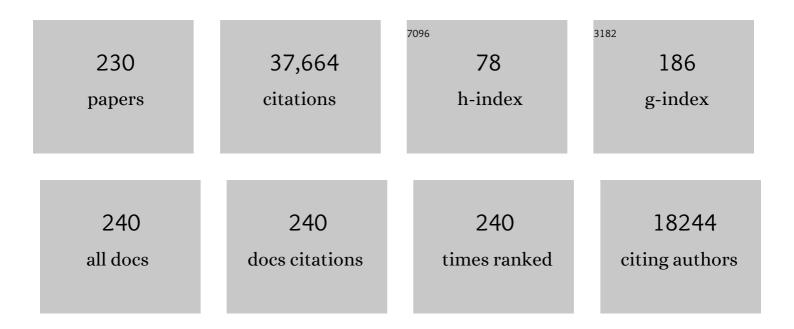
Hoshin Gupta

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | NowCasting-Nets: Representation Learning to Mitigate Latency Gap of Satellite Precipitation Products Using Convolutional and Recurrent Neural Networks. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-21. | 6.3 | 15 |
| 2 | Exploring the Potential of Long Shortâ€Term Memory Networks for Improving Understanding of Continental―and Regionalâ€5cale Snowpack Dynamics. Water Resources Research, 2022, 58, . | 4.2 | 3 |
| 3 | On the Calibration of Spatially Distributed Hydrologic Models for Poorly Gauged Basins: Exploiting Information from Streamflow Signatures and Remote Sensing-Based Evapotranspiration Data. Water (Switzerland), 2022, 14, 1252. | 2.7 | 3 |
| 4 | Predicting wildfire induced changes to runoff: A review and synthesis of modeling approaches. Wiley Interdisciplinary Reviews: Water, 2022, 9, . | 6.5 | 5 |
| 5 | Achieving Robust and Transferable Performance for Conservationâ€Based Models of Dynamical Physical Systems. Water Resources Research, 2022, 58, . | 4.2 | 8 |
| 6 | Deep learning rainfall–runoff predictions of extreme events. Hydrology and Earth System Sciences, 2022, 26, 3377-3392. | 4.9 | 55 |
| 7 | What Role Does Hydrological Science Play in the Age of Machine Learning?. Water Resources Research, 2021, 57, e2020WR028091. | 4.2 | 196 |
| 8 | How certain are our uncertainty bounds? Accounting for sample variability in Monte Carlo-based uncertainty estimates. Environmental Modelling and Software, 2021, 136, 104931. | 4.5 | 2 |
| 9 | The Future of Sensitivity Analysis: An essential discipline for systems modeling and policy support. Environmental Modelling and Software, 2021, 137, 104954. | 4.5 | 209 |
| 10 | The timing and magnitude of changes to Hortonian overland flow at the watershed scale during the postâ€fire recovery process. Hydrological Processes, 2021, 35, e14208. | 2.6 | 15 |
| 11 | Understanding the Information Content in the Hierarchy of Model Development Decisions: Learning From Data. Water Resources Research, 2021, 57, e2020WR027948. | 4.2 | 22 |
| 12 | Computing Accurate Probabilistic Estimates of One-D Entropy from Equiprobable Random Samples. Entropy, 2021, 23, 740. | 2.2 | 3 |
| 13 | Multi-criteria, time dependent sensitivity analysis of an event-oriented, physically-based, distributed sediment and runoff model. Journal of Hydrology, 2021, 598, 126268. | 5.4 | 9 |
| 14 | Evaluation of NOAA National Water Model Parameter Calibration in Semi-Arid Environments Prone to Channel Infiltration. Journal of Hydrometeorology, 2021, , . | 1.9 | 10 |
| 15 | Improved Flood Forecasting in Basins With No Precipitation Stations: Constrained Runoff Correction Using Multiple Satellite Precipitation Products. Water Resources Research, 2021, 57, e2021WR029682. | 4.2 | 9 |
| 16 | Detailed overview of the multimodel multiproduct streamflow forecasting platform. Journal of Applied Water Engineering and Research, 2020, 8, 277-289. | 1.8 | 6 |
| 17 | Improving Information Extraction From Simulated Discharge Using Sensitivityâ€Weighted Performance Criteria. Water Resources Research, 2020, 56, e2019WR025605. | 4.2 | 2 |
| 18 | Why Is the Terrestrial Water Storage in Dryland Regions Declining? A Perspective Based on Gravity Recovery and Climate Experiment Satellite Observations and Noah Land Surface Model With Multiparameterization Schemes Model Simulations. Water Resources Research, 2020, 56, e2020WR027102. | 4.2 | 18 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Identification of climate variables dominating streamflow generation and quantification of streamflow decline in the Loess Plateau, China. Science of the Total Environment, 2020, 722, 137935. | 8.0 | 23 |
| 20 | Evaluating Uncertainty in Fluvial Geomorphic Response to Dam Removal. Journal of Hydrologic Engineering - ASCE, 2020, 25, . | 1.9 | 4 |
| 21 | Debates—Does Information Theory Provide a New Paradigm for Earth Science?. Water Resources Research, 2020, 56, e2019WR026398. | 4.2 | 10 |
| 22 | The physics of river prediction. Physics Today, 2020, 73, 46-52. | 0.3 | 12 |
| 23 | On the Robustness of Conceptual Rainfallâ€Runoff Models to Calibration and Evaluation Data Set Splits Selection: A Large Sample Investigation. Water Resources Research, 2020, 56, e2019WR026752. | 4.2 | 29 |
| 24 | Assessing the performance and robustness of two conceptual rainfall-runoff models on a worldwide sample of watersheds. Journal of Hydrology, 2020, 585, 124698. | 5.4 | 31 |
| 25 | Does Information Theory Provide a New Paradigm for Earth Science? Hypothesis Testing. Water Resources Research, 2020, 56, e2019WR024918. | 4.2 | 33 |
| 26 | Investigation of the relationship between precipitation extremes and sediment discharge production under extensive land cover change in the Chinese Loess Plateau. Geomorphology, 2020, 361, 107176. | 2.6 | 12 |
| 27 | On the Reliability of Variableâ€Rate Pumping Test Results: Sensitivity to Information Content of the Recorded Data. Water Resources Research, 2020, 56, e2019WR026961. | 4.2 | 7 |
| 28 | A universal multifractal approach to assessment of spatiotemporal extreme precipitation over the Loess Plateau of China. Hydrology and Earth System Sciences, 2020, 24, 809-826. | 4.9 | 25 |
| 29 | Advancing Precipitation Estimation, Prediction, and Impact Studies. Bulletin of the American Meteorological Society, 2020, 101, E1584-E1592. | 3.3 | 14 |
| 30 | Parameter Sensitivity Analysis for Computationally Intensive Spatially Distributed Dynamical Environmental Systems Models. Journal of Advances in Modeling Earth Systems, 2019, 11, 2896-2909. | 3.8 | 21 |
| 31 | On the choice of calibration metrics for "high-flow―estimation using hydrologic models. Hydrology and Earth System Sciences, 2019, 23, 2601-2614. | 4.9 | 110 |
| 32 | Robust Predictive Design of Field Measurements for Evapotranspiration Barriers Using Universal Multiple linear Regression. Water Resources Research, 2019, 55, 8478-8491. | 4.2 | 0 |
| 33 | Toward Improved Probabilistic Predictions for Flood Forecasts Generated Using Deterministic Models. Water Resources Research, 2019, 55, 9519-9543. | 4.2 | 12 |
| 34 | Formulating an Elasticity Approach to Quantify the Effects of Climate Variability and Ecological Restoration on Sediment Discharge Change in the Loess Plateau, China. Water Resources Research, 2019, 55, 9604-9622. | 4.2 | 21 |
| 35 | Climatic forcing for recent significant terrestrial drying and wetting. Advances in Water Resources, 2019, 133, 103425. | 3.8 | 24 |
| 36 | Improved Dynamic System Response Curve Method for Realâ€Time Flood Forecast Updating. Water Resources Research, 2019, 55, 7493-7519. | 4.2 | 18 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | A topographic index explaining hydrological similarity by accounting for the joint controls of runoff formation. Hydrology and Earth System Sciences, 2019, 23, 3807-3821. | 4.9 | 29 |
| 38 | Statistical Analysis of Discharge Fluctuations in a Semiarid Basin Using Effective Atmospheric Teleconnections: Dez River Basin in Iran. Journal of Hydrologic Engineering - ASCE, 2019, 24, . | 1.9 | 7 |
| 39 | Enhancing the Structure of the WRF-Hydro Hydrologic Model for Semiarid Environments. Journal of Hydrometeorology, 2019, 20, 691-714. | 1.9 | 44 |
| 40 | Assessing water security in the São Paulo metropolitan region under projected climate change. Hydrology and Earth System Sciences, 2019, 23, 4955-4968. | 4.9 | 23 |
| 41 | Global sensitivity analysis for high-dimensional problems: How to objectively group factors and measure robustness and convergence while reducing computational cost. Environmental Modelling and Software, 2019, 111, 282-299. | 4.5 | 53 |
| 42 | A multi-method Generalized Global Sensitivity Matrix approach to accounting for the dynamical nature of earth and environmental systems models. Environmental Modelling and Software, 2019, 114, 1-11. | 4.5 | 26 |
| 43 | VARS-TOOL: A toolbox for comprehensive, efficient, and robust sensitivity and uncertainty analysis. Environmental Modelling and Software, 2019, 112, 95-107. | 4.5 | 62 |
| 44 | On Lack of Robustness in Hydrological Model Development Due to Absence of Guidelines for Selecting Calibration and Evaluation Data: Demonstration for Dataâ€Đriven Models. Water Resources Research, 2018, 54, 1013-1030. | 4.2 | 71 |
| 45 | Circulation pattern-based assessment of projected climate change for a catchment in Spain. Journal of Hydrology, 2018, 556, 944-960. | 5.4 | 3 |
| 46 | Evaluating the Impacts of a Large-Scale Multi-Reservoir System on Flooding: Case of the Huai River in China. Water Resources Management, 2018, 32, 1013-1033. | 3.9 | 11 |
| 47 | Revisiting the Basis of Sensitivity Analysis for Dynamical Earth System Models. Water Resources Research, 2018, 54, 8692-8717. | 4.2 | 58 |
| 48 | An Information Theory Approach to Identifying a Representative Subset of Hydro limatic Simulations for Impact Modeling Studies. Water Resources Research, 2018, 54, 5422-5435. | 4.2 | 16 |
| 49 | Multihazard Scenarios for Analysis of Compound Extreme Events. Geophysical Research Letters, 2018, 45, 5470-5480. | 4.0 | 139 |
| 50 | On the dynamic nature of hydrological similarity. Hydrology and Earth System Sciences, 2018, 22, 3663-3684. | 4.9 | 42 |
| 51 | Ensembles vs. information theory: supporting science under uncertainty. Frontiers of Earth Science, 2018, 12, 653-660. | 2.1 | 21 |
| 52 | Assessing hydrological impacts of short-term climate change in the Mara River basin of East Africa. Journal of Hydrology, 2018, 566, 818-829. | 5.4 | 15 |
| 53 | Impact of Irrigation over the California Central Valley on Regional Climate. Journal of Hydrometeorology, 2017, 18, 1341-1357. | 1.9 | 46 |
| 54 | Hydrological model parameterization using NDVI values to account for the effects of land cover change on the rainfall–runoff response. Hydrology Research, 2017, 48, 1455-1473. | 2.7 | 9 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | A platform for probabilistic Multimodel and Multiproduct Streamflow Forecasting. Water Resources Research, 2017, 53, 376-399. | 4.2 | 32 |
| 56 | A Hydrometeorological Perspective on the Karakoram Anomaly Using Unique Valleyâ€Based Synoptic Weather Observations. Geophysical Research Letters, 2017, 44, 10,470. | 4.0 | 54 |
| 57 | Design and implementation of an operational multimodel multiproduct real-time probabilistic streamflow forecasting platform. Journal of Hydroinformatics, 2017, 19, 911-919. | 2.4 | 7 |
| 58 | Challenges and Future Outlook of Sensitivity Analysis. , 2017, , 397-415. | | 7 |
| 59 | Using satellite-based evapotranspiration estimates to improve the structure of a simple conceptual rainfall–runoff model. Hydrology and Earth System Sciences, 2017, 21, 879-896. | 4.9 | 37 |
| 60 | Modeling the distributed effects of forest thinning on the long-term water balance and streamflow extremes for a semi-arid basin in the southwestern US. Hydrology and Earth System Sciences, 2016, 20, 1241-1267. | 4.9 | 21 |
| 61 | Impact of the Three Gorges Dam on the Hydrology and Ecology of the Yangtze River. Water (Switzerland), 2016, 8, 590. | 2.7 | 41 |
| 62 | Efficient estimation of flood forecast prediction intervals via single―and multiâ€objective versions of the LUBE method. Hydrological Processes, 2016, 30, 2703-2716. | 2.6 | 45 |
| 63 | On characterizing the temporal dominance patterns of model parameters and processes. Hydrological Processes, 2016, 30, 2255-2270. | 2.6 | 43 |
| 64 | Urban Effects on Regional Climate: A Case Study in the Phoenix and Tucson "Sun Corridor― Earth Interactions, 2016, 20, 1-25. | 1.5 | 26 |
| 65 | A philosophical basis for hydrological uncertainty. Hydrological Sciences Journal, 2016, 61, 1666-1678. | 2.6 | 98 |
| 66 | Demasking the integrated information of discharge: Advancing sensitivity analysis to consider different hydrological components and their rates of change. Water Resources Research, 2016, 52, 8724-8743. | 4.2 | 26 |
| 67 | A new framework for comprehensive, robust, and efficient global sensitivity analysis: 1. Theory. Water Resources Research, 2016, 52, 423-439. | 4.2 | 132 |
| 68 | A new framework for comprehensive, robust, and efficient global sensitivity analysis: 2. Application. Water Resources Research, 2016, 52, 440-455. | 4.2 | 94 |
| 69 | Robust informational entropy-based descriptors of flow in catchment hydrology. Hydrological Sciences Journal, 2016, 61, 1-18. | 2.6 | 38 |
| 70 | The soil water characteristic as new class of closed-form parametric expressions for the flow duration curve. Journal of Hydrology, 2016, 535, 438-456. | 5.4 | 18 |
| 71 | Bringing all the stories together: Beyond the Tucson case study. IHE Delft Lecture Note Series, 2016, , 401-415. | 0.0 | 0 |
| 72 | Updating realâ€ŧime flood forecasts via the dynamic system response curve method. Water Resources Research, 2015, 51, 5128-5144. | 4.2 | 40 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Are we unnecessarily constraining the agility of complex process-based models?. Water Resources Research, 2015, 51, 716-728. | 4.2 | 123 |
| 74 | Assessing uncertainties in surface water security: An empirical multimodel approach. Water Resources Research, 2015, 51, 9013-9028. | 4.2 | 14 |
| 75 | Diagnostic calibration of a hydrological model in a mountain area by hydrograph partitioning. Hydrology and Earth System Sciences, 2015, 19, 1807-1826. | 4.9 | 40 |
| 76 | The quantity and quality of information in hydrologic models. Water Resources Research, 2015, 51, 524-538. | 4.2 | 85 |
| 77 | Impacts of rainfall spatial variability on hydrogeological response. Water Resources Research, 2015, 51, 1300-1314. | 4.2 | 40 |
| 78 | Comparing expert judgement and numerical criteria for hydrograph evaluation. Hydrological Sciences Journal, 2015, 60, 402-423. | 2.6 | 46 |
| 79 | Implication of remotely sensed data to incorporate land cover effect into a linear reservoir-based rainfall–runoff model. Journal of Hydrology, 2015, 529, 94-105. | 5.4 | 8 |
| 80 | Contrasting American and Brazilian Systems for Water Allocation and Transfers. Journal of Water Resources Planning and Management - ASCE, 2015, 141, . | 2.6 | 14 |
| 81 | A multi-criteria penalty function approach for evaluating a priori model parameter estimates. Journal of Hydrology, 2015, 525, 165-177. | 5.4 | 5 |
| 82 | What do we mean by sensitivity analysis? The need for comprehensive characterization of "global― sensitivity in <scp>E</scp> arth and <scp>E</scp> nvironmental systems models. Water Resources Research, 2015, 51, 3070-3092. | 4.2 | 230 |
| 83 | Toward a comprehensive assessment of the combined impacts of climate change and groundwater pumping on catchment dynamics. Journal of Hydrology, 2015, 529, 1701-1712. | 5.4 | 13 |
| 84 | Advancing catchment hydrology to deal with predictions under change. Hydrology and Earth System Sciences, 2014, 18, 649-671. | 4.9 | 83 |
| 85 | A constraint-based search algorithm for parameter identification of environmental models. Hydrology and Earth System Sciences, 2014, 18, 4861-4870. | 4.9 | 26 |
| 86 | Large-sample hydrology: a need to balance depth with breadth. Hydrology and Earth System Sciences, 2014, 18, 463-477. | 4.9 | 208 |
| 87 | Physical Mechanisms Related to Climate-Induced Drying of Two Semiarid Watersheds in the Southwestern United States. Journal of Hydrometeorology, 2014, 15, 1404-1418. | 1.9 | 6 |
| 88 | A blue/green waterâ€based accounting framework for assessment of water security. Water Resources Research, 2014, 50, 7187-7205. | 4.2 | 100 |
| 89 | Trends in water balance components across the Brazilian Cerrado. Water Resources Research, 2014, 50, 7100-7114. | 4.2 | 140 |
| 90 | Use of an entropyâ€based metric in multiobjective calibration to improve model performance. Water Resources Research, 2014, 50, 8066-8083. | 4.2 | 37 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Debates—the future of hydrological sciences: A (common) path forward? Using models and data to learn: A systems theoretic perspective on the future of hydrological science. Water Resources Research, 2014, 50, 5351-5359. | 4.2 | 91 |
| 92 | Estimating information entropy for hydrological data: Oneâ€dimensional case. Water Resources Research, 2014, 50, 5003-5018. | 4.2 | 57 |
| 93 | Water Governance Tools: The Role of Science and Decision Support Systems in Participatory Management. , 2014, , 241-259. | | 4 |
| 94 | On Simulation and Analysis of Variableâ€Rate Pumping Tests. Ground Water, 2013, 51, 469-473. | 1.3 | 19 |
| 95 | Towards a comprehensive approach to parameter estimation in land surface parameterization schemes. Hydrological Processes, 2013, 27, 2075-2097. | 2.6 | 43 |
| 96 | Stochastic Simulation of Nonstationary Rainfall Fields, Accounting for Seasonality and Atmospheric Circulation Pattern Evolution. Mathematical Geosciences, 2013, 45, 621-645. | 2.4 | 8 |
| 97 | Estimating epistemic and aleatory uncertainties during hydrologic modeling: An information theoretic approach. Water Resources Research, 2013, 49, 2253-2273. | 4.2 | 87 |
| 98 | Information loss in approximately Bayesian estimation techniques: A comparison of generative and discriminative approaches to estimating agricultural productivity. Journal of Hydrology, 2013, 507, 163-173. | 5.4 | 23 |
| 99 | A decade of Predictions in Ungauged Basins (PUB)—a review. Hydrological Sciences Journal, 2013, 58, 1198-1255. | 2.6 | 821 |
| 100 | "Panta Rhei—Everything Flows― Change in hydrology and society—The IAHS Scientific Decade 2013–2022. Hydrological Sciences Journal, 2013, 58, 1256-1275. | 2.6 | 569 |
| 101 | An approach to quantifying the efficiency of a Bayesian filter. Water Resources Research, 2013, 49, 2164-2173. | 4.2 | 16 |
| 102 | A fully multipleâ€criteria implementation of the Sobol′ method for parameter sensitivity analysis. Journal of Geophysical Research, 2012, 117, . | 3.3 | 85 |
| 103 | Towards a comprehensive assessment of model structural adequacy. Water Resources Research, 2012, 48, . | 4.2 | 317 |
| 104 | Assimilating remote sensing observations of leaf area index and soil moisture for wheat yield estimates: An observing system simulation experiment. Water Resources Research, 2012, 48, . | 4.2 | 86 |
| 105 | A resonating rainfall and evaporation recorder. Water Resources Research, 2012, 48, . | 4.2 | 12 |
| 106 | Use of the continuous slope-area method to estimate runoff in a network of ephemeral channels, southeast Arizona, USA. Journal of Hydrology, 2012, 472-473, 148-158. | 5.4 | 13 |
| 107 | Multiple-criteria calibration of a distributed watershed model using spatial regularization and response signatures. Journal of Hydrology, 2012, 418-419, 49-60. | 5.4 | 88 |
| 108 | Results of the DMIP 2 Oklahoma experiments. Journal of Hydrology, 2012, 418-419, 17-48. | 5.4 | 97 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Correcting the mathematical structure of a hydrological model via Bayesian data assimilation. Water Resources Research, 2011, 47, . | 4.2 | 54 |
| 110 | On the ability to infer spatial catchment variability using streamflow hydrographs. Water Resources Research, 2011, 47, . | 4.2 | 41 |
| 111 | On typical range, sensitivity, and normalization of Mean Squared Error and Nashâ€Sutcliffe Efficiency type metrics. Water Resources Research, 2011, 47, . | 4.2 | 134 |
| 112 | Hydrologic consistency as a basis for assessing complexity of monthly water balance models for the continental United States. Water Resources Research, 2011, 47, . | 4.2 | 49 |
| 113 | Modeling moisture fluxes using artificial neural networks: can information extraction overcome data loss?. Hydrology and Earth System Sciences, 2011, 15, 359-368. | 4.9 | 7 |
| 114 | Scenario development for water resources planning and watershed management: Methodology and semi-arid region case study. Environmental Modelling and Software, 2011, 26, 873-885. | 4.5 | 28 |
| 115 | How Bayesian data assimilation can be used to estimate the mathematical structure of a model. Stochastic Environmental Research and Risk Assessment, 2010, 24, 925-937. | 4.0 | 36 |
| 116 | Diagnostic evaluation of conceptual rainfall–runoff models using temporal clustering. Hydrological Processes, 2010, 24, 2840-2850. | 2.6 | 81 |
| 117 | Improving robustness of hydrologic parameter estimation by the use of moving block bootstrap resampling. Water Resources Research, 2010, 46, . | 4.2 | 47 |
| 118 | On the use of spatial regularization strategies to improve calibration of distributed watershed models. Water Resources Research, 2010, 46, . | 4.2 | 62 |
| 119 | Toward improved identification of hydrological models: A diagnostic evaluation of the " <i>abcd</i> ― monthly water balance model for the conterminous United States. Water Resources Research, 2010, 46, . | 4.2 | 120 |
| 120 | The future of hydrology: An evolving science for a changing world. Water Resources Research, 2010, 46, . | 4.2 | 487 |
| 121 | Multicriteria design of rain gauge networks for flash flood prediction in semiarid catchments with complex terrain. Water Resources Research, 2010, 46, . | 4.2 | 64 |
| 122 | Mapping model behaviour using Self-Organizing Maps. Hydrology and Earth System Sciences, 2009, 13, 395-409. | 4.9 | 30 |
| 123 | On the development of regionalization relationships for lumped watershed models: The impact of ignoring sub-basin scale variability. Journal of Hydrology, 2009, 373, 337-351. | 5.4 | 82 |
| 124 | Decomposition of the mean squared error and NSE performance criteria: Implications for improving hydrological modelling. Journal of Hydrology, 2009, 377, 80-91. | 5.4 | 3,232 |
| 125 | Climate and vegetation water use efficiency at catchment scales. Hydrological Processes, 2009, 23, 2409-2414. | 2.6 | 176 |
| 126 | Equifinality of formal (DREAM) and informal (GLUE) Bayesian approaches in hydrologic modeling?. Stochastic Environmental Research and Risk Assessment, 2009, 23, 1011-1026. | 4.0 | 337 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Response to comment by Keith Beven on "Equifinality of formal (DREAM) and informal (GLUE) Bayesian approaches in hydrologic modeling?― Stochastic Environmental Research and Risk Assessment, 2009, 23, 1061-1062. | 4.0 | 16 |
| 128 | A formal framework for scenario development in support of environmental decision-making. Environmental Modelling and Software, 2009, 24, 798-808. | 4.5 | 284 |
| 129 | Estimating the uncertain mathematical structure of a water balance model via Bayesian data assimilation. Water Resources Research, 2009, 45, . | 4.2 | 69 |
| 130 | Climate Change: The Need to Consider Human Forcings Besides Greenhouse Gases. Eos, 2009, 90, 413-413. | 0.1 | 64 |
| 131 | Reconciling theory with observations: elements of a diagnostic approach to model evaluation. Hydrological Processes, 2008, 22, 3802-3813. | 2.6 | 511 |
| 132 | Linking science with environmental decision making: Experiences from an integrated modeling approach to supporting sustainable water resources management. Environmental Modelling and Software, 2008, 23, 846-858. | 4.5 | 292 |
| 133 | Toward a model space and model independence metric. Geophysical Research Letters, 2008, 35, . | 4.0 | 52 |
| 134 | Understanding uncertainty in distributed flash flood forecasting for semiarid regions. Water Resources Research, 2008, 44, . | 4.2 | 131 |
| 135 | A spatial regularization approach to parameter estimation for a distributed watershed model. Water Resources Research, 2008, 44, . | 4.2 | 84 |
| 136 | A processâ€based diagnostic approach to model evaluation: Application to the NWS distributed hydrologic model. Water Resources Research, 2008, 44, . | 4.2 | 399 |
| 137 | Framework for Understanding Structural Errors (FUSE): A modular framework to diagnose differences between hydrological models. Water Resources Research, 2008, 44, . | 4.2 | 461 |
| 138 | Chapter Nine Formal Scenario Development for Environmental Impact Assessment Studies. Developments in Integrated Environmental Assessment, 2008, 3, 145-162. | 0.0 | 4 |
| 139 | Systematic Bias in Land Surface Models. Journal of Hydrometeorology, 2007, 8, 989-1001. | 1.9 | 68 |
| 140 | WaterNet the NASA water cycle solutions network. , 2007, , . | | 0 |
| 141 | Uncertainty in hydrologic modeling: Toward an integrated data assimilation framework. Water Resources Research, 2007, 43, . | 4.2 | 611 |
| 142 | Do Nash values have value?. Hydrological Processes, 2007, 21, 2075-2080. | 2.6 | 486 |
| 143 | Regionalization of constraints on expected watershed response behavior for improved predictions in ungauged basins. Advances in Water Resources, 2007, 30, 1756-1774. | 3.8 | 417 |
| 144 | Parameter sensitivity analysis for different complexity land surface models using multicriteria methods. Journal of Geophysical Research, 2006, 111, . | 3.3 | 65 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Evaluating model performance and parameter behavior for varying levels of land surface model complexity. Water Resources Research, 2006, 42, . | 4.2 | 53 |
| 146 | Real-Time Data Assimilation for Operational Ensemble Streamflow Forecasting. Journal of Hydrometeorology, 2006, 7, 548-565. | 1.9 | 146 |
| 147 | A â€~User-Friendly' approach to parameter estimation in hydrologic models. Journal of Hydrology, 2006, 320, 202-217. | 5.4 | 49 |
| 148 | Model Parameter Estimation Experiment (MOPEX): An overview of science strategy and major results from the second and third workshops. Journal of Hydrology, 2006, 320, 3-17. | 5.4 | 537 |
| 149 | Application of stochastic parameter optimization to the Sacramento Soil Moisture Accounting model. Journal of Hydrology, 2006, 325, 288-307. | 5.4 | 95 |
| 150 | Neural Error Regression Diagnosis (NERD): A Tool for Model Bias Identification and Prognostic Data Assimilation. Journal of Hydrometeorology, 2006, 7, 160-177. | 1.9 | 31 |
| 151 | Spatial patterns in thunderstorm rainfall events and their coupling with watershed hydrological response. Advances in Water Resources, 2006, 29, 843-860. | 3.8 | 137 |
| 152 | Constraining Land Surface and Atmospheric Parameters of a Locally Coupled Model Using Observational Data. Journal of Hydrometeorology, 2005, 6, 156-172. | 1.9 | 49 |
| 153 | Evaluation and Transferability of the Noah Land Surface Model in Semiarid Environments. Journal of Hydrometeorology, 2005, 6, 68-84. | 1.9 | 119 |
| 154 | Dual state–parameter estimation of hydrological models using ensemble Kalman filter. Advances in Water Resources, 2005, 28, 135-147. | 3.8 | 753 |
| 155 | The role of hydrograph indices in parameter estimation of rainfall-runoff models. Hydrological Processes, 2005, 19, 2187-2207. | 2.6 | 44 |
| 156 | Rainfall modeling for integrating radar information into hydrological model. Atmospheric Science Letters, 2005, 6, 23-30. | 1.9 | 11 |
| 157 | Model identification for hydrological forecasting under uncertainty. Stochastic Environmental Research and Risk Assessment, 2005, 19, 378-387. | 4.0 | 269 |
| 158 | Intercomparison of Rain Gauge, Radar, and Satellite-Based Precipitation Estimates with Emphasis on Hydrologic Forecasting. Journal of Hydrometeorology, 2005, 6, 497-517. | 1.9 | 217 |
| 159 | Improved treatment of uncertainty in hydrologic modeling: Combining the strengths of global optimization and data assimilation. Water Resources Research, 2005, 41, . | 4.2 | 472 |
| 160 | Application of temporal streamflow descriptors in hydrologic model parameter estimation. Water Resources Research, 2005, 41, . | 4.2 | 48 |
| 161 | Uncertainty assessment of hydrologic model states and parameters: Sequential data assimilation using the particle filter. Water Resources Research, 2005, 41, . | 4.2 | 556 |
| 162 | Constraining a physically based Soil-Vegetation-Atmosphere Transfer model with surface water content and thermal infrared brightness temperature measurements using a multiobjective approach. Water Resources Research, 2005, 41, . | 4.2 | 43 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | A hydroarchive for the free exchange of hydrological software Website:. Hydrological Processes, 2004, 18, 389-391. | 2.6 | 7 |
| 164 | Exploring parameter sensitivities of the land surface using a locally coupled land-atmosphere model. Journal of Geophysical Research, 2004, 109, n/a-n/a. | 3.3 | 49 |
| 165 | Using a multiobjective approach to retrieve information on surface properties used in a SVAT model. Journal of Hydrology, 2004, 287, 214-236. | 5.4 | 61 |
| 166 | Improved streamflow forecasting using self-organizing radial basis function artificial neural networks. Journal of Hydrology, 2004, 295, 246-262. | 5.4 | 183 |
| 167 | Calibration of a semi-distributed hydrologic model for streamflow estimation along a river system. Journal of Hydrology, 2004, 298, 112-135. | 5.4 | 234 |
| 168 | Towards the characterization of streamflow simulation uncertainty through multimodel ensembles. Journal of Hydrology, 2004, 298, 222-241. | 5.4 | 306 |
| 169 | Towards reduced uncertainty in conceptual rainfall-runoff modelling: dynamic identifiability analysis. Hydrological Processes, 2003, 17, 455-476. | 2.6 | 448 |
| 170 | Reply to comment by K. Beven and P. Young on "Bayesian recursive parameter estimation for hydrologic models― Water Resources Research, 2003, 39, . | 4.2 | 32 |
| 171 | A Shuffled Complex Evolution Metropolis algorithm for optimization and uncertainty assessment of hydrologic model parameters. Water Resources Research, 2003, 39, . | 4.2 | 914 |
| 172 | Effective and efficient algorithm for multiobjective optimization of hydrologic models. Water Resources Research, 2003, 39, . | 4.2 | 479 |
| 173 | Impacts of a Parameterization Deficiency on Offline and Coupled Land Surface Model Simulations. Journal of Hydrometeorology, 2003, 4, 901-914. | 1.9 | 18 |
| 174 | Advances in automatic calibration of watershed models. Water Science and Application, 2003, , 9-28. | 0.3 | 64 |
| 175 | Identification and evaluation of watershed models. Water Science and Application, 2003, , 29-47. | 0.3 | 28 |
| 176 | Bayesian recursive estimation of parameter and output uncertainty for watershed models. Water Science and Application, 2003, , 113-124. | 0.3 | 34 |
| 177 | A shuffled complex evolution metropolis algorithm for estimating posterior distribution of watershed model parameters. Water Science and Application, 2003, , 105-112. | 0.3 | 17 |
| 178 | Parameter, structure, and model performance evaluation for land-surface schemes. Water Science and Application, 2003, , 229-237. | 0.3 | 11 |
| 179 | Estimating parameters and structure of a hydrochemical model using multiple criteria. Water Science and Application, 2003, , 213-228. | 0.3 | 2 |
| 180 | Toward Improved Identifiability of Soil Hydraulic Parameters: On the Selection of a Suitable Parametric Model. Vadose Zone Journal, 2003, 2, 98-113. | 2.2 | 36 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Multiple criteria global optimization for watershed model calibration. Water Science and Application, 2003, , 125-132. | 0.3 | 27 |
| 182 | A multi-step automatic calibration scheme for watershed models. Water Science and Application, 2003, , 165-174. | 0.3 | 9 |
| 183 | Multicriteria calibration of hydrologic models. Water Science and Application, 2003, , 185-196. | 0.3 | 17 |
| 184 | Toward Improved Identifiability of Soil Hydraulic Parameters. Vadose Zone Journal, 2003, 2, 98. | 2.2 | 9 |
| 185 | Diurnal Variability of Tropical Rainfall Retrieved from Combined GOES and TRMM Satellite Information. Journal of Climate, 2002, 15, 983-1001. | 3.2 | 157 |
| 186 | Calibrating a Land Surface Model of Varying Complexity Using Multicriteria Methods and the Cabauw Dataset. Journal of Hydrometeorology, 2002, 3, 181-194. | 1.9 | 62 |
| 187 | Exploring the relationship between complexity and performance in a land surface model using the multicriteria method. Journal of Geophysical Research, 2002, 107, ACL 11-1. | 3.3 | 40 |
| 188 | Self-organizing linear output map (SOLO): An artificial neural network suitable for hydrologic modeling and analysis. Water Resources Research, 2002, 38, 38-1-38-17. | 4.2 | 203 |
| 189 | Toward improved identifiability of hydrologic model parameters: The information content of experimental data. Water Resources Research, 2002, 38, 48-1-48-13. | 4.2 | 135 |
| 190 | The challenge of predicting flash floods from thunderstorm rainfall. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2002, 360, 1363-1371. | 3.4 | 18 |
| 191 | Perspectives in using a remotely sensed dryness index in distributed hydrological models at the river-basin scale. Hydrological Processes, 2002, 16, 2973-2987. | 2.6 | 13 |
| 192 | A brief history and mission of SAHRA: a National Science Foundation Science and Technology Center on ?sustainability of semi-arid hydrology and riparian areas?. Hydrological Processes, 2002, 16, 3293-3295. | 2.6 | 10 |
| 193 | Multiobjective calibration and sensitivity of a distributed land surface water and energy balance model. Journal of Geophysical Research, 2001, 106, 33421-33433. | 3.3 | 23 |
| 194 | Toward improved streamflow forecasts: value of semidistributed modeling. Water Resources Research, 2001, 37, 2749-2759. | 4.2 | 211 |
| 195 | A chaotic approach to rainfall disaggregation. Water Resources Research, 2001, 37, 61-72. | 4.2 | 98 |
| 196 | Bayesian recursive parameter estimation for hydrologic models. Water Resources Research, 2001, 37, 2521-2535. | 4.2 | 351 |
| 197 | Impact of field-calibrated vegetation parameters on GCM climate simulations. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1199-1223. | 2.7 | 32 |
| 198 | A framework for development and application of hydrological models. Hydrology and Earth System Sciences, 2001, 5, 13-26. | 4.9 | 443 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Bounding the parameters of land-surface schemes using observational data. Water Science and Application, 2001, , 65-76. | 0.3 | 9 |
| 200 | Impact of field-calibrated vegetation parameters on GCM climate simulations. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1199-1223. | 2.7 | 1 |
| 201 | A Multistep Automatic Calibration Scheme for River Forecasting Models. Journal of Hydrometeorology, 2000, 1, 524-542. | 1.9 | 134 |
| 202 | Evaluation of PERSIANN System Satellite–Based Estimates of Tropical Rainfall. Bulletin of the American Meteorological Society, 2000, 81, 2035-2046. | 3.3 | 1,063 |
| 203 | Preface paper to the Semi-Arid Land-Surface-Atmosphere (SALSA) Program special issue. Agricultural and Forest Meteorology, 2000, 105, 3-20. | 4.8 | 55 |
| 204 | Toward improved calibration of hydrologic models: Combining the strengths of manual and automatic methods. Water Resources Research, 2000, 36, 3663-3674. | 4.2 | 537 |
| 205 | Soil-moisture nudging experiments with a single-column version of the ECMWF model. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 1879-1902. | 2.7 | 13 |
| 206 | Sensitivity analysis using mass flux and concentration. Hydrological Processes, 1999, 13, 2233-2244. | 2.6 | 26 |
| 207 | Status of Automatic Calibration for Hydrologic Models: Comparison with Multilevel Expert Calibration. Journal of Hydrologic Engineering - ASCE, 1999, 4, 135-143. | 1.9 | 1,573 |
| 208 | Estimation of physical variables from multichannel remotely sensed imagery using a neural network: Application to rainfall estimation. Water Resources Research, 1999, 35, 1605-1618. | 4.2 | 166 |
| 209 | A Cloud-Patch Technique for Identification and Removal of No-Rain Clouds from Satellite Infrared Imagery. Journal of Applied Meteorology and Climatology, 1999, 38, 1170-1181. | 1.7 | 15 |
| 210 | Multi-objective global optimization for hydrologic models. Journal of Hydrology, 1998, 204, 83-97. | 5.4 | 771 |
| 211 | Integration of soil moisture remote sensing and hydrologic modeling using data assimilation. Water Resources Research, 1998, 34, 3405-3420. | 4.2 | 396 |
| 212 | Toward improved calibration of hydrologic models: Multiple and noncommensurable measures of information. Water Resources Research, 1998, 34, 751-763. | 4.2 | 1,154 |
| 213 | On the simulation of infiltration- and saturation-excess runoff using radar-based rainfall estimates: Effects of algorithm uncertainty and pixel aggregation. Water Resources Research, 1998, 34, 2655-2670. | 4.2 | 126 |
| 214 | Precipitation Estimation from Remotely Sensed Information Using Artificial Neural Networks. Journal of Applied Meteorology and Climatology, 1997, 36, 1176-1190. | 1.7 | 833 |
| 215 | The Challenges We Face: Panel Discussion on Snow. , 1997, , 183-187. | | 2 |
| | | | |

The Challenges We Face: Panel Discussion on Evapotranspiration. , 1997, , 383-385.

0

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 217 | The Challenges We Face: Panel Discussion on Runoff. , 1997, , 483-487. | | 0 |
| 218 | Automatic calibration of conceptual rainfall-runoff models: sensitivity to calibration data. Journal of Hydrology, 1996, 181, 23-48. | 5.4 | 486 |
| 219 | Artificial Neural Network Modeling of the Rainfall-Runoff Process. Water Resources Research, 1995, 31, 2517-2530. | 4.2 | 1,198 |
| 220 | Shuffled complex evolution approach for effective and efficient global minimization. Journal of Optimization Theory and Applications, 1993, 76, 501-521. | 1.5 | 1,338 |
| 221 | Calibration of rainfall-runoff models: Application of global optimization to the Sacramento Soil Moisture Accounting Model. Water Resources Research, 1993, 29, 1185-1194. | 4.2 | 425 |
| 222 | A Markov Chain Flow Model for flood forecasting. Water Resources Research, 1993, 29, 2427-2436. | 4.2 | 22 |
| 223 | Effective and efficient global optimization for conceptual rainfall-runoff models. Water Resources Research, 1992, 28, 1015-1031. | 4.2 | 2,584 |
| 224 | On the estimation of parameters for frequency domain models. Water Resources Research, 1991, 27, 873-882. | 4.2 | 9 |
| 225 | The Automatic Calibration of Conceptual Catchment Models Using Derivativeâ€Based Optimization Algorithms. Water Resources Research, 1985, 21, 473-485. | 4.2 | 95 |
| 226 | The Analysis of Structural Identifiability: Theory and Application to Conceptual Rainfallâ€Runoff Models. Water Resources Research, 1985, 21, 487-495. | 4.2 | 61 |
| 227 | The relationship between data and the precision of parameter estimates of hydrologic models. Journal of Hydrology, 1985, 81, 57-77. | 5.4 | 116 |
| 228 | Evaluation of Maximum Likelihood Parameter estimation techniques for conceptual rainfallâ€runoff models: Influence of calibration data variability and length on model credibility. Water Resources Research, 1983, 19, 251-259. | 4.2 | 248 |
| 229 | Automatic calibration of conceptual rainfallâ€runoff models: The question of parameter observability and uniqueness. Water Resources Research, 1983, 19, 260-268. | 4.2 | 188 |
| 230 | Uniqueness and observability of conceptual rainfallâ€runoff model parameters: The percolation process examined. Water Resources Research, 1983, 19, 269-276. | 4.2 | 117 |