Darryl D Holm

List of Publications by Year
in descending order

251 papers	13,554 citations	50566 48 h-index	27587 110 g-index
254 all docs	254 docs citations	254 times ranked	3621 citing authors

#	Article	IF	Citations
1	Nonlinear dispersion in wave-current interactions. Journal of Geometric Mechanics, 2022, 14, 597-633.	0.5	1
2	Variational principles for fluid dynamics on rough paths. Advances in Mathematics, 2022, 404, 108409.	0.5	8
3	Stochastic Wave–Current Interaction in Thermal Shallow Water Dynamics. Journal of Nonlinear Science, 2021, 31, 1.	1.0	10
4	Stochastic mesoscale circulation dynamics in the thermal ocean. Physics of Fluids, 2021, 33, .	1.6	13
5	Perspectives on the formation of peakons in the stochastic Camassa–Holm equation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, .	1.0	4
6	Stochastic effects of waves on currents in the ocean mixed layer. Journal of Mathematical Physics, 2021, 62, .	0.5	11
7	Wave–current interaction on a free surface. Studies in Applied Mathematics, 2021, 147, 1277-1338.	1.1	3
8	The bohmion method in nonadiabatic quantum hydrodynamics. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 495201.	0.7	6
9	Stochastic Variational Formulations of Fluid Wave–Current Interaction. Journal of Nonlinear Science, 2021, 31, 4.	1.0	10
10	Circulation and Energy Theorem Preserving Stochastic Fluids. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2020, 150, 2776-2814.	0.8	20
11	Lyapunov Exponents of Two Stochastic Lorenz 63 Systems. Journal of Statistical Physics, 2020, 179, 1343-1365.	0.5	6
12	Implications of Kunita–Itô–Wentzell Formula for k-Forms in Stochastic Fluid Dynamics. Journal of Nonlinear Science, 2020, 30, 1421-1454.	1.0	14
13	Modelling the Climate and Weather of a 2D Lagrangian-Averaged Euler–Boussinesq Equation with Transport Noise. Journal of Statistical Physics, 2020, 179, 1267-1303.	0.5	13
14	Stochastic modelling in fluid dynamics: Itô versus Stratonovich. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190812.	1.0	2
15	A geometric diffuse-interface method for droplet spreading. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190222.	1.0	1
16	Lagrangian Averaged Stochastic Advection by Lie Transport for Fluids. Journal of Statistical Physics, 2020, 179, 1304-1342.	0.5	13
17	A Particle Filter for Stochastic Advection by Lie Transport: A Case Study for the Damped and Forced Incompressible Two-Dimensional Euler Equation. SIAM-ASA Journal on Uncertainty Quantification, 2020, 8, 1446-1492.	1.1	20
18	Predicting uncertainty in geometric fluid mechanics. Discrete and Continuous Dynamical Systems - Series S, 2020, 13, 1229-1242.	0.6	3

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19	Stochastic Parametrization of the Richardson Triple. Journal of Nonlinear Science, 2019, 29, 89-113.	1.0	7
20	A Geometric Framework for Stochastic Shape Analysis. Foundations of Computational Mathematics, 2019, 19, 653-701.	1.5	14
21	Stochastic Closures for Wave–Current Interaction Dynamics. Journal of Nonlinear Science, 2019, 29, 2987-3031.	1.0	10
22	Geometry of Nonadiabatic Quantum Hydrodynamics. Acta Applicandae Mathematicae, 2019, 162, 63-103.	0.5	16
23	Solution Properties of a 3D Stochastic Euler Fluid Equation. Journal of Nonlinear Science, 2019, 29, 813-870.	1.0	74
24	Numerically Modeling Stochastic Lie Transport in Fluid Dynamics. Multiscale Modeling and Simulation, 2019, 17, 192-232.	0.6	65
25	Stochastic Evolution of Augmented Born–Infeld Equations. Journal of Nonlinear Science, 2019, 29, 115-138.	1.0	0
26	Stochastic Metamorphosis with Template Uncertainties. Lecture Notes Series, Institute for Mathematical Sciences, 2019, , 75-96.	0.2	2
27	The stochastic energy-Casimir method. Comptes Rendus - Mecanique, 2018, 346, 279-290.	2.1	5
28	Stochastic Geometric Models with Non-stationary Spatial Correlations in Lagrangian Fluid Flows. Journal of Nonlinear Science, 2018, 28, 873-904.	1.0	28
29	Dynamics of non-holonomic systems with stochastic transport. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170479.	1.0	0
30	Momentum Maps and Stochastic Clebsch Action Principles. Communications in Mathematical Physics, 2018, 357, 873-912.	1.0	15
31	Un-reduction in field theory. Letters in Mathematical Physics, 2018, 108, 225-247.	0.5	1
32	Noise and Dissipation on Coadjoint Orbits. Journal of Nonlinear Science, 2018, 28, 91-145.	1.0	27
33	Stochastic discrete Hamiltonian variational integrators. BIT Numerical Mathematics, 2018, 58, 1009-1048.	1.0	28
34	Wave breaking for the Stochastic Camassa–Holm equation. Physica D: Nonlinear Phenomena, 2018, 376-377, 138-143.	1.3	23
35	String Methods for Stochastic Image and Shape Matching. Journal of Mathematical Imaging and Vision, 2018, 60, 953-967.	0.8	3
36	New variational and multisymplectic formulations of the Euler–Poincaré equation on the Virasoro–Bott group using the inverse map. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180052.	1.0	7

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37	Stochastic metamorphosis in imaging science. Annals of Mathematical Sciences and Applications, 2018, 3, 309-335.	0.2	0
38	<i>G</i> -Strands on symmetric spaces. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160795.	1.0	4
39	Bounds on solutions of the rotating, stratified, incompressible, non-hydrostatic, three-dimensional Boussinesq equations. Nonlinearity, 2017, 30, R1-R24.	0.6	0
40	Multipole Vortex Blobs (MVB): Symplectic Geometry and Dynamics. Journal of Nonlinear Science, 2017, 27, 973-1006.	1.0	4
41	Stochastic partial differential fluid equations as a diffusive limit of deterministic Lagrangian multi-time dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170388.	1.0	43
42	Noise and Dissipation in Rigid Body Motion. Springer Proceedings in Mathematics and Statistics, 2017, , 1-12.	0.1	3
43	A Stochastic Large Deformation Model for Computational Anatomy. Lecture Notes in Computer Science, 2017, , 571-582.	1.0	9
44	Weak Dual Pairs and Jetlet Methods for Ideal Incompressible Fluid Models in $$n \ge 2$$ n ‰¥ 2 Dimensions. Journal of Nonlinear Science, 2016, 26, 1723-1765.	1.0	3
45	Variational principles for stochastic soliton dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150827.	1.0	23
46	Geometry of Image Registration: The Diffeomorphism Group and Momentum Maps. Fields Institute Communications, 2015, , 19-56.	0.6	13
47	Variational principles for stochastic fluid dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140963.	1.0	155
48	A geometric theory of selective decay with applications in MHD. Nonlinearity, 2014, 27, 1747-1777.	0.6	11
49	Matrix G-strands. Nonlinearity, 2014, 27, 1445-1469.	0.6	4
50	IntegrableG-strands on semisimple Lie groups. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 075201.	0.7	1
51	Variational formulations of sound-proof models. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 1966-1973.	1.0	11
52	A jetlet hierarchy for ideal fluid dynamics. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 352001.	0.7	4
53	Euler-PoincarÃ© equations for<i>G</i>-Strands. Journal of Physics: Conference Series, 2014, 482, 012018.	0.3	0
54	Selective decay by Casimir dissipation in inviscid fluids. Nonlinearity, 2013, 26, 495-524.	0.6	20

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55	Stretching and Folding Processes in the 3D Euler and Navier-Stokes Equations. Procedia IUTAM, 2013, 9, 25-31.	1.2	0
56	On Noether's Theorem for the Euler–Poincaré Equation on the Diffeomorphism Group with Advected Quantities. Foundations of Computational Mathematics, 2013, 13, 457-477.	1.5	11
57	Inexact trajectory planning and inverse problems in the Hamilton–Pontryagin framework. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130249.	1.0	10
58	Geometric dynamics of optimization. Communications in Mathematical Sciences, 2013, 11, 163-231.	0.5	9
59	Collisionless kinetic theory of rolling molecules. Kinetic and Related Models, 2013, 6, 429-458.	0.5	2
60	G-Strands and Peakon Collisions on Diff(R). Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2013, , .	0.5	0
61	Multiscale turbulence models based on convected fluid microstructure. Journal of Mathematical Physics, 2012, 53, .	0.5	12
62	G-Strands. Journal of Nonlinear Science, 2012, 22, 517-551.	1.0	12
63	Invariant Higher-Order Variational Problems II. Journal of Nonlinear Science, 2012, 22, 553-597.	1.0	27
64	Quasiconservation laws for compressible three-dimensional Navier-Stokes flow. Physical Review E, 2012, 86, 047301.	0.8	3
65	Quantum Splines. Physical Review Letters, 2012, 109, 100501.	2.9	7
66	Exact geometric theory of dendronized polymer dynamics. Advances in Applied Mathematics, 2012, 48, 535-574.	0.4	9
67	Invariant Higher-Order Variational Problems. Communications in Mathematical Physics, 2012, 309, 413-458.	1.0	44
68	Dual pairs in resonances. Journal of Geometric Mechanics, 2012, 4, 297-311.	0.5	7
69	Euler-Poincaré formulation of hybrid plasma models. Communications in Mathematical Sciences, 2012, 10, 191-222.	0.5	22
70	Waltzing peakons and compacton pairs in a cross-coupled Camassa–Holm equation. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 265205.	0.7	11
71	Simultaneous Multi-scale Registration Using Large Deformation Diffeomorphic Metric Mapping. IEEE Transactions on Medical Imaging, 2011, 30, 1746-1759.	5.4	75
72	The gradient of potential vorticity, quaternions and an orthonormal frame for fluid particles. Geophysical and Astrophysical Fluid Dynamics, 2011, 105, 329-339.	0.4	2

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73	Higher order Lagrange-Poincaré and Hamilton-Poincaré reductions. Bulletin of the Brazilian Mathematical Society, 2011, 42, 579-606.	0.3	27
74	The Effect of Subfilter-Scale Physics on Regularization Models. Journal of Scientific Computing, 2011, 49, 21-34.	1.1	11
75	The Momentum Map Representation of Images. Journal of Nonlinear Science, 2011, 21, 115-150.	1.0	48
76	Lagrange–Poincaré field equations. Journal of Geometry and Physics, 2011, 61, 2120-2146.	0.7	25
77	Geometric Mechanics. , 2011, , .		42
78	Geometric Mechanics. , 2011, , .		31
79	Un-reduction. Journal of Geometric Mechanics, 2011, 3, 363-387.	0.5	5
80	The dynamics of the gradient of potential vorticity. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 172001.	0.7	17
81	Symmetry Reduced Dynamics of Charged Molecular Strands. Archive for Rational Mechanics and Analysis, 2010, 197, 811-902.	1.1	47
82	Multi-component generalizations of the CH equation: geometrical aspects, peakons and numerical examples. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 492001.	0.7	45
83	Smooth and peaked solitons of the CH equation. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 434003.	0.7	21
84	Simultaneous Fine and Coarse Diffeomorphic Registration: Application to Atrophy Measurement in Alzheimer's Disease. Lecture Notes in Computer Science, 2010, 13, 610-617.	1.0	20
85	The Euler-Poincaré theory of metamorphosis. Quarterly of Applied Mathematics, 2009, 67, 661-685.	0.5	53
86	Singular solutions of a modified two-component Camassa-Holm equation. Physical Review E, 2009, 79, 016601.	0.8	113
87	Momentum Maps for Lattice EPDiff. Handbook of Numerical Analysis, 2009, 14, 247-278.	0.9	0
88	Geodesic flows on semidirect-product Lie groups: geometry of singular measure-valued solutions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 457-476.	1.0	21
89	Continuous and Discrete Clebsch Variational Principles. Foundations of Computational Mathematics, 2009, 9, 221-242.	1.5	23
90	Euler's fluid equations: Optimal control vs optimization. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 4354-4359.	0.9	4

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91	Nonlocal orientation-dependent dynamics of charged strands and ribbons. Comptes Rendus Mathematique, 2009, 347, 1093-1098.	0.1	12
92	Random Hamiltonian in thermal equilibrium. Journal of Physics: Conference Series, 2009, 174, 012041.	0.3	2
93	Variational principles for spin systems and the Kirchhoff rod. Journal of Geometric Mechanics, 2009, 1, 417-444.	0.5	16
94	Geometric gradient-flow dynamics with singular solutions. Physica D: Nonlinear Phenomena, 2008, 237, 2952-2965.	1.3	11
95	Implementation of the LANS-α turbulence model in a primitive equation ocean model. Journal of Computational Physics, 2008, 227, 5691-5716.	1.9	33
96	Vlasov moments, integrable systems and singular solutions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 1024-1033.	0.9	24
97	Geometry of Vlasov kinetic moments: A bosonic Fock space for the symmetric Schouten bracket. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 4184-4196.	0.9	19
98	Kinetic models of oriented self-assembly. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 344010.	0.7	4
99	Three regularization models of the Navier–Stokes equations. Physics of Fluids, 2008, 20, .	1.6	28
100	The LANS-α and Leray turbulence parameterizations in primitive equation ocean modeling. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 344009.	0.7	18
101	A Euler–Poincaré framework for the multilayer Green–Nagdhi equations. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 344018.	0.7	9
102	Emergent singular solutions of nonlocal density-magnetization equations in one dimension. Physical Review E, 2008, 77, 036211.	0.8	4
103	Hamiltonian statistical mechanics. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 502002.	0.7	6
104	Geometric Mechanics. , 2008, , .		43
105	Geometric Mechanics. , 2008, , .		24
106	Complex trajectories of a simple pendulum. Journal of Physics A: Mathematical and Theoretical, 2007, 40, F81-F89.	0.7	48
107	Lagrangian analysis of alignment dynamics for isentropic compressible magnetohydrodynamics. New Journal of Physics, 2007, 9, 292-292.	1.2	9
108	Highly turbulent solutions of the Lagrangian-averaged Navier-Stokes α model and their large-eddy-simulation potential. Physical Review E, 2007, 76, 056310.	0.8	24

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109	Lagrangian particle paths and ortho-normal quaternion frames. Nonlinearity, 2007, 20, 1745-1759.	0.6	20
110	Complexified dynamical systems. Journal of Physics A: Mathematical and Theoretical, 2007, 40, F793-F804.	0.7	51
111	Geometric dissipation in kinetic equations. Comptes Rendus Mathematique, 2007, 345, 297-302.	0.1	8
112	The LANS-alpha turbulence model in primitive-equation ocean modeling. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1100903-1100904.	0.2	0
113	Formation and evolution of singularities in anisotropic geometric continua. Physica D: Nonlinear Phenomena, 2007, 235, 33-47.	1.3	10
114	Coriolis induced compressibility effects in rotating shear layers. , 2007, , 383-385.		1
115	Leray and LANS-α modelling of turbulent mixing. Journal of Turbulence, 2006, 7, N10.	0.5	52
116	Euler-alpha and vortex blob regularization of vortex filament and vortex sheet motion. Journal of Fluid Mechanics, 2006, 555, 149.	1.4	32
117	Length-scale estimates for the LANS-Âequations in terms of the ReynoldsÂnumber. Physica D: Nonlinear Phenomena, 2006, 220, 69-78.	1.3	16
118	Formation of clumps and patches in self-aggregation of finite-size particles. Physica D: Nonlinear Phenomena, 2006, 220, 183-196.	1.3	61
119	Commutator errors in large-eddy simulation. Journal of Physics A, 2006, 39, 2213-2229.	1.6	19
120	Quaternions and particle dynamics in the Euler fluid equations. Nonlinearity, 2006, 19, 1969-1983.	0.6	71
121	Baroclinic Instabilities of the Two-Layer Quasigeostrophic Alpha Model. Journal of Physical Oceanography, 2005, 35, 1287-1296.	0.7	15
122	Elliptic instability in the Lagrangian-averaged Euler–Boussinesq-α equations. Physics of Fluids, 2005, 17, 054113.	1.6	0
123	Aggregation of Finite-Size Particles with Variable Mobility. Physical Review Letters, 2005, 95, 226106.	2.9	56
124	A Class of Equations with Peakon and Pulson Solutions (with an Appendix by Harry Braden and John) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.8	46
125	Resonant interactions in rotating homogeneous three-dimensional turbulence. Journal of Fluid Mechanics, 2005, 542, 139.	1.4	71
126	On a Leray–α model of turbulence. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2005, 461, 629-649.	1.0	215

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127	Momentum maps and measure-valued solutions (peakons, filaments, and sheets) for the EPDiff equation. , 2005, , 203-235.		43
128	Rotating concentric circular peakons. Nonlinearity, 2004, 17, 2163-2186.	0.6	5
129	Craikâ€"Criminale solutions and elliptic instability in nonlinear-reactive closure models for turbulence. Physics of Fluids, 2004, 16, 853-866.	1.6	7
130	Eulerâ€"PoincarÃ© formulation and elliptic instability fornth-gradient fluids. Journal of Physics A, 2004, 37, 7609-7623.	1.6	1
131	Traveling Wave Solutions for a Class of One-Dimensional Nonlinear Shallow Water Wave Models. Journal of Dynamics and Differential Equations, 2004, 16, 167-178.	1.0	87
132	On asymptotically equivalent shallow water wave equations. Physica D: Nonlinear Phenomena, 2004, 190, 1-14.	1.3	182
133	Multi-frequency CraikCriminale solutions of the NavierStokes equations. Journal of Fluid Mechanics, 2004, 506, 207-215.	1.4	2
134	Soliton dynamics in computational anatomy. NeuroImage, 2004, 23, S170-S178.	2.1	61
135	Boundary Effects on Exact Solutions of the Lagrangian-Averaged Navierâ€"Stokes-Î± Equations. Journal of Statistical Physics, 2003, 113, 841-854.	0.5	11
136	Camassaâ€"Holm, Kortewegâ€"de Vries-5 and other asymptotically equivalent equations for shallow water waves. Fluid Dynamics Research, 2003, 33, 73-95.	0.6	241
137	Nonlinear balance and exchange of stability in dynamics of solitons, peakons, ramps/cliffs and leftons in a 1+1 nonlinear evolutionary PDE. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 308, 437-444.	0.9	141
138	Rasettiâ€"Regge Dirac bracket formulation of Lagrangian fluid dynamics of vortex filaments. Mathematics and Computers in Simulation, 2003, 62, 53-63.	2.4	4
139	Regularization modeling for large-eddy simulation. Physics of Fluids, 2003, 15, L13-L16.	1.6	161
140	Wave Structure and Nonlinear Balances in a Family of Evolutionary PDEs. SIAM Journal on Applied Dynamical Systems, 2003, 2, 323-380.	0.7	223
141	Mean Effects of Turbulence on Elliptic Instability in Fluids. Physical Review Letters, 2003, 90, 124501.	2.9	11
142	Intermittency in the Joint Cascade of Energy and Helicity. Physical Review Letters, 2003, 90, 214503.	2.9	91
143	Modeling Mesoscale Turbulence in the Barotropic Double-Gyre Circulation. Journal of Physical Oceanography, 2003, 33, 2355-2365.	0.7	64
144	Variational principles for Lagrangian-averaged fluid dynamics. Journal of Physics A, 2002, 35, 679-688.	1.6	17

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145	Euler-PoincarÃ© Dynamics of Perfect Complex Fluids. , 2002, , 169-180.		23
146	Transient Vortex Events in the Initial Value Problem for Turbulence. Physical Review Letters, 2002, 88, 244501.	2.9	33
147	Lagrangian averages, averaged Lagrangians, and the mean effects of fluctuations in fluid dynamics. Chaos, 2002, 12, 518-530.	1.0	53
148	KÃ¡rmÃ¡nâ€"Howarth theorem for the Lagrangian-averaged Navierâ€"Stokesâ€"alpha model of turbulence. Journal of Fluid Mechanics, 2002, 467, 205-214.	1.4	17
149	Stepwise Precession of the Resonant Swinging Spring. SIAM Journal on Applied Dynamical Systems, 2002, 1, 44-64.	0.7	62
150	Averaged Lagrangians and the mean effects of fluctuations in ideal fluid dynamics. Physica D: Nonlinear Phenomena, 2002, 170, 253-286.	1.3	56
151	Title is missing!. Journal of Dynamics and Differential Equations, 2002, 14, 1-35.	1.0	293
152	Alpha-modeling Strategy for LES of Turbulent Mixing. , 2002, , 237-278.		19
153	An Integrable Shallow Water Equation with Linear and Nonlinear Dispersion. Physical Review Letters, 2001, 87, 194501.	2.9	294
154	The Complex Geometry of Weak Piecewise Smooth Solutions of Integrable Nonlinear PDE'sÂ¶of Shallow Water and Dym Type. Communications in Mathematical Physics, 2001, 221, 197-227.	1.0	81
155	Integrable vs. nonintegrable geodesic soliton behavior. Physica D: Nonlinear Phenomena, 2001, 150, 237-263.	1.3	34
156	The Navierâ€"Stokes-alpha model of fluid turbulence. Physica D: Nonlinear Phenomena, 2001, 152-153, 505-519.	1.3	311
157	Introduction to HVBK Dynamics. , 2001, , 114-130.		7
158	Variational Principles, Geometry and Topology of Lagrangian-Averaged Fluid Dynamics. , 2001, , 271-291.		2
159	On billiard solutions of nonlinear PDEs. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 264, 171-178.	0.9	38
160	Fluctuation effects on 3D Lagrangian mean and Eulerian mean fluid motion. Physica D: Nonlinear Phenomena, 1999, 133, 215-269.	1.3	119
161	Direct numerical simulations of the Navierâ€"Stokes alpha model. Physica D: Nonlinear Phenomena, 1999, 133, 66-83.	1.3	150
162	Variational methods and nonlinear quasigeostrophic waves. Physics of Fluids, 1999, 11, 875-879.	1.6	0

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163	The Euler–Poincaré Equations and Semidirect Products with Applications to Continuum Theories. Advances in Mathematics, 1998, 137, 1-81.	0.5	711
164	The Maxwell–Vlasov equations in Euler–Poincaré form. Journal of Mathematical Physics, 1998, 39, 3138-3157.	0.5	62
165	Euler-Poincaré Models of Ideal Fluids with Nonlinear Dispersion. Physical Review Letters, 1998, 80, 4173-4176.	2.9	240
166	Camassa-Holm Equations as a Closure Model for Turbulent Channel and Pipe Flow. Physical Review Letters, 1998, 81, 5338-5341.	2.9	272
167	Hamilton's principle for quasigeostrophic motion. Physics of Fluids, 1998, 10, 800-806.	1.6	27
168	Secondary Instabilities of Flows with Elliptic Streamlines. Physical Review Letters, 1997, 78, 1900-1903.	2.9	14
169	Long-time shallow-water equations with a varying bottom. Journal of Fluid Mechanics, 1997, 349, 173-189.	1.4	35
170	On Kelvin Waves in Balance Models. Journal of Physical Oceanography, 1997, 27, 2060-2063.	0.7	3
171	Low-noise picosecond soliton transmission by use of concatenated nonlinear amplifying loop mirrors. Journal of the Optical Society of America B: Optical Physics, 1997, 14, 1850.	0.9	15
172	Homoclinic orbits and chaos in a second-harmonic generating optical cavity. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 233, 203-208.	0.9	3
173	Self-consistent Hamiltonian dynamics of wave mean-flow interaction for a rotating stratified incompressible fluid. Physica D: Nonlinear Phenomena, 1996, 98, 343-378.	1.3	42
174	The ideal Craik-Leibovich equations. Physica D: Nonlinear Phenomena, 1996, 98, 415-441.	1.3	63
175	Long-time effects of bottom topography in shallow water. Physica D: Nonlinear Phenomena, 1996, 98, 258-286.	1.3	60
176	Extended-geostrophic Hamiltonian models for rotating shallow water motion. Physica D: Nonlinear Phenomena, 1996, 98, 229-248.	1.3	34
177	Hamiltonian balance equations. Physica D: Nonlinear Phenomena, 1996, 98, 379-414.	1.3	30
178	Homoclinic orbits in the Maxwell-Bloch equations with a probe. Physical Review E, 1996, 54, 243-256.	0.8	2
179	Crossover behavior in quantum nonlinear resonance in a hydrogen atom. Physica D: Nonlinear Phenomena, 1995, 83, 55-58.	1.3	2
180	Near-integrability and chaos in a resonant-cavity laser model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 200, 299-307.	0.9	4

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181	Nonlinear resonance and dynamical chaos in a diatomic molecule driven by a resonant ir field. Physical Review A, 1995, 52, 3074-3081.	1.0	10
182	Recovery of solitons with nonlinear amplifying loop mirrors. Optics Letters, 1995, 20, 2490.	1.7	8
183	A New Integrable Shallow Water Equation. Advances in Applied Mechanics, 1994, , 1-33.	1.4	720
184	Quantum chaos of atoms in a resonator driven by an external resonant field. Physical Review A, 1994, 49, 4943-4956.	1.0	6
185	The geometry of peaked solitons and billiard solutions of a class of integrable PDE's. Letters in Mathematical Physics, 1994, 32, 137-151.	0.5	184
186	Quantum computer on a class of one-dimensional Ising systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 193, 444-450.	0.9	51
187	Dynamical chaos in SU(2)âŠ—U(1) theory. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 194, 251-264.	0.9	3
188	Crossover-Time in Quantum Boson and Spin Systems. Lecture Notes in Physics Monographs, 1994, , .	0.5	21
189	Violation of the semi-classical approximation and quantum chaos in a paramagnetic spin system. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 181, 296-307.	0.9	2
190	An integrable shallow water equation with peaked solitons. Physical Review Letters, 1993, 71, 1661-1664.	2.9	2,793
191	Chaotic dynamics due to competition among degenerate modes in a ring-cavity laser. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 161, 499-505.	0.9	2
192	Homoclinic chaos in a laser-matter system. Physica D: Nonlinear Phenomena, 1992, 56, 270-300.	1.3	21
193	Dispersive barotropic equations for stratified mesoscale ocean dynamics. Physica D: Nonlinear Phenomena, 1992, 60, 1-15.	1.3	24
194	Multiple lie-poisson structures, reductions, and geometric phases for the Maxwell-Bloch travelling wave equations. Journal of Nonlinear Science, 1992, 2, 241-262.	1.0	46
195	Elliptical vortices and integrable Hamiltonian dynamics of the rotating shallow-water equations. Journal of Fluid Mechanics, 1991, 227, 393-406.	1.4	23
196	Zeroâ€helicity Lagrangian kinematics of threeâ€dimensional advection. Physics of Fluids A, Fluid Dynamics, 1991, 3, 1033-1038.	1.6	38
197	Chaotic laser-matter interaction. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 154, 346-352.	0.9	20
198	A tri-Hamiltonian formulation of the self-induced transparency equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 160, 143-148.	0.9	10

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199	Homoclinic chaos for ray optics in a fiber. Physica D: Nonlinear Phenomena, 1991, 51, 177-188.	1.3	10
200	Lie-Poisson description of Hamiltonian ray optics. Physica D: Nonlinear Phenomena, 1991, 51, 189-199.	1.3	13
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