Rick Salmon

List of Publications by Year
in descending order

40 papers	2,324 citations	361413 20 h-index	315739 38 g-index
40 all docs	40 docs citations	40 times ranked	1029 citing authors

#	Article	IF	Citations
1	Lectures on Geophysical Fluid Dynamics. , 1998, , .		516
2	The equilibrium statistical mechanics of simple quasi-geostrophic models. Journal of Fluid Mechanics, 1976, 75, 691-703.	3.4	239
3	Baroclinic instability and geostrophic turbulence. Geophysical and Astrophysical Fluid Dynamics, 1980, 15, 167-211.	1.2	217
4	Two-layer quasi-geostrophic turbulence in a simple special case. Geophysical and Astrophysical Fluid Dynamics, 1978, 10, 25-52.	1.2	167
5	Practical use of Hamilton's principle. Journal of Fluid Mechanics, 1983, 132, 431-444.	3.4	148
6	New equations for nearly geostrophic flow. Journal of Fluid Mechanics, 1985, 153, 461.	3.4	98
7	Weakly dispersive nonlinear gravity waves. Journal of Fluid Mechanics, 1985, 157, 519-531.	3.4	96
8	The lattice Boltzmann method as a basis for ocean circulation modeling. Journal of Marine Research, 1999, 57, 503-535.	0.3	83
9	The thermocline as an "internal boundary layer". Journal of Marine Research, 1990, 48, 437-469.	0.3	81
10	Semigeostrophic theory as a Dirac-bracket projection. Journal of Fluid Mechanics, 1988, 196, 345-358.	3.4	60
11	A General Method for Conserving Energy and Potential Enstrophy in Shallow-Water Models. Journals of the Atmospheric Sciences, 2007, 64, 515-531.	1.7	59
12	A variational method for inverting hydrographic data. Journal of Marine Research, 1986, 44, 1-34.	0.3	52
13	The North Atlantic circulation: Combining simplified dynamics with hydrographic data. Journal of Marine Research, 1993, 51, 1-52.	0.3	50
14	A general method for conserving quantities related to potential vorticity in numerical models. Nonlinearity, 2005, 18, R1-R16.	1.4	46
15	A simplified linear ocean circulation theory. Journal of Marine Research, 1986, 44, 695-711.	0.3	44
16	Generalizations of Arakawa's Jacobian. Journal of Computational Physics, 1989, 83, 247-259.	3.8	41
17	A two-layer Gulf Stream over a continental slope. Journal of Marine Research, 1992, 50, 341-365.	0.3	38
18	Wind-driven ocean circulation and equilibrium statistical mechanics. Journal of Marine Research, 1989, 47, 457-492.	0.3	37

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19	Numerical solution of the two-layer shallow water equations with bottom topography. Journal of Marine Research, 2002, 60, 605-638.	0.3	30
20	Lattice Boltzmann solutions of the three-dimensional planetary geostrophic equations. Journal of Marine Research, 1999, 57, 847-884.	0.3	26
21	Hamiltonâ€™s principle and Ertelâ€™s theorem. , 1982, , .		23
22	Generalized two-layer models of ocean circulation. Journal of Marine Research, 1994, 52, 865-908.	0.3	23
23	The Shape of the Main Thermocline. Journal of Physical Oceanography, 1982, 12, 1458-1479.	1.7	20
24	Eddy formation on a continental slope. Journal of Marine Research, 1997, 55, 181-200.	0.3	19
25	An alternative view of generalized Lagrangian mean theory. Journal of Fluid Mechanics, 2013, 719, 165-182.	3.4	16
26	Large-scale semigeostrophic equations for use in ocean circulation models. Journal of Fluid Mechanics, 1996, 318, 85.	3.4	13
27	Large scale air-sea interactions with a simple general circulation model. Tellus, 1976, 28, 228-242.	0.8	12
28	Variational treatment of inertiaâ€“gravity waves interacting with a quasi-geostrophic mean flow. Journal of Fluid Mechanics, 2016, 809, 502-529.	3.4	11
29	Hamiltonian derivation of the nonhydrostatic pressure-coordinate model. Quarterly Journal of the Royal Meteorological Society, 1994, 120, 1409-1413.	2.7	9
30	Linear ocean circulation theory with realistic bathymetry. Journal of Marine Research, 1998, 56, 833-884.	0.3	9
31	A shallow water model conserving energy and potential enstrophy in the presence of boundaries. Journal of Marine Research, 2009, 67, 779-814.	0.3	8
32	Hamilton's principle and the vorticity laws for a relativistic perfect fluid. Geophysical and Astrophysical Fluid Dynamics, 1988, 43, 167-179.	1.2	6
33	A simple model of the â€˜joint effect of baroclinicity and reliefâ€™ on ocean circulation. Journal of Marine Research, 1995, 53, 211-230.	0.3	6
34	The shape of the main thermocline, revisited. Journal of Marine Research, 2010, 68, 541-568.	0.3	4
35	Entropy budget and coherent structures associated with a spectral closure model ofÂturbulence. Journal of Fluid Mechanics, 2018, 857, 806-822.	3.4	4
36	Particle description of the interaction between wave packets and point vortices. Journal of Fluid Mechanics, 2021, 925, .	3.4	4

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37	An Ocean Circulation Model Based on Operator-Splitting, Hamiltonian Brackets, and the Inclusion of Sound Waves. Journal of Physical Oceanography, 2009, 39, 1615-1633.	1.7	3
38	Analogous formulation of electrodynamics and two-dimensional fluid dynamics. Journal of Fluid Mechanics, 2014, 761, .	3.4	3
39	Statistical mechanics and ocean circulation. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2144-2152.	3.3	2
40	Coupled systems of two-dimensional turbulence. Journal of Fluid Mechanics, 2013, 732, .	3.4	1