

# Richard K Scott

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,389  
citations

331670

21  
h-index

361022

35  
g-index

50  
all docs

50  
docs citations

50  
times ranked

968  
citing authors

#	ARTICLE	IF	CITATIONS
1	An initial-value problem for testing numerical models of the global shallow-water equations. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 56, 429.	1.7	84
2	On the spacing of meandering jets in the strong-stair limit. <i>Journal of Fluid Mechanics</i> , 2022, 930, .	3.4	3
3	Polar Vortices in Planetary Atmospheres. <i>Reviews of Geophysics</i> , 2021, 59, e2020RG000723.	23.0	7
4	Spontaneous inertia-gravity wave emission from a nonlinear critical layer in the stratosphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 1516-1528.	2.7	9
5	Forcing of the Martian polar annulus by Hadley cell transport and latent heating. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 2174-2190.	2.7	8
6	Nonlinear latitudinal transfer of wave activity in the winter stratosphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2019, 145, 1933-1946.	2.7	3
7	Scale-invariant singularity of the surface quasigeostrophic patch. <i>Journal of Fluid Mechanics</i> , 2019, 863, .	3.4	8
8	Encapsulation of Fiber Optic Sensors in 3D Printed Packages for Use in Civil Engineering Applications: A Preliminary Study. <i>Sensors</i> , 2019, 19, 1689.	3.8	12
9	Zonal Jet Formation by Potential Vorticity Mixing at Large and Small Scales. , 2019, , 238-246.		6
10	Internal interannual variability of the winter polar vortex in a simple model of the seasonally evolving stratosphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2019, 145, 3057-3073.	2.7	1
11	Robustness of vortex populations in the two-dimensional inverse energy cascade. <i>Journal of Fluid Mechanics</i> , 2018, 850, 844-874.	3.4	4
12	The Stability of Mars's Annular Polar Vortex. <i>Journals of the Atmospheric Sciences</i> , 2017, 74, 1533-1547.	1.7	24
13	Vertical structure of tropospheric winds on gas giants. <i>Geophysical Research Letters</i> , 2017, 44, 3073-3081.	4.0	4
14	Scaling theory for vortices in the two-dimensional inverse energy cascade. <i>Journal of Fluid Mechanics</i> , 2017, 811, 742-756.	3.4	17
15	Vortex scaling ranges in two-dimensional turbulence. <i>Physics of Fluids</i> , 2017, 29, .	4.0	20
16	A new class of vacillations of the stratospheric polar vortex. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 1948-1957.	2.7	15
17	The role of planetary waves in the tropospheric jet response to stratospheric cooling. <i>Geophysical Research Letters</i> , 2016, 43, 2904-2911.	4.0	21
18	A test case for the inviscid shallow-water equations on the sphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 488-495.	2.7	10

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19	The onset of the barotropic sudden warming in a global model. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2944-2955.	2.7	14
20	Kraichnan's "Leith-Batchelor similarity theory and two-dimensional inverse cascades. Journal of Fluid Mechanics, 2015, 767, 467-496.	3.4	21
21	On the formation and maintenance of the stratospheric surf zone as inferred from the zonally averaged potential vorticity distribution. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 327-332.	2.7	5
22	Numerical Simulation of a Self-Similar Cascade of Filament Instabilities in the Surface Quasigeostrophic System. Physical Review Letters, 2014, 112, 144505.	7.8	33
23	Halting scale and energy equilibration in two-dimensional quasigeostrophic turbulence. Journal of Fluid Mechanics, 2013, 721, .	3.4	6
24	Vortical control of forced two-dimensional turbulence. Physics of Fluids, 2013, 25, .	4.0	14
25	The generation of zonal jets by large-scale mixing. Physics of Fluids, 2012, 24, .	4.0	14
26	The structure of zonal jets in geostrophic turbulence. Journal of Fluid Mechanics, 2012, 711, 576-598.	3.4	68
27	Jet sharpening by turbulent mixing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 754-770.	3.4	39
28	A scenario for finite-time singularity in the quasigeostrophic model. Journal of Fluid Mechanics, 2011, 687, 492-502.	3.4	27
29	Polar accumulation of cyclonic vorticity. Geophysical and Astrophysical Fluid Dynamics, 2011, 105, 409-420.	1.2	25
30	Late time evolution of unforced inviscid two-dimensional turbulence. Journal of Fluid Mechanics, 2009, 640, 215-233.	3.4	13
31	Equatorial superrotation in shallow atmospheres. Geophysical Research Letters, 2008, 35, .	4.0	56
32	A Barotropic Model of the Angular Momentum-Conserving Potential Vorticity Staircase in Spherical Geometry. Journals of the Atmospheric Sciences, 2008, 65, 1105-1136.	1.7	56
33	Forced-Dissipative Shallow-Water Turbulence on the Sphere and the Atmospheric Circulation of the Giant Planets. Journals of the Atmospheric Sciences, 2007, 64, 3158-3176.	1.7	97
34	Revisiting Batchelor's theory of two-dimensional turbulence. Journal of Fluid Mechanics, 2007, 591, 379-391.	3.4	33
35	The Antarctic stratospheric sudden warming of 2002: A self-tuned resonance?. Geophysical Research Letters, 2006, 33, .	4.0	27
36	Internal Variability of the Winter Stratosphere. Part I: Time-Independent Forcing. Journals of the Atmospheric Sciences, 2006, 63, 2758-2776.	1.7	88

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37	Wave Reflection and Focusing prior to the Major Stratospheric Warming of September 2002*. Journals of the Atmospheric Sciences, 2005, 62, 640-650.	1.7	20
38	Excitation of Transient Rossby Waves on the Stratospheric Polar Vortex and the Barotropic Sudden Warming. Journals of the Atmospheric Sciences, 2005, 62, 3661-3682.	1.7	70
39	The stability of quasi-geostrophic ellipsoidal vortices. Journal of Fluid Mechanics, 2005, 536, 401-421.	3.4	19
40	Downward Wave Propagation on the Polar Vortex. Journals of the Atmospheric Sciences, 2005, 62, 3382-3395.	1.7	5
41	Stratospheric control of upward wave flux near the tropopause. Geophysical Research Letters, 2004, 31, .	4.0	75
42	Enhancement of Rossby Wave Breaking by Steep Potential Vorticity Gradients in the Winter Stratosphere. Journals of the Atmospheric Sciences, 2004, 61, 904-918.	1.7	28
43	Numerically Converged Solutions of the Global Primitive Equations for Testing the Dynamical Core of Atmospheric GCMs. Monthly Weather Review, 2004, 132, 2539-2552.	1.4	54
44	An initial-value problem for testing numerical models of the global shallow-water equations. Tellus, Series A: Dynamic Meteorology and Oceanography, 2004, 56, 429-440.	1.7	88
45	Stretching rates and equivalent length near the tropopause. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	18
46	The Seasonal Cycle of Planetary Waves in the Winter Stratosphere. Journals of the Atmospheric Sciences, 2002, 59, 803-822.	1.7	29
47	Internal Vacillations in Stratosphere-Only Models. Journals of the Atmospheric Sciences, 2000, 57, 3233-3250.	1.7	40
48	Internal interannual variability of the extratropical stratospheric circulation: The low-latitude flywheel. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 2149-2173.	2.7	50
49	The stability of quasi-geostrophic ellipsoidal vortices. , 0, .		1
50	Shrinkage curvature of cracked reinforced concrete sections under load. Structural Concrete, 0, , .	3.1	0