Murray C Peel

List of Publications by Year
in descending order

84 papers	12,675 citations	101543 36 h-index	71685 76 g-index
106 all docs	106 docs citations	106 times ranked	17706 citing authors

#	Article	IF	Citations
1	Updated world map of the KÃ¶ppen-Geiger climate classification. Hydrology and Earth System Sciences, 2007, 11, 1633-1644.	4.9	7,579
2	Estimating actual, potential, reference crop and pan evaporation using standard meteorological data: a pragmatic synthesis. Hydrology and Earth System Sciences, 2013, 17, 1331-1363.	4.9	430
3	The influence of multiyear drought on the annual rainfallâ€“runoff relationship: An <scp>A</scp>ustralian perspective. Water Resources Research, 2015, 51, 2444-2463.	4.2	158
4	Simulating runoff under changing climatic conditions: Revisiting an apparent deficiency of conceptual rainfallâ€“runoff models. Water Resources Research, 2016, 52, 1820-1846.	4.2	136
5	Watersheds may not recover from drought. Science, 2021, 372, 745-749.	12.6	113
6	Vegetation impact on mean annual evapotranspiration at a global catchment scale. Water Resources Research, 2010, 46, .	4.2	111
7	Continental differences in the variability of annual runoff-update and reassessment. Journal of Hydrology, 2004, 295, 185-197.	5.4	105
8	The utility of L-moment ratio diagrams for selecting a regional probability distribution. Hydrological Sciences Journal, 2001, 46, 147-155.	2.6	96
9	Global streamflows â€“ Part 1: Characteristics of annual streamflows. Journal of Hydrology, 2007, 347, 243-259.	5.4	96
10	Identification and explanation of continental differences in the variability of annual runoff. Journal of Hydrology, 2001, 250, 224-240.	5.4	95
11	Flow characteristics of rivers in northern Australia: Implications for development. Journal of Hydrology, 2008, 357, 93-111.	5.4	92
12	Compounding Impacts of Human-Induced Water Stress and Climate Change on Water Availability. Scientific Reports, 2017, 7, 6282.	3.3	92
13	Decadal Trends in Evaporation from Global Energy and Water Balances. Journal of Hydrometeorology, 2012, 13, 379-391.	1.9	89
14	Predicting shifts in rainfallâ€“runoff partitioning during multiyear drought: Roles of dry period and catchment characteristics. Water Resources Research, 2016, 52, 9290-9305.	4.2	86
15	Changes in Antecedent Soil Moisture Modulate Flood Seasonality in a Changing Climate. Water Resources Research, 2020, 56, e2019WR026300.	4.2	81
16	Modular Assessment of Rainfallâ€“Runoff Models Toolbox (MARRMoT) v1.2: an open-source, extendable framework providing implementations of 46 conceptual hydrologic models as continuous state-space formulations. Geoscientific Model Development, 2019, 12, 2463-2480.	3.6	74
17	A Brief Analysis of Conceptual Model Structure Uncertainty Using 36 Models and 559 Catchments. Water Resources Research, 2020, 56, e2019WR025975.	4.2	72
18	Revisiting reservoir storageâ€“yield relationships using a global streamflow database. Advances in Water Resources, 2007, 30, 1858-1872.	3.8	71

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19	Assessment of precipitation and temperature data from CMIP3 global climate models for hydrologic simulation. Hydrology and Earth System Sciences, 2015, 19, 361-377.	4.9	68
20	Historical developments of models for estimating evaporation using standard meteorological data. Wiley Interdisciplinary Reviews: Water, 2016, 3, 788-818.	6.5	68
21	Bias in streamflow projections due to climateâ€induced shifts in catchment response. Geophysical Research Letters, 2016, 43, 1574-1581.	4.0	68
22	Improved Rainfallâ€Runoff Calibration for Drying Climate: Choice of Objective Function. Water Resources Research, 2018, 54, 3392-3408.	4.2	68
23	Simulating Runoff Under Changing Climatic Conditions: A Framework for Model Improvement. Water Resources Research, 2018, 54, 9812-9832.	4.2	58
24	Equifinality and Flux Mapping: A New Approach to Model Evaluation and Process Representation Under Uncertainty. Water Resources Research, 2019, 55, 8922-8941.	4.2	57
25	Many Commonly Used Rainfallâ€Runoff Models Lack Long, Slow Dynamics: Implications for Runoff Projections. Water Resources Research, 2020, 56, e2019WR025286.	4.2	54
26	Empirical mode decomposition using rational splines: an application to rainfall time series. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 1483-1501.	2.1	52
27	Modelling the long term water yield impact of wildfire and other forest disturbance in Eucalypt forests. Environmental Modelling and Software, 2010, 25, 467-478.	4.5	51
28	Trends in Global Flood and Streamflow Timing Based on Local Water Year. Water Resources Research, 2020, 56, e2020WR027233.	4.2	50
29	Global streamflows â€“ Part 2: Reservoir storageâ€“yield performance. Journal of Hydrology, 2007, 347, 260-271.	5.4	49
30	The Hydrology of the Mekong River. , 2009, , 53-76.		49
31	Understanding the surface hydrology of the Lake Eyre Basin: Part 2â€”Streamflow. Journal of Arid Environments, 2008, 72, 1869-1886.	2.4	46
32	The effect of year-to-year variability of leaf area index on Variable Infiltration Capacity model performance and simulation of runoff. Advances in Water Resources, 2015, 83, 310-322.	3.8	46
33	A quality-controlled global runoff data set. Nature, 2006, 444, E14-E14.	27.8	44
34	Variability of Annual Precipitation and Its Relationship to the El NiÃ±oâ€“Southern Oscillation. Journal of Climate, 2002, 15, 545-551.	3.2	38
35	Review of Gouldâ€“Dincer reservoir storageâ€“yieldâ€“reliability estimates. Advances in Water Resources, 2007, 30, 1873-1882.	3.8	38
36	Historical development of rainfallâ€runoff modeling. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1471.	6.5	37

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37	Global streamflows â€“ Part 3: Country and climate zone characteristics. Journal of Hydrology, 2007, 347, 272-291.	5.4	35
38	CAMELS-AUS: hydrometeorological time series and landscape attributes for 222 catchments in Australia. Earth System Science Data, 2021, 13, 3847-3867.	9.9	33
39	Trends in winter fog events in the Terai region of Nepal. Agricultural and Forest Meteorology, 2018, 259, 118-130.	4.8	32
40	Implications of the relationship between catchment vegetation type and the variability of annual runoff. Hydrological Processes, 2002, 16, 2995-3002.	2.6	31
41	Understanding the surface hydrology of the Lake Eyre Basin: Part 1â€”Rainfall. Journal of Arid Environments, 2008, 72, 1853-1868.	2.4	30
42	Assessing the performance of rational spline-based empirical mode decomposition using a global annual precipitation dataset. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 1919-1937.	2.1	29
43	A Simple Methodology for Estimating Mean and Variability of Annual Runoff and Reservoir Yield under Present and Future Climates. Journal of Hydrometeorology, 2011, 12, 135-146.	1.9	29
44	Leaf Area Index Variation for Crop, Pasture, and Tree in Response to Climatic Variation in the Goulburnâ€“Broken Catchment, Australia. Journal of Hydrometeorology, 2014, 15, 1592-1606.	1.9	29
45	Approximating uncertainty of annual runoff and reservoir yield using stochastic replicates of global climate model data. Hydrology and Earth System Sciences, 2015, 19, 1615-1639.	4.9	29
46	A New Approach to Stochastically Generating Six-Monthly Rainfall Sequences Based on Empirical Mode Decomposition. Journal of Hydrometeorology, 2008, 9, 1377-1389.	1.9	28
47	Global analysis of runs of annual precipitation and runoff equal to or below the median: run magnitude and severity. International Journal of Climatology, 2005, 25, 549-568.	3.5	26
48	Global analysis of runs of annual precipitation and runoff equal to or below the median: run length. International Journal of Climatology, 2004, 24, 807-822.	3.5	25
49	Evaluating four downscaling methods for assessment of climate change impact on ecological indicators. Environmental Modelling and Software, 2017, 96, 68-82.	4.5	25
50	Uncertainty in stageâ€“discharge rating curves: application to Australian Hydrologic Reference Stations data. Hydrological Sciences Journal, 2019, 64, 255-275.	2.6	25
51	Generalized extreme value distribution fitted by LH moments for low-flow frequency analysis. Water Resources Research, 2007, 43, .	4.2	22
52	Recent frequency component changes in interannual climate variability. Geophysical Research Letters, 2006, 33, .	4.0	21
53	Including the dynamic relationship between climatic variables and leaf area index in a hydrological model to improve streamflow prediction under a changing climate. Hydrology and Earth System Sciences, 2015, 19, 2821-2836.	4.9	20
54	Assessing the degree of hydrologic stress due to climate change. Climatic Change, 2019, 156, 87-104.	3.6	20

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55	Decreases in relative humidity across Australia. Environmental Research Letters, 2021, 16, 074023.	5.2	18
56	The sensitivity of catchment hypsometry and hypsometric properties to DEM resolution and polynomial order. Geomorphology, 2018, 309, 112-120.	2.6	15
57	The first 300â€year streamflow reconstruction of a highâ€elevation river in Chile using tree rings. International Journal of Climatology, 2018, 38, 436-451.	3.5	15
58	Excluding stock from riverbanks for environmental restoration: The influence of social norms, drought, and off-farm income on landholder behaviour. Journal of Rural Studies, 2018, 62, 116-124.	4.7	15
59	AWAPer: An R package for area weighted catchment daily meteorological data anywhere within Australia. Hydrological Processes, 2020, 34, 1301-1306.	2.6	15
60	Prediction of annual runoff in ungauged basins. , 2013, , 70-101.		14
61	Vulnerability of Ecological Condition to the Sequencing of Wet and Dry Spells Prior to and during the Murray-Darling Basin Millennium Drought. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	2.6	14
62	Assessment of eight reference evapotranspiration (ET_o) methods considering KÃ¶ppen climate class in Iran. Hydrological Sciences Journal, 2018, 63, 1468-1481.	2.6	13
63	A Continental Scale Assessment of Australiaâ€™s Potential for Irrigation. Water Resources Management, 2010, 24, 1791-1817.	3.9	12
64	Understanding Hydrological Alteration. , 2017, , 37-64.		12
65	Amplification of risks to water supply at 1.5 Â°C and 2 Â°C in drying climates: a case study for Melbourne, Australia. Environmental Research Letters, 2019, 14, 084028.	5.2	11
66	Estimating evaporation based on standard meteorological data â€“ progress since 2007. Progress in Physical Geography, 2014, 38, 241-250.	3.2	10
67	Uncertainties in runoff projections in southwestern Australian catchments using a global climate model with perturbed physics. Journal of Hydrology, 2015, 529, 184-199.	5.4	9
68	Towards more realistic runoff projections by removing limits on simulated soil moisture deficit. Journal of Hydrology, 2021, 600, 126505.	5.4	8
69	Corrigendum to "Estimating actual, potential, reference crop and pan evaporation using standard meteorological data: a pragmatic synthesis" published in Hydrol. Earth Syst. Sci., 17, 1331â€“1363, 2013. Hydrology and Earth System Sciences, 2013, 17, 4503-4503.	4.9	6
70	Comment on the application of the Szilagyiâ€“Jozsa advectionâ€“aridity model for estimating actual terrestrial evapotranspiration in "Estimating actual, potential, reference crop and pan evaporation using standard meteorological data: a pragmatic synthesis" by McMahon et al. (2013). Hydrology and Earth System Sciences, 2013, 17, 4865-4867.	4.9	6
71	Integrated framework for rapid climate stress testing on a monthly timestep. Environmental Modelling and Software, 2022, 150, 105339.	4.5	5
72	Justin Costelloe: a champion of arid-zone water research. Hydrogeology Journal, 2020, 28, 37-41.	2.1	4

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73	â€˜Sub-Primeâ€™ Water, Low-Security Entitlements and Policy Challenges in Over-Allocated River Basins: the Case of the Murrayâ€“Darling Basin. Environmental Management, 2020, 66, 202-217.	2.7	4
74	Development of a Regression Model for Estimating Daily Radiative Forcing Due to Atmospheric Aerosols from Moderate Resolution Imaging Spectrometers (MODIS) Data in the Indo Gangetic Plain (IGP). Atmosphere, 2018, 9, 405.	2.3	3
75	Lessons from Flipping Subjects in Engineering: Effectiveness of Student Learning in a Flipped Environment at the University Level. Journal of Civil Engineering Education, 2021, 147, .	1.4	3
76	Understanding regional streamflow trend magnitudes in the Southern Murray-Darling Basin, Australia. Australian Journal of Water Resources, 2022, 26, 213-226.	2.7	3
77	Understanding global hydrology. , 2011, , 23-45.		2
78	Analysis of within and between-GCM uncertainties of runoff projections in Mediterranean-like catchments.. Journal of Southern Hemisphere Earth Systems Science, 2017, 67, 181-213.	1.8	1
79	Ensemble Empirical Mode Decomposition of Australian monthly rainfall and temperature data. , 0, , .		1
80	Ensemble Empirical Mode Decomposition of monthly climatic indices relevant to Australian hydroclimatology. , 0, , .		1
81	Climate and Rivers. , 2009, , 344-356.		0
82	Discussion of: Finkl, C.W. and Cathcart, R.B., 2011. The â€œMorning Gloryâ€•Project: A Papua New Guineaâ€“Queensland Australia Undersea Freshwater Pipeline, Journal of Coastal Research, 27(4), 607â€“618. Journal of Coastal Research, 2012, 28, 979.	0.3	0
83	Can riparian eucalypts be used for hydroclimatic reconstruction? The case for Eucalyptus coolabah to define palaeo-flood events. Journal of Arid Environments, 2021, 184, 104301.	2.4	0
84	Analysis of within and between-GCM uncertainties of runoff projections in Mediterranean-like catchments. Journal of Southern Hemisphere Earth Systems Science, 2017, 67, 181.	1.8	0