# Andrew W Wood

List of Publications by Year
in descending order



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|---|---|---|---|
| 98 papers | 11,713 citations | 44069 48 h-index | 51608 86 g-index |
| 124 all docs | 124 docs citations | 124 times ranked | 9256 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Hydrologic Implications of Dynamical and Statistical Approaches to Downscaling Climate Model Outputs. Climatic Change, 2004, 62, 189-216. | 3.6 | 1,503 |
| 2 | Human-Induced Changes in the Hydrology of the Western United States. Science, 2008, 319, 1080-1083. | 12.6 | 956 |
| 3 | The Effects of Climate Change on the Hydrology and Water Resources of the Colorado River Basin. Climatic Change, 2004, 62, 337-363. | 3.6 | 825 |
| 4 | Use of a standardized runoff index for characterizing hydrologic drought. Geophysical Research Letters, 2008, 35, . | 4.0 | 825 |
| 5 | Long-range experimental hydrologic forecasting for the eastern United States. Journal of Geophysical Research, 2002, 107, ACL 6-1. | 3.3 | 772 |
| 6 | Twentieth-Century Drought in the Conterminous United States. Journal of Hydrometeorology, 2005, 6, 985-1001. | 1.9 | 457 |
| 7 | A unified approach for processâ€based hydrologic modeling: 1. Modeling concept. Water Resources Research, 2015, 51, 2498-2514. | 4.2 | 354 |
| 8 | Mitigating the Effects of Climate Change on the Water Resources of the Columbia River Basin. Climatic Change, 2004, 62, 233-256. | 3.6 | 314 |
| 9 | Development of a large-sample watershed-scale hydrometeorological data set for the contiguous USA: data set characteristics and assessment of regional variability in hydrologic model performance. Hydrology and Earth System Sciences, 2015, 19, 209-223. | 4.9 | 310 |
| 10 | Detection and Attribution of Streamflow Timing Changes to Climate Change in the Western United States. Journal of Climate, 2009, 22, 3838-3855. | 3.2 | 260 |
| 11 | Water Resources Implications of Global Warming: A U.S. Regional Perspective. Climatic Change, 1999, 43, 537-579. | 3.6 | 225 |
| 12 | Attribution of Declining Western U.S. Snowpack to Human Effects. Journal of Climate, 2008, 21, 6425-6444. | 3.2 | 217 |
| 13 | Flash droughts present a new challenge for subseasonal-to-seasonal prediction. Nature Climate Change, 2020, 10, 191-199. | 18.8 | 210 |
| 14 | The Evaporative Demand Drought Index. Part I: Linking Drought Evolution to Variations in Evaporative Demand. Journal of Hydrometeorology, 2016, 17, 1745-1761. | 1.9 | 209 |
| 15 | A Test Bed for New Seasonal Hydrologic Forecasting Approaches in the Western United States. Bulletin of the American Meteorological Society, 2006, 87, 1699-1712. | 3.3 | 206 |
| 16 | Potential Implications of PCM Climate Change Scenarios for Sacramentoâ€“San Joaquin River Basin Hydrology and Water Resources. Climatic Change, 2004, 62, 257-281. | 3.6 | 203 |
| 17 | An ensemble approach for attribution of hydrologic prediction uncertainty. Geophysical Research Letters, 2008, 35, . | 4.0 | 178 |
| 18 | The evolution of process-based hydrologic models: historical challenges and the collective quest for physical realism. Hydrology and Earth System Sciences, 2017, 21, 3427-3440. | 4.9 | 177 |

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|---|---|---|---|
| 19 | The Great Colorado Flood of September 2013. Bulletin of the American Meteorological Society, 2015, 96, 1461-1487. | 3.3 | 175 |
| 20 | A unified approach for processâ€based hydrologic modeling: 2. Model implementation and case studies. Water Resources Research, 2015, 51, 2515-2542. | 4.2 | 173 |
| 21 | Characterizing Uncertainty of the Hydrologic Impacts of Climate Change. Current Climate Change Reports, 2016, 2, 55-64. | 8.6 | 159 |
| 22 | Correcting Errors in Streamflow Forecast Ensemble Mean and Spread. Journal of Hydrometeorology, 2008, 9, 132-148. | 1.9 | 142 |
| 23 | How Suitable is Quantile Mapping For Postprocessing GCM Precipitation Forecasts?. Journal of Climate, 2017, 30, 3185-3196. | 3.2 | 135 |
| 24 | Challenges of Operational River Forecasting. Journal of Hydrometeorology, 2014, 15, 1692-1707. | 1.9 | 127 |
| 25 | Gridded Ensemble Precipitation and Temperature Estimates for the Contiguous United States. Journal of Hydrometeorology, 2015, 16, 2481-2500. | 1.9 | 124 |
| 26 | The Evaporative Demand Drought Index. Part II: CONUS-Wide Assessment against Common Drought Indicators. Journal of Hydrometeorology, 2016, 17, 1763-1779. | 1.9 | 113 |
| 27 | How Essential is Hydrologic Model Calibration to Seasonal Streamflow Forecasting?. Journal of Hydrometeorology, 2008, 9, 1350-1363. | 1.9 | 111 |
| 28 | On the choice of calibration metrics for â€œhigh-flowâ€•estimation using hydrologic models. Hydrology and Earth System Sciences, 2019, 23, 2601-2614. | 4.9 | 110 |
| 29 | Detection and Attribution of Temperature Changes in the Mountainous Western United States. Journal of Climate, 2008, 21, 6404-6424. | 3.2 | 109 |
| 30 | Towards seamless largeâ€domain parameter estimation for hydrologic models. Water Resources Research, 2017, 53, 8020-8040. | 4.2 | 108 |
| 31 | The NAME 2004 Field Campaign and Modeling Strategy. Bulletin of the American Meteorological Society, 2006, 87, 79-94. | 3.3 | 98 |
| 32 | Ensemble flood forecasting: Current status and future opportunities. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1432. | 6.5 | 96 |
| 33 | A retrospective assessment of National Centers for Environmental Prediction climate modelâ€“based ensemble hydrologic forecasting in the western United States. Journal of Geophysical Research, 2005, 110, . | 3.3 | 84 |
| 34 | Benchmarking of a Physically Based Hydrologic Model. Journal of Hydrometeorology, 2017, 18, 2215-2225. | 1.9 | 79 |
| 35 | The potential to reduce uncertainty in regional runoff projections from climate models. Nature Climate Change, 2019, 9, 926-933. | 18.8 | 75 |
| 36 | Prospects for Advancing Drought Understanding, Monitoring, and Prediction. Journal of Hydrometeorology, 2015, 16, 1636-1657. | 1.9 | 72 |

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|---|---|---|---|
| 37 | Quantifying Streamflow Forecast Skill Elasticity to Initial Condition and Climate Prediction Skill. Journal of Hydrometeorology, 2016, 17, 651-668. | 1.9 | 70 |
| 38 | Evaluation of Precipitation Products for Global Hydrological Prediction. Journal of Hydrometeorology, 2008, 9, 388-407. | 1.9 | 67 |
| 39 | Statistical applications of physically based hydrologic models to seasonal streamflow forecasts. Water Resources Research, 2011, 47, . | 4.2 | 67 |
| 40 | What Drives the Variability of Evaporative Demand across the Conterminous United States?. Journal of Hydrometeorology, 2012, 13, 1195-1214. | 1.9 | 60 |
| 41 | Generating Ensemble Streamflow Forecasts: A Review of Methods and Approaches Over the Past 40 Years. Water Resources Research, 2021, 57, e2020WR028392. | 4.2 | 59 |
| 42 | Projected wetland densities under climate change: habitat loss but little geographic shift in conservation strategy. Ecological Applications, 2016, 26, 1677-1692. | 3.8 | 57 |
| 43 | Assessing recent declines in Upper Rio Grande runoff efficiency from a paleoclimate perspective. Geophysical Research Letters, 2017, 44, 4124-4133. | 4.0 | 57 |
| 44 | Use of Satellite Data for Streamflow and Reservoir Storage Forecasts in the Snake River Basin. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 97-110. | 2.6 | 55 |
| 45 | Assessing Climate Change Implications for Water Resources Planning. Climatic Change, 1997, 37, 203-228. | 3.6 | 54 |
| 46 | A hybrid statistical–dynamical framework for meteorological drought prediction: Application to the southwestern United States. Water Resources Research, 2016, 52, 5095-5110. | 4.2 | 53 |
| 47 | Climate change impacts on flood risk and asset damages within mapped 100-year floodplains of the contiguous United States. Natural Hazards and Earth System Sciences, 2017, 17, 2199-2211. | 3.6 | 53 |
| 48 | Evaluation of snow data assimilation using the ensemble Kalman filter for seasonal streamflow prediction in the western United States. Hydrology and Earth System Sciences, 2017, 21, 635-650. | 4.9 | 52 |
| 49 | Future streamflow regime changes in the United States: assessment using functional classification. Hydrology and Earth System Sciences, 2020, 24, 3951-3966. | 4.9 | 50 |
| 50 | An intercomparison of approaches for improving operational seasonal streamflow forecasts. Hydrology and Earth System Sciences, 2017, 21, 3915-3935. | 4.9 | 49 |
| 51 | Spatial Dependence of Floods Shaped by Spatiotemporal Variations in Meteorological and Land–Surface Processes. Geophysical Research Letters, 2020, 47, e2020GL088000. | 4.0 | 40 |
| 52 | Mitigating the Impacts of Climate Nonstationarity on Seasonal Streamflow Predictability in the U.S. Southwest. Geophysical Research Letters, 2017, 44, 12,208. | 4.0 | 37 |
| 53 | SCDNA: a serially complete precipitation and temperature dataset for North America from 1979 to 2018. Earth System Science Data, 2020, 12, 2381-2409. | 9.9 | 35 |
| 54 | Planning for an Uncertain Future: Climate Change Sensitivity Assessment toward Adaptation Planning for Public Water Supply. Earth Interactions, 2013, 17, 1-26. | 1.5 | 31 |

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|---|---|---|---|
| 55 | Passive microwave remote sensing of snow constrained by hydrological simulations. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1744-1756. | 6.3 | 30 |
| 56 | Increasing importance of temperature as a contributor to the spatial extent of streamflow drought. Environmental Research Letters, 2021, 16, 024038. | 5.2 | 30 |
| 57 | Diagnostic Evaluation of Largeâ€Domain Hydrologic Models Calibrated Across the Contiguous United States. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13991-14007. | 3.3 | 29 |
| 58 | Automation and human expertise in operational river forecasting. Wiley Interdisciplinary Reviews: Water, 2016, 3, 692-705. | 6.5 | 24 |
| 59 | Adjusting Flood Peak Frequency Changes to Account for Climate Change Impacts in the Western United States. Journal of Water Resources Planning and Management - ASCE, 2018, 144, . | 2.6 | 23 |
| 60 | An Efficient Approach for Estimating Streamflow Forecast Skill Elasticity. Journal of Hydrometeorology, 2017, 18, 1715-1729. | 1.9 | 22 |
| 61 | EMDNA: an Ensemble Meteorological Dataset for North America. Earth System Science Data, 2021, 13, 3337-3362. | 9.9 | 22 |
| 62 | DOs and DON'Ts for using climate change information for water resource planning and management: guidelines for study design. Climate Services, 2018, 12, 1-13. | 2.5 | 21 |
| 63 | Real-Time Precipitation Estimation Based on Index Station Percentiles*. Journal of Hydrometeorology, 2009, 10, 266-277. | 1.9 | 20 |
| 64 | An Experiment on Risk-Based Decision-Making in Water Management Using Monthly Probabilistic Forecasts. Bulletin of the American Meteorological Society, 2016, 97, 541-551. | 3.3 | 20 |
| 65 | Advancing Drought Understanding, Monitoring, and Prediction. Bulletin of the American Meteorological Society, 2013, 94, ES186-ES188. | 3.3 | 19 |
| 66 | Developing Subseasonal to Seasonal Climate Forecast Products for Hydrology and WaterÂManagement. Journal of the American Water Resources Association, 2019, 55, 1024-1037. | 2.4 | 18 |
| 67 | Western U.S. Water Supply Forecasting: A Tradition Evolves. Eos, 2014, 95, 28-29. | 0.1 | 17 |
| 68 | 100 Years of Progress in Hydrology. Meteorological Monographs, 2018, 59, 25.1-25.51. | 5.0 | 16 |
| 69 | Flood spatial coherence, triggers, and performance in hydrological simulations: large-sample evaluation of four streamflow-calibrated models. Hydrology and Earth System Sciences, 2021, 25, 105-119. | 4.9 | 16 |
| 70 | Mapping the spatial distribution and time evolution of snow water equivalent with passive microwave measurements. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 612-621. | 6.3 | 13 |
| 71 | Benchmark decadal forecast skill for terrestrial water storage estimated by an elasticity framework. Nature Communications, 2019, 10, 1237. | 12.8 | 13 |
| 72 | Spaceâ€“time dependence of compound hotâ€“dry events in the United States: assessment using a multi-site multi-variable weather generator. Earth System Dynamics, 2021, 12, 621-634. | 7.1 | 13 |

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| 73 | Evaluation of Hydrologically Relevant PCM Climate Variables and Large-Scale Variability over the Continental U.S.. Climatic Change, 2004, 62, 45-74. | 3.6 | 12 |
| 74 | Probabilistic Spatial Meteorological Estimates for Alaska and the Yukon. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032696. | 3.3 | 11 |
| 75 | Potential in improving monthly streamflow forecasting through variational assimilation of observed streamflow. Journal of Hydrology, 2021, 600, 126559. | 5.4 | 9 |
| 76 | Informing Hydrometric Network Design for Statistical Seasonal Streamflow Forecasts. Journal of Hydrometeorology, 2013, 14, 1587-1604. | 1.9 | 7 |
| 77 | Application of Postprocessing to Watershed-Scale Subseasonal Climate Forecasts over the Contiguous United States. Journal of Hydrometeorology, 2020, 21, 971-987. | 1.9 | 7 |
| 78 | Enhancing Ensemble Seasonal Streamflow Forecasts in the Upper Colorado River Basin Using Multiâ€Model Climate Forecasts. Journal of the American Water Resources Association, 2021, 57, 906-922. | 2.4 | 6 |
| 79 | Invigorating Hydrological Research Through Journal Publications. Water Resources Research, 2020, 56, . | 4.2 | 5 |
| 80 | Leveraging ensemble meteorological forcing data to improve parameter estimation of hydrologic models. Hydrological Processes, 2021, 35, e14410. | 2.6 | 5 |
| 81 | Hydrologic Model Sensitivity to Temporal Aggregation of Meteorological Forcing Data: A Case Study for the Contiguous United States. Journal of Hydrometeorology, 2022, 23, 167-183. | 1.9 | 4 |
| 82 | Improving Forecasts for Water Management. Eos, 2014, 95, 3-3. | 0.1 | 3 |
| 83 | Joint editorial: Invigorating hydrological research through journal publications. Hydrology and Earth System Sciences, 2018, 22, 5735-5739. | 4.9 | 3 |
| 84 | Ensemble Dressing of Meteorological Fields: Using Spatial Regression to Estimate Uncertainty in Deterministic Gridded Meteorological Datasets. Journal of Hydrometeorology, 2022, 23, 1525-1543. | 1.9 | 3 |
| 85 | Motivation and Overview of Hydrological Ensemble Post-processing. , 2019, , 783-793. | | 2 |
| 86 | Research to Advance Drought Monitoring and Prediction Capabilities. Drought and Water Crises, 2017, , 127-140. | 0.1 | 2 |
| 87 | Motivation and Overview of Hydrological Ensemble Post-processing. , 2018, , 1-10. | | 2 |
| 88 | The Effects of Climate Change on Water Management Strategies and Demands in the Central Valley of California. , 2001, , 1. | | 1 |
| 89 | Value of Forecasts in Reservoir Operations Management. , 2014, , . | | 1 |
| 90 | Seasonal Ensemble Forecast Post-processing. , 2019, , 819-845. | | 1 |

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|---|---|---|---|
| 91 | Seasonal Ensemble Forecast Post-processing. , 2019, , 1-27. | | 1 |
| 92 | Motivation and Overview of Hydrological Ensemble Post-processing. , 2019, , 1-11. | | 1 |
| 93 | Improving station-based ensemble surface meteorological analyses using numerical weather prediction: A case study of the Oroville Dam crisis precipitation event. Journal of Hydrometeorology, 2022, , . | 1.9 | 1 |
| 94 | Conducting a Virtual Flood for Devils Lake, North Dakota. , 1999, , 1. | | 0 |
| 95 | Title is missing!. Climatic Change, 2000, 44, 539-541. | 3.6 | 0 |
| 96 | Motivation and Overview of Hydrological Ensemble Post-processing. , 2018, , 1-11. | | 0 |
| 97 | Seasonal Ensemble Forecast Post-processing. , 2018, , 1-27. | | 0 |
| 98 | Joint editorial: Invigorating hydrological research through journal publications. Proceedings of the International Association of Hydrological Sciences, 0, 380, 3-8. | 1.0 | 0 |