David M Romps

List of Publications by Year
in descending order

72 papers	3,004 citations	159525 30 h-index	168321 53 g-index
73 all docs	73 docs citations	73 times ranked	2707 citing authors

#	Article	IF	Citations
1	Projected increase in lightning strikes in the United States due to global warming. Science, 2014, 346, 851-854.	6.0	388
2	A Direct Measure of Entrainment. Journals of the Atmospheric Sciences, 2010, 67, 1908-1927.	0.6	167
3	Response of Tropical Precipitation to Global Warming. Journals of the Atmospheric Sciences, 2011, 68, 123-138.	0.6	144
4	Do Undiluted Convective Plumes Exist in the Upper Tropical Troposphere?. Journals of the Atmospheric Sciences, 2010, 67, 468-484.	0.6	136
5	Convective selfâ€aggregation, cold pools, and domain size. Geophysical Research Letters, 2013, 40, 994-998.	1.5	115
6	An Analytical Model for Tropical Relative Humidity. Journal of Climate, 2014, 27, 7432-7449.	1.2	109
7	Future increases in Arctic lightning and fire risk for permafrost carbon. Nature Climate Change, 2021, 11, 404-410.	8.1	103
8	Nature versus Nurture in Shallow Convection. Journals of the Atmospheric Sciences, 2010, 67, 1655-1666.	0.6	94
9	Exact Expression for the Lifting Condensation Level. Journals of the Atmospheric Sciences, 2017, 74, 3891-3900.	0.6	90
10	The Effect of Global Warming on Severe Thunderstorms in the United States. Journal of Climate, 2015, 28, 2443-2458.	1.2	89
11	Sticky Thermals: Evidence for a Dominant Balance between Buoyancy and Drag in Cloud Updrafts. Journals of the Atmospheric Sciences, 2015, 72, 2890-2901.	0.6	87
12	Clouds and Convective Selfâ€Aggregation in a Multimodel Ensemble of Radiativeâ€Convective Equilibrium Simulations. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002138.	1.3	86
13	Why does tropical convective available potential energy (CAPE) increase with warming?. Geophysical Research Letters, 2015, 42, 10,429.	1.5	77
14	The Dry-Entropy Budget of a Moist Atmosphere. Journals of the Atmospheric Sciences, 2008, 65, 3779-3799.	0.6	76
15	Isotopic composition of water in the tropical tropopause layer in cloudâ€resolving simulations of an idealized tropical circulation. Journal of Geophysical Research, 2010, 115, .	3.3	75
16	CAPE in Tropical Cyclones. Journals of the Atmospheric Sciences, 2012, 69, 2452-2463.	0.6	72
17	Effective Buoyancy, Inertial Pressure, and the Mechanical Generation of Boundary Layer Mass Flux by Cold Pools. Journals of the Atmospheric Sciences, 2015, 72, 3199-3213.	0.6	58
18	Acceleration of tropical cyclogenesis by self-aggregation feedbacks. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2930-2935.	3.3	57

#	Article	IF	Citations
19	Clausiusâ€“Clapeyron Scaling of CAPE from Analytical Solutions to RCE. Journals of the Atmospheric Sciences, 2016, 73, 3719-3737.	0.6	56
20	Overshooting convection in tropical cyclones. Geophysical Research Letters, 2009, 36, .	1.5	54
21	Mean precipitation change from a deepening troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11465-11470.	3.3	53
22	Measurement of Convective Entrainment Using Lagrangian Particles. Journals of the Atmospheric Sciences, 2013, 70, 266-277.	0.6	45
23	The origin of water vapor rings in tropical oceanic cold pools. Geophysical Research Letters, 2015, 42, 7825-7834.	1.5	42
24	CAPE Times P Explains Lightning Over Land But Not the Landâ€Ocean Contrast. Geophysical Research Letters, 2018, 45, 12,623.	1.5	41
25	Quantum Bousso bound. Physical Review D, 2004, 70, .	1.6	37
26	Formation of Tropical Anvil Clouds by Slow Evaporation. Geophysical Research Letters, 2019, 46, 492-501.	1.5	37
27	Weak Pressure Gradient Approximation and Its Analytical Solutions. Journals of the Atmospheric Sciences, 2012, 69, 2835-2845.	0.6	36
28	FAT or FiTT: Are Anvil Clouds or the Tropopause Temperature Invariant?. Geophysical Research Letters, 2019, 46, 1842-1850.	1.5	35
29	A Transilient Matrix for Moist Convection. Journals of the Atmospheric Sciences, 2011, 68, 2009-2025.	0.6	34
30	The Stochastic Parcel Model: A deterministic parameterization of stochastically entraining convection. Journal of Advances in Modeling Earth Systems, 2016, 8, 319-344.	1.3	34
31	MSE Minus CAPE is the True Conserved Variable for an Adiabatically Lifted Parcel. Journals of the Atmospheric Sciences, 2015, 72, 3639-3646.	0.6	31
32	Lagrangian Investigation of the Precipitation Efficiency of Convective Clouds. Journals of the Atmospheric Sciences, 2015, 72, 1045-1062.	0.6	30
33	Utilizing a Storm-Generating Hotspot to Study Convective Cloud Transitions: The CACTI Experiment. Bulletin of the American Meteorological Society, 2021, 102, E1597-E1620.	1.7	30
34	Evaluating the Future of Lightning in Cloudâ€Resolving Models. Geophysical Research Letters, 2019, 46, 14863-14871.	1.5	28
35	Numerical Tests of the Weak Pressure Gradient Approximation. Journals of the Atmospheric Sciences, 2012, 69, 2846-2856.	0.6	27
36	Effective buoyancy at the surface and aloft. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 811-820.	1.0	27

#	Article	IF	Citations
37	Rayleigh Damping in the Free Troposphere. Journals of the Atmospheric Sciences, 2014, 71, 553-565.	0.6	25
38	Stereo photogrammetry reveals substantial drag on cloud thermals. Geophysical Research Letters, 2015, 42, 5051-5057.	1.5	25
39	On the sizes and lifetimes of cold pools. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 1517-1527.	1.0	21
40	Supersymmetric branes inAdS2Ã—S2Ã—CY3. Physical Review D, 2005, 71, .	1.6	19
41	On the Equivalence of Two Schemes for Convective Momentum Transport. Journals of the Atmospheric Sciences, 2012, 69, 3491-3500.	0.6	19
42	An Improved Weak Pressure Gradient Scheme for Single-Column Modeling. Journals of the Atmospheric Sciences, 2014, 71, 2415-2429.	0.6	16
43	Observing Clouds in 4D with Multiview Stereophotogrammetry. Bulletin of the American Meteorological Society, 2018, 99, 2575-2586.	1.7	15
44	Methods for Estimating 2D Cloud Size Distributions from 1D Observations. Journals of the Atmospheric Sciences, 2017, 74, 3405-3417.	0.6	14
45	Reconciling Differences Between Largeâ€Eddy Simulations and Doppler Lidar Observations of Continental Shallow Cumulus Cloudâ€Base Vertical Velocity. Geophysical Research Letters, 2019, 46, 11539-11547.	1.5	14
46	Climate Sensitivity and the Direct Effect of Carbon Dioxide in a Limited-Area Cloud-Resolving Model. Journal of Climate, 2020, 33, 3413-3429.	1.2	14
47	Stereophotogrammetry of Oceanic Clouds. Journal of Atmospheric and Oceanic Technology, 2014, 31, 1482-1501.	0.5	13
48	Tropical cloud buoyancy is the same in a world with or without ice. Geophysical Research Letters, 2016, 43, 3572-3579.	1.5	13
49	A Numerical Study of Methods for Moist Atmospheric Flows: Compressible Equations. Monthly Weather Review, 2014, 142, 4269-4283.	0.5	11
50	Why the Forcing from Carbon Dioxide Scales as the Logarithm of Its Concentration. Journal of Climate, 2022, 35, 4027-4047.	1.2	10
51	Selfâ€consistency tests of largeâ€scale dynamics parameterizations for singleâ€column modeling. Journal of Advances in Modeling Earth Systems, 2015, 7, 320-334.	1.3	9
52	Climate news articles lack basic climate science. Environmental Research Communications, 2019, 1, 081002.	0.9	9
53	The Rankineâ€"Kirchhoff approximations for moist thermodynamics. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 3493-3497.	1.0	6
54	Extending the Heat Index. Journal of Applied Meteorology and Climatology, 2022, 61, 1367-1383.	0.6	6

#	Article	IF	Citations
55	Descent relations in type-0A and type-0B theories. Physical Review D, 2002, 65, .	1.6	5
56	AdS solutions to the 2D type 0A effective action. Physical Review D, 2004, 70, .	1.6	5
57	Beyond the Rigid Lid: Baroclinic Modes in a Structured Atmosphere. Journals of the Atmospheric Sciences, 2017, 74, 3551-3566.	0.6	5
58	On the Life Cycle of a Shallow Cumulus Cloud: Is It a Bubble or Plume, Active or Forced?. Journals of the Atmospheric Sciences, 2021, 78, 2823-2833.	0.6	5
59	On the Utility (or Futility) of Using Stable Water Isotopes to Constrain the Bulk Properties of Tropical Convection. Journal of Advances in Modeling Earth Systems, 2018, 10, 516-529.	1.3	4
60	Evolving CO₂ Rather Than SST Leads to a Factor of Ten Decrease in GCM Convergence Time. Journal of Advances in Modeling Earth Systems, 2021, 13, e2021MS002505.	1.3	4
61	Ascending Columns, WTG, and Convective Aggregation. Journals of the Atmospheric Sciences, 2021, 78, 497-508.	0.6	3
62	Identifying insects, clouds, and precipitation using vertically pointing polarimetric radar Doppler velocity spectra. Atmospheric Measurement Techniques, 2021, 14, 4425-4444.	1.2	3
63	Summertime Continental Shallow Cumulus Cloud Detection Using GOES-16 Satellite and Ground-Based Stereo Cameras at the DOE ARM Southern Great Plains Site. Remote Sensing, 2021, 13, 2309.	1.8	2
64	A Closure for the Virtual Origin of Turbulent Plumes. Journals of the Atmospheric Sciences, 2022, 79, 1459-1471.	0.6	2
65	Prediction for cloud spacing confirmed using stereo cameras. Journals of the Atmospheric Sciences, 2021, , .	0.6	2
66	Observing atmospheric clouds through stereo reconstruction. Proceedings of SPIE, 2015, , .	0.8	1
67	Reply to â€œComments on â€˜MSE minus CAPE is the True Conserved Variable for an Adiabatically Lifted Parcelâ€™â€. Journals of the Atmospheric Sciences, 2016, 73, 2577-2583.	0.6	1
68	Accurate Expressions for the Dewpoint and Frost Point Derived from the Rankineâ€“Kirchhoff Approximations. Journals of the Atmospheric Sciences, 2021, 78, 2113-2116.	0.6	1
69	Theory of tropical moist convection. , 2020, , 1-45.		1
70	Should the United States Resume Reprocessing? A Pro and Con. Bulletin of the Atomic Scientists, 2009, 65, 30-41.	0.2	0
71	Extending the Heat Index to Quantify the Physiological Response to Future Warming: A Modelling Study. SSRN Electronic Journal, 0, , .	0.4	0
72	Perspective Is Everything. Inference, 2022, 7, .	0.0	0