10
22	Slow dynamics via degenerate variational asymptotics. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140460.	2.1	9
23	Multi-scale Methods for Geophysical Flows. <i>Mathematics of Planet Earth</i> , 2019, , 1-51.	0.1	9
24	Toward Consistent Subgrid Momentum Closures in Ocean Models. <i>Mathematics of Planet Earth</i> , 2019, , 145-192.	0.1	9
25	Generalized LSG models with spatially varying Coriolis parameter. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2013, 107, 259-276.	1.2	8
26	The Interior Energy Pathway: Inertia-Gravity Wave Emission by Oceanic Flows. <i>Mathematics of Planet Earth</i> , 2019, , 53-85.	0.1	7
27	Global well-posedness for the averaged Euler equations in two dimensions. <i>Physica D: Nonlinear Phenomena</i> , 2000, 138, 197-209.	2.8	6
28	Long-Time Accuracy for Approximate Slow Manifolds in a Finite-Dimensional Model of Balance. <i>Journal of Nonlinear Science</i> , 2007, 17, 283-307.	2.1	6
29	Global Well-Posedness for the Generalized Large-Scale Semigeostrophic Equations. <i>Archive for Rational Mechanics and Analysis</i> , 2013, 207, 969-990.	2.4	6
30	Generalized large-scale semigeostrophic approximations for the f -plane primitive equations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 184001.	2.1	6
31	Comparison of variational balance models for the rotating shallow water equations. <i>Journal of Fluid Mechanics</i> , 2017, 822, 689-716.	3.4	6
32	Hamiltonian formalism for models of rotating shallow water in semigeostrophic scaling. <i>Discrete and Continuous Dynamical Systems</i> , 2011, 31, 827-846.	0.9	6
33	Accelerating fronts in autocatalysis. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2000, 456, 1609-1624.	2.1	5
34	Optimal Balance via Adiabatic Invariance of Approximate Slow Manifolds. <i>Multiscale Modeling and Simulation</i> , 2017, 15, 1404-1422.	1.6	5
35	The Lagrangian averaged Euler equations as the short-time inviscid limit of the Navier–Stokes equations with Besov class data in \mathbb{R}^2 . <i>Communications on Pure and Applied Analysis</i> , 2002, 1, 221-235.	0.8	4
36	A variational derivation of the geostrophic momentum approximation. <i>Journal of Fluid Mechanics</i> , 2014, 751, .	3.4	4

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37	Lagrangian averaging with geodesic mean. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170558.	2.1	4
38	Geometric Lagrangian averaged Euler–Boussinesq and primitive equations. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 455501.	2.1	4
39	Hs-class construction of an almost invariant slow subspace for the Klein–Gordon equation in the non-relativistic limit. Journal of Mathematical Physics, 2018, 59, 051509.	1.1	4
40	Optimal balance for rotating shallow water in primitive variables. Geophysical and Astrophysical Fluid Dynamics, 2020, 114, 429-452.	1.2	4
41	A-stable Runge–Kutta methods for semilinear evolution equations. Journal of Functional Analysis, 2012, 263, 1981-2023.	1.4	3
42	Uniqueness of solutions for weakly degenerate cordial Volterra integral equations. Journal of Integral Equations and Applications, 2019, 31, .	0.6	3
43	A new model for shallow water in the low-Rossby-number limit. Journal of Fluid Mechanics, 2002, 450, 287-296.	3.4	2
44	Transparent boundary conditions as dissipative subgrid closures for the spectral representation of scalar advection by shear flows. Journal of Mathematical Physics, 2007, 48, 065502.	1.1	2
45	A parcel formulation of Hamiltonian layer models. Geophysical and Astrophysical Fluid Dynamics, 2009, 103, 423-442.	1.2	2
46	Weak solutions for generalized large-scale semigeostrophic equations. Communications on Pure and Applied Analysis, 2012, 12, 939-955.	0.8	2
47	Convergence of the Hamiltonian particle-mesh method for barotropic fluid flow. Mathematics of Computation, 2012, 82, 861-891.	2.1	2
48	Exponentially accurate Hamiltonian embeddings of symplectic A-stable Runge–Kutta methods for Hamiltonian semilinear evolution equations. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2016, 146, 1265-1301.	1.2	2
49	On the Existence of Solutions to a Bi-Planar Monge-Ampère Equation. Acta Mathematica Scientia, 2020, 40, 379-388.	1.0	2
50	Convergence of the Hamiltonian Particle-Mesh Method Applied to Barotropic Fluid Equations. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10127-10128.	0.2	1
51	Stability under Galerkin truncation of A-stable Runge–Kutta discretizations in time. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2014, 144, 603-636.	1.2	1
52	Geodesic motion on groups of diffeomorphisms with H1 metric as geometric generalised Lagrangian mean theory. Geophysical and Astrophysical Fluid Dynamics, 2019, 113, 466-490.	1.2	1
53	A direct construction of a slow manifold for a semilinear wave equation of Klein–Gordon type. Journal of Differential Equations, 2019, 267, 1-14.	2.2	1
54	Breakdown of Liesegang precipitation bands in a simplified fast reaction limit of the Keller–Rubinow model. Nonlinear Differential Equations and Applications, 2021, 28, 1.	0.8	1

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55	The Ever-Elusive Blowup in the Mathematical Description of Fluids. , 2011, , 137-164.		1
56	On the Rate of Convergence of the Hamiltonian Particle-Mesh Method. Lecture Notes in Computational Science and Engineering, 2013, , 25-43.	0.3	1
57	Transparent boundary conditions as dissipative closures. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10601-10602.	0.2	0
58	An estimate on the Bedrosian commutator in Sobolev space. Journal of Inequalities and Applications, 2018, 2018, 348.	1.1	0
59	Numerical Integration of Functions of a Rapidly Rotating Phase. SIAM Journal on Numerical Analysis, 2021, 59, 2310-2319.	2.3	0
60	Variational balance models for the three-dimensional Eulerâ€“Boussinesq equations with full Coriolis force. Physics of Fluids, 2021, 33, 076606.	4.0	0