

# David G Dritschel

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

153  
papers

4,412  
citations

38  
h-index

62  
g-index

160  
ext. papers

4,671  
ext. citations

3  
avg, IF

5.84  
L-index

#	Paper	IF	Citations
153	Self-similar collapse of three vortices in the generalised Euler and quasi-geostrophic equations. <i>Physica D: Nonlinear Phenomena</i> , <b>2022</b> , 434, 133226	3.3	1
152	Balance in non-hydrostatic rotating shallow-water flows. <i>Physics of Fluids</i> , <b>2021</b> , 33, 086601	4.4	1
151	Velocity-pressure correlation in Navier-Stokes flows and the problem of global regularity. <i>Journal of Fluid Mechanics</i> , <b>2021</b> , 911,	3.7	2
150	Fermion self-trapping in the optical geometry of Einstein-Dirac solitons. <i>Physical Review D</i> , <b>2020</b> , 101,	4.9	1
149	Stability and evolution of two opposite-signed quasi-geostrophic shallow-water vortex patches. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>2020</b> , 114, 561-587	1.4	1
148	Equilibria and stability of four point vortices on a sphere. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2020</b> , 476, 20200344	2.4	2
147	The deflection angle between a wind-forced surface current and the overlying wind in an ocean with vertically varying eddy viscosity. <i>Physics of Fluids</i> , <b>2020</b> , 32, 116604	4.4	11
146	The validity of two-dimensional models of a rotating shallow fluid layer. <i>Journal of Fluid Mechanics</i> , <b>2020</b> , 900,	3.7	2
145	N-symmetric interaction of N hetons. I. Analysis of the case $N = 2$ . <i>Physics of Fluids</i> , <b>2020</b> , 32, 096601	4.4	5
144	On the regularity of the Green-Naghdi equations [CORRIGENDUM]. <i>Journal of Fluid Mechanics</i> , <b>2020</b> , 900,	3.7	1
143	The stability and nonlinear evolution of quasi-geostrophic toroidal vortices. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 863, 60-78	3.7	11
142	Scale-invariant singularity of the surface quasigeostrophic patch. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 863,	3.7	3
141	Long frontal waves and dynamic scaling in freely evolving equivalent barotropic flow. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 866,	3.7	2
140	Comparison of the Moist Parcel-in-Cell (MPIC) model with large-eddy simulation for an idealized cloud. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2019</b> , 145, 1865-1881	6.4	3
139	On the regularity of the Green-Naghdi equations for a rotating shallow fluid layer. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 865, 100-136	3.7	3
138	Point mass dynamics on spherical hypersurfaces. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2019</b> , 377, 20180349	3	0
137	Imperfect Bifurcation for the Quasi-Geostrophic Shallow-Water Equations. <i>Archive for Rational Mechanics and Analysis</i> , <b>2019</b> , 231, 1853-1915	2.3	8

136	Modeling Subsurface Hydrology in Floodplains. <i>Water Resources Research</i> , <b>2018</b> , 54, 1428-1459	5.4	5
135	The moist parcel-in-cell method for modelling moist convection. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2018</b> , 144, 1695-1718	6.4	2
134	Circulation conservation and vortex breakup in magnetohydrodynamics at low magnetic Prandtl number. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 857, 38-60	3.7	2
133	The interaction of two asymmetric quasi-geostrophic vortex patches. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>2018</b> , 112, 375-401	1.4	2
132	Numerical simulation of a self-similar cascade of filament instabilities in the surface quasigeostrophic system. <i>Physical Review Letters</i> , <b>2014</b> , 112, 144505	7.4	25
131	Simply-connected vortex-patch shallow-water quasi-equilibria. <i>Journal of Fluid Mechanics</i> , <b>2014</b> , 743, 481-502	3.7	2
130	The effect of slip length on vortex rebound from a rigid boundary. <i>Physics of Fluids</i> , <b>2013</b> , 25, 093104	4.4	5
129	Waves and Turbulence: Their Cooperative Role in Structure Formation. <i>Procedia IUTAM</i> , <b>2013</b> , 8, 85-93		1
128	Halting scale and energy equilibration in two-dimensional quasigeostrophic turbulence. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 721,	3.7	5
127	Quasi-geostrophic shallow-water doubly-connected vortex equilibria and their stability. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 723, 40-68	3.7	13
126	Vortical control of forced two-dimensional turbulence. <i>Physics of Fluids</i> , <b>2013</b> , 25, 015101	4.4	12
125	The structure of zonal jets in geostrophic turbulence. <i>Journal of Fluid Mechanics</i> , <b>2012</b> , 711, 576-598	3.7	47
124	Quasi-geostrophic shallow-water vortex patch equilibria and their stability. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>2012</b> , 106, 574-595	1.4	16
123	Flow-topography interactions in shallow-water turbulence. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>2012</b> , 106, 45-66	1.4	
122	Instability in internal solitary waves with trapped cores. <i>Physics of Fluids</i> , <b>2012</b> , 24, 016601	4.4	12
121	Two-dimensional magnetohydrodynamic turbulence in the small magnetic Prandtl number limit. <i>Journal of Fluid Mechanics</i> , <b>2012</b> , 703, 85-98	3.7	12
120	An exact steadily rotating surface quasi-geostrophic elliptical vortex. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>2011</b> , 105, 368-376	1.4	24
119	Shallow-water vortex equilibria and their stability. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 318, 062019		3

118	The steady-state form of large-amplitude internal solitary waves. <i>Journal of Fluid Mechanics</i> , <b>2011</b> , 666, 477-505	3.7	15
117	Jet sharpening by turbulent mixing. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2011</b> , 369, 754-70	3	24
116	Numerical simulation of shear-induced instabilities in internal solitary waves. <i>Journal of Fluid Mechanics</i> , <b>2011</b> , 683, 263-288	3.7	19
115	Revisiting Vacillations in Shallow-Water Models of the Stratosphere Using Potential-Vorticity-Based Numerical Algorithms. <i>Journals of the Atmospheric Sciences</i> , <b>2011</b> , 68, 1007-1022	2.1	5
114	Effective degrees of nonlinearity in a family of generalized models of two-dimensional turbulence. <i>Physical Review E</i> , <b>2010</b> , 81, 016301	2.4	16
113	Energy dissipation and resolution of steep gradients in one-dimensional Burgers flows. <i>Physics of Fluids</i> , <b>2010</b> , 22, 037102	4.4	7
112	Generation of an internal tide by surface tide/eddy resonant interactions. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 39-50	0.3	
111	Eddies and Circulation: Lessons from Oceans and the GFD Lab. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 77-94	0.3	
110	Quasigeostrophic and stratified turbulence in the atmosphere. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 117-130	0.3	10
109	A Perspective on Submesoscale Geophysical Turbulence. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 131-141	0.3	3
108	The structure of zonal jets in shallow water turbulence on the sphere. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 243-252	0.3	3
107	Geostrophic vortex alignment in external shear or strain. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 217-228	0.3	3
106	Homostrophic vortex interaction under external strain, in a coupled QG-SQG model. <i>Regular and Chaotic Dynamics</i> , <b>2010</b> , 15, 66-83	1.6	9
105	The combined Lagrangian advection method. <i>Journal of Computational Physics</i> , <b>2010</b> , 229, 5408-5417	4.1	31
104	On spontaneous imbalance and ocean turbulence: generalizations of the Paparella-Young epsilon theorem. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 3-15	0.3	4
103	Modeling mixing in two-dimensional turbulence and stratified fluids. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 155-167	0.3	1
102	The solar tachocline: a study in stably stratified MHD turbulence. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 169-179	0.3	3
101	Some Unusual Properties of Turbulent Convection and Dynamos in Rotating Spherical Shells. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 181-194	0.3	3

100	Equilibrium States of Quasi-geostrophic Point Vortices. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 229-239</i>	0.3	2
99	Inertia-gravity-wave generation: a geometric-optics approach. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 17-26</i>	0.3	2
98	Parallels between stratification and rotation in hydrodynamics, and between both of them and external magnetic field in magnetohydrodynamics, with applications to nonlinear waves. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 27-37</i>	0.3	3
97	Generation of harmonics and sub-harmonics from an internal tide in a uniformly stratified fluid: numerical and laboratory experiments. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 51-62</i>	0.3	6
96	Deep ocean mixing by near-inertial waves. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 63-73</i>	0.3	2
95	Spectra and Distribution Functions of Stably Stratified Turbulence. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 143-154</i>	0.3	
94	Observations on Rapidly Rotating Turbulence. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 95-104</i>	0.3	
93	Zigzag instability of the K $\bar{m}$ $\bar{m}$ vortex street in stratified and rotating fluids. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 197-206</i>	0.3	1
92	Triple cascade behaviour in QG and drift turbulence and generation of zonal jets. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 265-288</i>	0.3	
91	Instabilities of a columnar vortex in a stratified fluid. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 207-215</i>	0.3	0
90	The HyperCASL algorithm. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 289-298</i>	0.3	
89	Jet formation in decaying two-dimensional turbulence on a rotating sphere. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 253-263</i>	0.3	1
88	Equilibration of Inertial Instability in Rotating Flow. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, 105-115</i>	0.3	
87	The Diabatic Contour-Advective Semi-Lagrangian Algorithms for the Spherical Shallow Water Equations. <i>Monthly Weather Review, 2009, 137, 2979-2994</i>	2.4	10
86	On the simulation of nearly inviscid two-dimensional turbulence. <i>Journal of Computational Physics, 2009, 228, 2707-2711</i>	4.1	23
85	The HyperCASL algorithm: A new approach to the numerical simulation of geophysical flows. <i>Journal of Computational Physics, 2009, 228, 6411-6425</i>	4.1	26
84	A family of helically symmetric vortex equilibria. <i>Journal of Fluid Mechanics, 2009, 634, 245</i>	3.7	12
83	Destructive interactions between two counter-rotating quasi-geostrophic vortices. <i>Journal of Fluid Mechanics, 2009, 639, 195-211</i>	3.7	11

82	Late time evolution of unforced inviscid two-dimensional turbulence. <i>Journal of Fluid Mechanics</i> , <b>2009</b> , 640, 215-233	3.7	12
81	Vortex self-similarity and the evolution of unforced inviscid two-dimensional turbulence. <i>Springer Proceedings in Physics</i> , <b>2009</b> , 461-464	0.2	1
80	Balance in non-hydrostatic rotating stratified turbulence. <i>Journal of Fluid Mechanics</i> , <b>2008</b> , 596, 201-219	3.7	23
79	Multiple Jets as PV Staircases: The Phillips Effect and the Resilience of Eddy-Transport Barriers. <i>Journals of the Atmospheric Sciences</i> , <b>2008</b> , 65, 855-874	2.1	231
78	Unifying scaling theory for vortex dynamics in two-dimensional turbulence. <i>Physical Review Letters</i> , <b>2008</b> , 101, 094501	7.4	43
77	Interaction between two quasi-geostrophic vortices of unequal potential vorticity. <i>Journal of Fluid Mechanics</i> , <b>2008</b> , 597, 395-414	3.7	18
76	Strong interactions between two corotating quasi-geostrophic vortices. <i>Journal of Fluid Mechanics</i> , <b>2007</b> , 592, 117-133	3.7	24
75	Revisiting Batchelor's theory of two-dimensional turbulence. <i>Journal of Fluid Mechanics</i> , <b>2007</b> , 591, 379-391	3.7	31
74	The persistence of balance in geophysical flows. <i>Journal of Fluid Mechanics</i> , <b>2007</b> , 570, 365-383	3.7	12
73	Assessing the Numerical Accuracy of Complex Spherical Shallow-Water Flows. <i>Monthly Weather Review</i> , <b>2007</b> , 135, 3876-3894	2.4	17
72	Vortex Dipole Formation by Baroclinic Instability of Boundary Currents. <i>Journal of Physical Oceanography</i> , <b>2007</b> , 37, 1661-1677	2.4	17
71	Revisiting the Rossby-Haurwitz wave test case with contour advection. <i>Journal of Computational Physics</i> , <b>2006</b> , 217, 473-484	4.1	17
70	Large-scale dynamics in two-dimensional Euler and surface quasigeostrophic flows. <i>Physics of Fluids</i> , <b>2006</b> , 18, 121703	4.4	7
69	Bending and twisting instabilities of columnar elliptical vortices in a rotating strongly stratified fluid. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 561, 73	3.7	5
68	Instability of a shallow-water potential-vorticity front. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 561, 237	3.7	26
67	The stability of a quasi-geostrophic ellipsoidal vortex in a background shear flow. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 560, 1	3.7	12
66	Vanishing enstrophy dissipation in two-dimensional Navier-Stokes turbulence in the inviscid limit. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 559, 107	3.7	35
65	Spontaneous generation of inertia-gravity wave packets by balanced geophysical flows. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 553, 107	3.7	39

64	Impeded inverse energy transfer in the Charney-Hasegawa-Mima model of quasi-geostrophic flows. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 551, 435	3.7	9
63	The Diabatic Contour Advective Semi-Lagrangian Model. <i>Monthly Weather Review</i> , <b>2006</b> , 134, 2503-2514	2.4	12
62	Vortex-Vortex Interactions in the Winter Stratosphere. <i>Journals of the Atmospheric Sciences</i> , <b>2006</b> , 63, 726-740	2.1	12
61	The stability of quasi-geostrophic ellipsoidal vortices. <i>Journal of Fluid Mechanics</i> , <b>2005</b> , 536, 401-421	3.7	16
60	Quasi-geostrophic vortices in compressible atmospheres. <i>Journal of Fluid Mechanics</i> , <b>2005</b> , 530, 305-325	3.7	10
59	The critical merger distance between two co-rotating quasi-geostrophic vortices. <i>Journal of Fluid Mechanics</i> , <b>2005</b> , 522, 357-381	3.7	38
58	Downward Wave Propagation on the Polar Vortex. <i>Journals of the Atmospheric Sciences</i> , <b>2005</b> , 62, 3382-3395	3.7	3
57	Contour-advective semi-Lagrangian algorithms for many-layer primitive-equation models. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2004</b> , 130, 347-364	6.4	23
56	Optimal potential vorticity balance of geophysical flows. <i>Journal of Fluid Mechanics</i> , <b>2004</b> , 521, 343-352	3.7	40
55	Destabilization of barotropic flows small-scale topography. <i>Journal of Fluid Mechanics</i> , <b>2004</b> , 517, 359-374	3.7	8
54	The quasi-geostrophic ellipsoidal vortex model. <i>Journal of Fluid Mechanics</i> , <b>2004</b> , 505, 201-223	3.7	34
53	Potential Vorticity and the Quasigeostrophic and Semigeostrophic Mesoscale Vertical Velocity. <i>Journal of Physical Oceanography</i> , <b>2004</b> , 34, 865-887	2.4	20
52	Dynamic Potential Vorticity Initialization and the Diagnosis of Mesoscale Motion. <i>Journal of Physical Oceanography</i> , <b>2004</b> , 34, 2761-2773	2.4	5
51	Enhancement of Rossby Wave Breaking by Steep Potential Vorticity Gradients in the Winter Stratosphere. <i>Journals of the Atmospheric Sciences</i> , <b>2004</b> , 61, 904-918	2.1	26
50	The CASL algorithm for quasi-geostrophic flow in a cylinder. <i>Journal of Computational Physics</i> , <b>2003</b> , 188, 232-251	4.1	17
49	A balanced approach to modelling rotating stably stratified geophysical flows. <i>Journal of Fluid Mechanics</i> , <b>2003</b> , 488, 123-150	3.7	61
48	Vertical velocity in mesoscale geophysical flows. <i>Journal of Fluid Mechanics</i> , <b>2003</b> , 483, 199-223	3.7	61
47	The motion of a fluid ellipsoid in a general linear background flow. <i>Journal of Fluid Mechanics</i> , <b>2003</b> , 474, 147-173	3.7	23

46	The shape of vortices in quasi-geostrophic turbulence. <i>Journal of Fluid Mechanics</i> , <b>2003</b> , 474, 175-192	3.7	60
45	The merger of vertically offset quasi-geostrophic vortices. <i>Journal of Fluid Mechanics</i> , <b>2002</b> , 469, 287-315	3.7	49
44	An explicit potential-vorticity-conserving approach to modelling nonlinear internal gravity waves. <i>Journal of Fluid Mechanics</i> , <b>2002</b> , 458, 75-101	3.7	10
43	Vortex merger in rotating stratified flows. <i>Journal of Fluid Mechanics</i> , <b>2002</b> , 455, 83-101	3.7	40
42	Hierarchies of Balance Conditions for the Plane Shallow-Water Equations. <i>Journals of the Atmospheric Sciences</i> , <b>2001</b> , 58, 2411-2426	2.1	53
41	A high-resolution, three-dimensional model of Jupiter's Great Red Spot. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 5099-5105		28
40	A Numerical Investigation of the Stability of Isolated Shallow Water Vortices. <i>Journal of Physical Oceanography</i> , <b>2000</b> , 30, 2562-2573	2.4	45
39	The role of boundary conditions in the simulation of rotating, stratified turbulence. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>2000</b> , 92, 233-253	1.4	9
38	Mixing in two-dimensional vortex interactions. <i>Physics of Fluids</i> , <b>2000</b> , 12, 3285-3288	4.4	8
37	The Contour-Adveective Semi-Lagrangian Algorithm for the Shallow Water Equations. <i>Monthly Weather Review</i> , <b>1999</b> , 127, 1551-1565	2.4	50
36	The Dependence of Rossby Wave Breaking on the Vertical Structure of the Polar Vortex. <i>Journals of the Atmospheric Sciences</i> , <b>1999</b> , 56, 2359-2375	2.1	25
35	The three-dimensional vortical nature of atmospheric and oceanic turbulent flows. <i>Physics of Fluids</i> , <b>1999</b> , 11, 1512-1520	4.4	45
34	On the persistence of non-axisymmetric vortices in inviscid two-dimensional flows. <i>Journal of Fluid Mechanics</i> , <b>1998</b> , 371, 141-155	3.7	53
33	A contour-adveective semi-lagrangian numerical algorithm for simulating fine-scale conservative dynamical fields. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>1997</b> , 123, 1097-1130	6.4	124
32	Introduction to Contour Dynamics for the Euler Equations in Two Dimensions. <i>Journal of Computational Physics</i> , <b>1997</b> , 135, 217-219	4.1	6
31	The instability and breakdown of tall columnar vortices in a quasi-geostrophic fluid. <i>Journal of Fluid Mechanics</i> , <b>1996</b> , 328, 129-160	3.7	73
30	On the nature of vortex interactions and models in unforced nearly-inviscid two-dimensional turbulence. <i>Physics of Fluids</i> , <b>1996</b> , 8, 1252-1256	4.4	35
29	High gradient phenomena in two-dimensional vortex interactions. <i>Physics of Fluids</i> , <b>1995</b> , 7, 539-548	4.4	36



28	A general theory for two-dimensional vortex interactions. <i>Journal of Fluid Mechanics</i> , <b>1995</b> , 293, 269-303	3.7	131
27	Vortex stripping and the erosion of coherent structures in two-dimensional flows. <i>Physics of Fluids</i> , <b>1994</b> , 6, 3954-3962	4.4	108
26	Three-dimensional quasi-geostrophic contour dynamics, with an application to stratospheric vortex dynamics. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>1994</b> , 120, 1267-1297	6.4	54
25	Vortex properties of two-dimensional turbulence. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1993</b> , 5, 984-997		68
24	The dynamics of long frontal waves in the shallow-water equations. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1993</b> , 5, 1089-1091		37
23	Wave and vortex dynamics on the surface of a sphere. <i>Journal of Fluid Mechanics</i> , <b>1993</b> , 255, 35	3.7	90
22	A fast contour dynamics method for many-vortex calculations in two-dimensional flows. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1993</b> , 5, 173-186		27
21	Modeling Oceanic and Atmospheric Vortices. <i>Physics Today</i> , <b>1993</b> , 46, 44-51	0.9	40
20	A Comparison of the Contour Surgery and Pseudo-spectral Methods. <i>Journal of Computational Physics</i> , <b>1993</b> , 104, 287-302	4.1	45
19	Vortex stripping and the generation of high vorticity gradients in two-dimensional flows. <i>Flow, Turbulence and Combustion</i> , <b>1993</b> , 51, 445-455		65
18	Quantification of the inelastic interaction of unequal vortices in two-dimensional vortex dynamics. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1992</b> , 4, 1737-1744		155
17	The roll-up of vorticity strips on the surface of a sphere. <i>Journal of Fluid Mechanics</i> , <b>1992</b> , 234, 47	3.7	38
16	The elliptical model of two-dimensional vortex dynamics. I: The basic state. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1991</b> , 3, 845-854		39
15	A new, but flawed, numerical method for vortex patch evolution in two dimensions. <i>Journal of Computational Physics</i> , <b>1991</b> , 93, 481-484	4.1	3
14	Generalized helical Beltrami flows in hydrodynamics and magnetohydrodynamics. <i>Journal of Fluid Mechanics</i> , <b>1991</b> , 222, 525	3.7	41
13	The elliptical model of two-dimensional vortex dynamics. II: Disturbance equations. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1991</b> , 3, 855-869		24
12	The stability of filamentary vorticity in two-dimensional geophysical vortex-dynamics models. <i>Journal of Fluid Mechanics</i> , <b>1991</b> , 231, 575-598	3.7	35
11	The stability of a two-dimensional vorticity filament under uniform strain. <i>Journal of Fluid Mechanics</i> , <b>1991</b> , 230, 647-665	3.7	94

10	Does contour dynamics go singular?. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1990</b> , 2, 748-753		23
9	The stability of elliptical vortices in an external straining flow. <i>Journal of Fluid Mechanics</i> , <b>1990</b> , 210, 223-261	3.7	69
8	Contour dynamics and contour surgery: Numerical algorithms for extended, high-resolution modelling of vortex dynamics in two-dimensional, inviscid, incompressible flows. <i>Computer Physics Reports</i> , <b>1989</b> , 10, 77-146		246
7	On the stabilization of a two-dimensional vortex strip by adverse shear. <i>Journal of Fluid Mechanics</i> , <b>1989</b> , 206, 193-221	3.7	69
6	Contour dynamics/surgery on the sphere. <i>Journal of Computational Physics</i> , <b>1988</b> , 79, 477-483	4.1	28
5	Contour surgery: A topological reconnection scheme for extended integrations using contour dynamics. <i>Journal of Computational Physics</i> , <b>1988</b> , 77, 240-266	4.1	209
4	The repeated filamentation of two-dimensional vorticity interfaces. <i>Journal of Fluid Mechanics</i> , <b>1988</b> , 194, 511	3.7	76
3	Nonlinear stability bounds for inviscid, two-dimensional, parallel or circular flows with monotonic vorticity, and the analogous three-dimensional quasi-geostrophic flows. <i>Journal of Fluid Mechanics</i> , <b>1988</b> , 191, 575	3.7	76
2	The nonlinear evolution of rotating configurations of uniform vorticity. <i>Journal of Fluid Mechanics</i> , <b>1986</b> , 172, 157	3.7	126
1	The stability and energetics of corotating uniform vortices. <i>Journal of Fluid Mechanics</i> , <b>1985</b> , 157, 95-134	3.7	162