# Thorsten Wagener

List of Publications by Year
in descending order



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|---|---|---|---|
| 177 papers | 20,349 citations | 10389 72 h-index | 11939 134 g-index |
| 257 all docs | 257 docs citations | 257 times ranked | 13810 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The critical need to foster computational reproducibility. Environmental Research Letters, 2022, 17, 041005. | 5.2 | 6 |
| 2 | On the evaluation of climate change impact models. Wiley Interdisciplinary Reviews: Climate Change, 2022, 13, . | 8.1 | 14 |
| 3 | Understanding process controls on groundwater recharge variability across Africa through recharge landscapes. Journal of Hydrology, 2022, 612, 127967. | 5.4 | 6 |
| 4 | Assessing Streamflow Sensitivity to Precipitation Variability in Karstâ€Influenced Catchments With Unclosed Water Balances. Water Resources Research, 2021, 57, e2020WR028598. | 4.2 | 13 |
| 5 | Discovering environmental management opportunities for infectious disease control. Scientific Reports, 2021, 11, 6442. | 3.3 | 4 |
| 6 | Risk of groundwater contamination widely underestimated because of fast flow into aquifers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 53 |
| 7 | Uncertainty in the extreme flood magnitude estimates of large-scale flood hazard models. Environmental Research Letters, 2021, 16, 064013. | 5.2 | 8 |
| 8 | Hydroinformatics education â€“ the Water Informatics in Science and Engineering (WISE) Centre for Doctoral Training. Hydrology and Earth System Sciences, 2021, 25, 2721-2738. | 4.9 | 3 |
| 9 | Knowledge gaps in our perceptual model of Great Britain's hydrology. Hydrological Processes, 2021, 35, e14288. | 2.6 | 22 |
| 10 | On doing hydrology with dragons: Realizing the value of perceptual models and knowledge accumulation. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1550. | 6.5 | 26 |
| 11 | Incorporating Uncertainty Into Multiscale Parameter Regionalization to Evaluate the Performance of Nationally Consistent Parameter Fields for a Hydrological Model. Water Resources Research, 2021, 57, e2020WR028393. | 4.2 | 9 |
| 12 | Towards more realistic runoff projections by removing limits on simulated soil moisture deficit. Journal of Hydrology, 2021, 600, 126505. | 5.4 | 8 |
| 13 | GMD perspective: The quest to improve the evaluation of groundwater representation in continental- to global-scale models. Geoscientific Model Development, 2021, 14, 7545-7571. | 3.6 | 38 |
| 14 | Developing observational methods to drive future hydrological science: Can we make a start as a community?. Hydrological Processes, 2020, 34, 868-873. | 2.6 | 34 |
| 15 | Illuminating water cycle modifications and Earth system resilience in the Anthropocene. Water Resources Research, 2020, 56, e2019WR024957. | 4.2 | 86 |
| 16 | How successfully is open-source research software adopted? Results and implications of surveying the users of a sensitivity analysis toolbox. Environmental Modelling and Software, 2020, 124, 104579. | 4.5 | 15 |
| 17 | Use of Reservoir Operation Optimization Methods in Practice: Insights from a Survey of Water Resource Managers. Journal of Water Resources Planning and Management - ASCE, 2020, 146, . | 2.6 | 8 |
| 18 | Technical Reportâ€”Methods: A Diagnostic Approach to Analyze the Direction of Change in Model Outputs Based on Global Variations in the Model Inputs. Water Resources Research, 2020, 56, e2020WR027153. | 4.2 | 4 |

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| 19 | The Water Planetary Boundary: Interrogation and Revision. One Earth, 2020, 2, 223-234. | 6.8 | 98 |
| 20 | What is the hydrologically effective area of a catchment?. Environmental Research Letters, 2020, 15, 104024. | 5.2 | 33 |
| 21 | CAMELS-GB: hydrometeorological time series and landscape attributes for 671 catchments in Great Britain. Earth System Science Data, 2020, 12, 2459-2483. | 9.9 | 87 |
| 22 | Including informal housing in slope stability analysis â€“ an application to a data-scarce location in the humid tropics. Natural Hazards and Earth System Sciences, 2020, 20, 3161-3177. | 3.6 | 9 |
| 23 | DECIPHeR v1: Dynamic fluxEs and Connectivity for Predictions of HydRology. Geoscientific Model Development, 2019, 12, 2285-2306. | 3.6 | 51 |
| 24 | Matlab/R workflows to assess critical choices in Global Sensitivity Analysis using the SAFE toolbox. MethodsX, 2019, 6, 2258-2280. | 1.6 | 26 |
| 25 | An argument-driven classification and comparison of reservoir operation optimization methods. Advances in Water Resources, 2019, 128, 74-86. | 3.8 | 65 |
| 26 | What has Global Sensitivity Analysis ever done for us? A systematic review to support scientific advancement and to inform policy-making in earth system modelling. Earth-Science Reviews, 2019, 194, 1-18. | 9.1 | 65 |
| 27 | How Important Are Model Structural and Contextual Uncertainties when Estimating the Optimized Performance of Water Resource Systems?. Water Resources Research, 2019, 55, 2170-2193. | 4.2 | 15 |
| 28 | Hillslope Hydrology in Global Change Research and Earth System Modeling. Water Resources Research, 2019, 55, 1737-1772. | 4.2 | 281 |
| 29 | Benchmarking the predictive capability of hydrological models for river flow and flood peak predictions across over 1000Âcatchments in Great Britain. Hydrology and Earth System Sciences, 2019, 23, 4011-4032. | 4.9 | 63 |
| 30 | Drivers of interannual and intraâ€annual variability of dissolved organic carbon concentration in the River Thames between 1884 and 2013. Hydrological Processes, 2019, 33, 994-1012. | 2.6 | 10 |
| 31 | Towards a computationally efficient free-surface groundwater flow boundary condition for large-scale hydrological modelling. Advances in Water Resources, 2019, 123, 225-233. | 3.8 | 13 |
| 32 | Effects of flood hazard visualization format on house purchasing decisions. Urban Water Journal, 2018, 15, 671-681. | 2.1 | 8 |
| 33 | Epistemic uncertainties and natural hazard risk assessment â€“ PartÂ2: What should constitute good practice?. Natural Hazards and Earth System Sciences, 2018, 18, 2769-2783. | 3.6 | 37 |
| 34 | Epistemic uncertainties and natural hazard risk assessment â€“ Part 1: A review of different natural hazard areas. Natural Hazards and Earth System Sciences, 2018, 18, 2741-2768. | 3.6 | 45 |
| 35 | V2Karst V1.1: a parsimonious large-scale integrated vegetationâ€“recharge model to simulate the impact of climate and land cover change in karst regions. Geoscientific Model Development, 2018, 11, 4933-4964. | 3.6 | 34 |
| 36 | Simulating Runoff Under Changing Climatic Conditions: A Framework for Model Improvement. Water Resources Research, 2018, 54, 9812-9832. | 4.2 | 58 |

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| 37 | Constraining Conceptual Hydrological Models With Multiple Information Sources. Water Resources Research, 2018, 54, 8332-8362. | 4.2 | 85 |
| 38 | A mechanistic hydro-epidemiological model of liver fluke risk. Journal of the Royal Society Interface, 2018, 15, 20180072. | 3.4 | 18 |
| 39 | Distribution-based sensitivity analysis from a generic input-output sample. Environmental Modelling and Software, 2018, 108, 197-207. | 4.5 | 81 |
| 40 | Dynamics of water fluxes and storages in an Alpine karst catchment under current and potential future climate conditions. Hydrology and Earth System Sciences, 2018, 22, 3807-3823. | 4.9 | 46 |
| 41 | A software tool to assess uncertainty in transient-storage model parameters using Monte Carlo simulations. Freshwater Science, 2017, 36, 195-217. | 1.8 | 27 |
| 42 | Comparison of variance-based and moment-independent global sensitivity analysis approaches by application to the SWAT model. Environmental Modelling and Software, 2017, 91, 210-222. | 4.5 | 105 |
| 43 | Enhanced groundwater recharge rates and altered recharge sensitivity to climate variability through subsurface heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2842-2847. | 7.1 | 128 |
| 44 | Reply to comment by Melsen et al. on â€œMost computational hydrology is not reproducible, so is it really science?â€• Water Resources Research, 2017, 53, 2570-2571. | 4.2 | 2 |
| 45 | Reply to comment by AÃ±el on â€œMost computational hydrology is not reproducible, so is it really science?â€• Water Resources Research, 2017, 53, 2575-2576. | 4.2 | 1 |
| 46 | Human impact on longâ€term organic carbon export to rivers. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 947-965. | 3.0 | 37 |
| 47 | Vulnerability of bridges to scour: insights from an international expert elicitation workshop. Natural Hazards and Earth System Sciences, 2017, 17, 1393-1409. | 3.6 | 36 |
| 48 | A Multimethod Global Sensitivity Analysis Approach to Support the Calibration and Evaluation of Land Surface Models. , 2017, , 125-144. | | 2 |
| 49 | An Introduction to the SAFE Matlab Toolbox With Practical Examples and Guidelines. , 2017, , 363-378. | | 3 |
| 50 | Understanding hydrologic variability across Europe through catchment classification. Hydrology and Earth System Sciences, 2017, 21, 2863-2879. | 4.9 | 97 |
| 51 | Dealing with deep uncertainties in landslide modelling for disaster risk reduction under climate change. Natural Hazards and Earth System Sciences, 2017, 17, 225-241. | 3.6 | 52 |
| 52 | Land surface model performance using cosmic-ray and point-scale soil moisture measurements for calibration. Hydrology and Earth System Sciences, 2017, 21, 2843-2861. | 4.9 | 18 |
| 53 | Characterizing and reducing equifinality by constraining a distributed catchment model with regional signatures, local observations, and process understanding. Hydrology and Earth System Sciences, 2017, 21, 3325-3352. | 4.9 | 49 |
| 54 | Calibration of channel depth and friction parameters in the LISFLOOD-FP hydraulic model using medium-resolution SAR data and identifiability techniques. Hydrology and Earth System Sciences, 2016, 20, 4983-4997. | 4.9 | 83 |

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| 55 | Simultaneous calibration of hydrological models in geographical space. Hydrology and Earth System Sciences, 2016, 20, 2913-2928. | 4.9 | 9 |
| 56 | Accounting for dependencies in regionalized signatures for predictions in ungauged catchments. Hydrology and Earth System Sciences, 2016, 20, 887-901. | 4.9 | 17 |
| 57 | The evolution of root-zone moisture capacities after deforestation: a step towards hydrological predictions under change?. Hydrology and Earth System Sciences, 2016, 20, 4775-4799. | 4.9 | 61 |
| 58 | Drought in a human-modified world: reframing drought definitions, understanding, and analysis approaches. Hydrology and Earth System Sciences, 2016, 20, 3631-3650. | 4.9 | 289 |
| 59 | Quantifying the importance of spatial resolution and other factors through global sensitivity analysis of a flood inundation model. Water Resources Research, 2016, 52, 9146-9163. | 4.2 | 92 |
| 60 | Correlation and causation in treeâ€ringâ€based reconstruction of paleohydrology in cold semiarid regions. Water Resources Research, 2016, 52, 7053-7069. | 4.2 | 10 |
| 61 | Decision Analysis for Management of Natural Hazards. Annual Review of Environment and Resources, 2016, 41, 489-516. | 13.4 | 40 |
| 62 | Most computational hydrology is not reproducible, so is it really science?. Water Resources Research, 2016, 52, 7548-7555. | 4.2 | 119 |
| 63 | Understanding the timeâ€varying importance of different uncertainty sources in hydrological modelling using global sensitivity analysis. Hydrological Processes, 2016, 30, 3991-4003. | 2.6 | 68 |
| 64 | Uncertainty in hydrological signatures for gauged and ungauged catchments. Water Resources Research, 2016, 52, 1847-1865. | 4.2 | 104 |
| 65 | Unraveling complex hydrogeological processes in Andean basins in southâ€central Chile: An integrated assessment to understand hydrological dissimilarity. Hydrological Processes, 2016, 30, 4934-4943. | 2.6 | 28 |
| 66 | Drought in the Anthropocene. Nature Geoscience, 2016, 9, 89-91. | 12.9 | 537 |
| 67 | Global Sensitivity Analysis of environmental models: Convergence and validation. Environmental Modelling and Software, 2016, 79, 135-152. | 4.5 | 227 |
| 68 | Sensitivity analysis of environmental models: A systematic review with practical workflow. Environmental Modelling and Software, 2016, 79, 214-232. | 4.5 | 926 |
| 69 | A novel framework for discharge uncertainty quantification applied to 500 <scp>UK</scp> gauging stations. Water Resources Research, 2015, 51, 5531-5546. | 4.2 | 159 |
| 70 | Accelerating advances in continental domain hydrologic modeling. Water Resources Research, 2015, 51, 10078-10091. | 4.2 | 102 |
| 71 | Virtual laboratories: new opportunities for collaborative water science. Hydrology and Earth System Sciences, 2015, 19, 2101-2117. | 4.9 | 63 |
| 72 | A large-scale simulation model to assess karstic groundwater recharge over Europe and the Mediterranean. Geoscientific Model Development, 2015, 8, 1729-1746. | 3.6 | 89 |

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| 73 | Investigating temporal field sampling strategies for site-specific calibration of three soil moistureâ€“neutron intensity parameterisation methods. Hydrology and Earth System Sciences, 2015, 19, 3203-3216. | 4.9 | 30 |
| 74 | Modelâ€based analysis of the influence of catchment properties on hydrologic partitioning across five mountain headwater subcatchments. Water Resources Research, 2015, 51, 4109-4136. | 4.2 | 34 |
| 75 | A simple and efficient method for global sensitivity analysis based onÂcumulative distribution functions. Environmental Modelling and Software, 2015, 67, 1-11. | 4.5 | 317 |
| 76 | Estimating the regional climate responses over river basins to changes in tropical sea surface temperature patterns. Climate Dynamics, 2015, 45, 1965-1982. | 3.8 | 3 |
| 77 | A Matlab toolbox for Global Sensitivity Analysis. Environmental Modelling and Software, 2015, 70, 80-85. | 4.5 | 454 |
| 78 | A multi-criteria penalty function approach for evaluating a priori model parameter estimates. Journal of Hydrology, 2015, 525, 165-177. | 5.4 | 5 |
| 79 | Model signatures and aridity indices enhance the accuracy of water balance estimations in a data-scarce Eastern Mediterranean catchment. Journal of Hydrology: Regional Studies, 2015, 4, 487-501. | 2.4 | 25 |
| 80 | Grand Challenges for Hydrology Education in the 21st Century. Journal of Hydrologic Engineering - ASCE, 2015, 20, . | 1.9 | 27 |
| 81 | Advancing catchment hydrology to deal with predictions under change. Hydrology and Earth System Sciences, 2014, 18, 649-671. | 4.9 | 83 |
| 82 | Characterizing hydrologic change through catchment classification. Hydrology and Earth System Sciences, 2014, 18, 273-285. | 4.9 | 75 |
| 83 | Catchment similarity concepts for understanding dynamic biogeochemical behaviour of river basins. Hydrological Processes, 2014, 28, 1554-1560. | 2.6 | 14 |
| 84 | Inaction and climate stabilization uncertainties lead to severe economic risks. Climatic Change, 2014, 127, 463-474. | 3.6 | 15 |
| 85 | Sensitivity Analysis of Environmental Models: A Systematic Review with Practical Workflow. , 2014, , . | | 2 |
| 86 | Modelling the hydrological impacts of rural land use change. Hydrology Research, 2014, 45, 737-754. | 2.7 | 44 |
| 87 | A new approach to visualizing time-varying sensitivity indices for environmental model diagnostics across evaluation time-scales. Environmental Modelling and Software, 2014, 51, 190-194. | 4.5 | 36 |
| 88 | Karst water resources in a changing world: Review of hydrological modeling approaches. Reviews of Geophysics, 2014, 52, 218-242. | 23.0 | 610 |
| 89 | Hydrological impacts of climate change in gauged and ungauged watersheds of the Olifants basin: a trading-space-for-time approach. Hydrological Sciences Journal, 2014, 59, 29-55. | 2.6 | 26 |
| 90 | Identifying dominant controls on hydrologic parameter transfer from gauged to ungauged catchments â€“ A comparative hydrology approach. Journal of Hydrology, 2014, 517, 985-996. | 5.4 | 84 |

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| 91 | Modeling spatiotemporal impacts of hydroclimatic extremes on groundwater recharge at a Mediterranean karst aquifer. Water Resources Research, 2014, 50, 6507-6521. | 4.2 | 82 |
| 92 | Identifying parametric controls and dependencies in integrated assessment models using global sensitivity analysis. Environmental Modelling and Software, 2014, 59, 10-29. | 4.5 | 58 |
| 93 | A vulnerability driven approach to identify adverse climate and land use change combinations for critical hydrologic indicator thresholds: Application to a watershed in Pennsylvania, USA. Water Resources Research, 2014, 50, 3409-3427. | 4.2 | 76 |
| 94 | Diagnostic evaluation of multiple hypotheses of hydrological behaviour in a limits-of-acceptability framework for 24 UK catchments. Hydrological Processes, 2014, 28, 6135-6150. | 2.6 | 71 |
| 95 | Variations in surface water-ground water interactions along a headwater mountain stream: Comparisons between transient storage and water balance analyses. Water Resources Research, 2013, 49, 3359-3374. | 4.2 | 71 |
| 96 | Improving parameter priors for data-scarce estimation problems. Water Resources Research, 2013, 49, 6090-6095. | 4.2 | 7 |
| 97 | A decade of Predictions in Ungauged Basins (PUB)â€"a review. Hydrological Sciences Journal, 2013, 58, 1198-1255. | 2.6 | 821 |
| 98 | â€œPanta Rheiâ€"Everything Flowsâ€• Change in hydrology and societyâ€"The IAHS Scientific Decade 2013â€“2022. Hydrological Sciences Journal, 2013, 58, 1256-1275. | 2.6 | 569 |
| 99 | Testing the realism of model structures to identify karst system processes using water quality and quantity signatures. Water Resources Research, 2013, 49, 3345-3358. | 4.2 | 81 |
| 100 | Identifiability of transient storage model parameters along a mountain stream. Water Resources Research, 2013, 49, 5290-5306. | 4.2 | 67 |
| 101 | Identification of the Controlling Mechanism for Predicting Critical Loads in Elastomeric Bearings. Journal of Structural Engineering, 2013, 139, . | 3.4 | 24 |
| 102 | Parameter sensitivity of a watershed-scale flood forecasting model as a function of modelling time-step. Hydrology Research, 2013, 44, 334-350. | 2.7 | 15 |
| 103 | Timeâ€varying sensitivity analysis clarifies the effects of watershed model formulation on model behavior. Water Resources Research, 2013, 49, 1400-1414. | 4.2 | 115 |
| 104 | Riparian hydraulic gradient and streamâ€groundwater exchange dynamics in steep headwater valleys. Journal of Geophysical Research F: Earth Surface, 2013, 118, 953-969. | 2.8 | 46 |
| 105 | Influence of constant rate versus slug injection experiment type on parameter identifiability in a 1â€D transient storage model for stream solute transport. Water Resources Research, 2013, 49, 1184-1188. | 4.2 | 20 |
| 106 | Climate-vegetation-soil interactions and long-term hydrologic partitioning: signatures of catchment co-evolution. Hydrology and Earth System Sciences, 2013, 17, 2209-2217. | 4.9 | 141 |
| 107 | Preface "Hydrology education in a changing world". Hydrology and Earth System Sciences, 2013, 17, 1393-1399. | 4.9 | 24 |
| 108 | From maps to movies: high-resolution time-varying sensitivity analysis for spatially distributed watershed models. Hydrology and Earth System Sciences, 2013, 17, 5109-5125. | 4.9 | 50 |

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| 109 | Technical Note: Method of Morris effectively reduces the computational demands of global sensitivity analysis for distributed watershed models. Hydrology and Earth System Sciences, 2013, 17, 2893-2903. | 4.9 | 142 |
| 110 | Process-based karst modelling to relate hydrodynamic and hydrochemical characteristics to system properties. Hydrology and Earth System Sciences, 2013, 17, 3305-3321. | 4.9 | 70 |
| 111 | Probabilistic Projections of Climate Change for the Mid-Atlantic Region of the United States: Validation of Precipitation Downscaling during the Historical Era*. Journal of Climate, 2012, 25, 509-526. | 3.2 | 31 |
| 112 | Has urbanization changed ecological streamflow characteristics in Maine (USA)?. Hydrological Sciences Journal, 2012, 57, 1337-1354. | 2.6 | 15 |
| 113 | Probabilistic Projections of Anthropogenic Climate Change Impacts on Precipitation for the Mid-Atlantic Region of the United States*. Journal of Climate, 2012, 25, 5273-5291. | 3.2 | 34 |
| 114 | Incorporating uncertainty in hydrological predictions for gauged and ungauged basins in southern Africa. Hydrological Sciences Journal, 2012, 57, 1000-1019. | 2.6 | 85 |
| 115 | Evaluation of nine largeâ€scale hydrological models with respect to the seasonal runoff climatology in Europe. Water Resources Research, 2012, 48, . | 4.2 | 107 |
| 116 | When are multiobjective calibration tradeâ€offs in hydrologic models meaningful?. Water Resources Research, 2012, 48, . | 4.2 | 121 |
| 117 | It takes a community to raise a hydrologist: the Modular Curriculum for Hydrologic Advancement (MOCHA). Hydrology and Earth System Sciences, 2012, 16, 3405-3418. | 4.9 | 31 |
| 118 | Results of the DMIP 2 Oklahoma experiments. Journal of Hydrology, 2012, 418-419, 17-48. | 5.4 | 97 |
| 119 | Investigating controls on the thermal sensitivity of Pennsylvania streams. Hydrological Processes, 2012, 26, 771-785. | 2.6 | 162 |
| 120 | Hydrological Catchment Classification Using a Data-Based Mechanistic Strategy. , 2012, , 483-500. | | 4 |
| 121 | Hydrological Modeling. , 2011, , 435-457. | | 16 |
| 122 | Convergence of approaches toward reducing uncertainty in predictions in ungauged basins. Water Resources Research, 2011, 47, . | 4.2 | 146 |
| 123 | Catchment classification: empirical analysis of hydrologic similarity based on catchment function in the eastern USA. Hydrology and Earth System Sciences, 2011, 15, 2895-2911. | 4.9 | 405 |
| 124 | A trading-space-for-time approach to probabilistic continuous streamflow predictions in a changing climate â€“ accounting for changing watershed behavior. Hydrology and Earth System Sciences, 2011, 15, 3591-3603. | 4.9 | 95 |
| 125 | Catchment classification: hydrological analysis of catchment behavior through process-based modeling along a climate gradient. Hydrology and Earth System Sciences, 2011, 15, 3411-3430. | 4.9 | 110 |
| 126 | Ten guidelines for effective data visualization in scientific publications. Environmental Modelling and Software, 2011, 26, 822-827. | 4.5 | 117 |

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| 127 | Quantifying parameter sensitivity, interaction, and transferability in hydrologically enhanced versions of the Noah land surface model over transition zones during the warm season. Journal of Geophysical Research, 2010, 115, . | 3.3 | 131 |
| 128 | The future of hydrology: An evolving science for a changing world. Water Resources Research, 2010, 46, . | 4.2 | 487 |
| 129 | Advances in the identification and evaluation of complex environmental systems models. Journal of Hydroinformatics, 2009, 11, 266-281. | 2.4 | 18 |
| 130 | A formal framework for scenario development in support of environmental decision-making. Environmental Modelling and Software, 2009, 24, 798-808. | 4.5 | 284 |
| 131 | A top-down framework for watershed model evaluation and selection under uncertainty. Environmental Modelling and Software, 2009, 24, 901-916. | 4.5 | 79 |
| 132 | Sensitivity-guided reduction of parametric dimensionality for multi-objective calibration of watershed models. Advances in Water Resources, 2009, 32, 1154-1169. | 3.8 | 175 |
| 133 | Multiobjective sensitivity analysis to understand the information content in streamflow observations for distributed watershed modeling. Water Resources Research, 2009, 45, . | 4.2 | 65 |
| 134 | Reducing Uncertainty of Continuous Streamflow Predictions in Ungauged Basins (PUB) Using Regional Constraints: Using Regional Constraints for PUB. , 2009, , . | | 0 |
| 135 | Reconciling theory with observations: elements of a diagnostic approach to model evaluation. Hydrological Processes, 2008, 22, 3802-3813. | 2.6 | 511 |
| 136 | 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 |
| 137 | Understanding uncertainty in distributed flash flood forecasting for semiarid regions. Water Resources Research, 2008, 44, . | 4.2 | 131 |
| 138 | Characterization of watershed model behavior across a hydroclimatic gradient. Water Resources Research, 2008, 44, . | 4.2 | 158 |
| 139 | A spatial regularization approach to parameter estimation for a distributed watershed model. Water Resources Research, 2008, 44, . | 4.2 | 84 |
| 140 | A processâ€based diagnostic approach to model evaluation: Application to the NWS distributed hydrologic model. Water Resources Research, 2008, 44, . | 4.2 | 399 |
| 141 | Framework for Understanding Structural Errors (FUSE): A modular framework to diagnose differences between hydrological models. Water Resources Research, 2008, 44, . | 4.2 | 461 |
| 142 | Model performance, model robustness, and model fitness scores: A new method for identifying good landâ€surface models. Geophysical Research Letters, 2008, 35, . | 4.0 | 26 |
| 143 | Rainfall characteristics define the value of streamflow observations for distributed watershed model identification. Geophysical Research Letters, 2008, 35, . | 4.0 | 57 |
| 144 | Reducing uncertainty in predictions in ungauged basins by combining hydrologic indices regionalization and multiobjective optimization. Water Resources Research, 2008, 44, . | 4.2 | 137 |

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| 145 | Chapter Two Good Modelling Practice. Developments in Integrated Environmental Assessment, 2008, 3, 15-31. | 0.0 | 16 |
| 146 | Comparison of Parameter Sensitivity Analysis Methods for Lumped Watershed Model. , 2008, , . | | 1 |
| 147 | Chapter Nine Formal Scenario Development for Environmental Impact Assessment Studies. Developments in Integrated Environmental Assessment, 2008, 3, 145-162. | 0.0 | 4 |
| 148 | Calibration, uncertainty, and regional analysis of conceptual rainfall-runoff models. , 2007, , 99-112. | | 2 |
| 149 | Monte Carlo sensitivity analysis of land surface parameters using the Variable Infiltration Capacity model. Journal of Geophysical Research, 2007, 112, . | 3.3 | 153 |
| 150 | Advancing the identification and evaluation of distributed rainfall-runoff models using global sensitivity analysis. Water Resources Research, 2007, 43, . | 4.2 | 126 |
| 151 | Comparing sensitivity analysis methods to advance lumped watershed model identification and evaluation. Hydrology and Earth System Sciences, 2007, 11, 793-817. | 4.9 | 272 |
| 152 | Taking the pulse of hydrology education. Hydrological Processes, 2007, 21, 1789-1792. | 2.6 | 40 |
| 153 | Can we model the hydrological impacts of environmental change?. Hydrological Processes, 2007, 21, 3233-3236. | 2.6 | 89 |
| 154 | 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 |
| 155 | Numerical and visual evaluation of hydrological and environmental models using the Monte Carlo analysis toolbox. Environmental Modelling and Software, 2007, 22, 1021-1033. | 4.5 | 144 |
| 156 | Catchment Classification and Hydrologic Similarity. Geography Compass, 2007, 1, 901-931. | 2.7 | 602 |
| 157 | Reply to J. Vrugt's comment on "How effective and efficient are multiobjective evolutionary algorithms at hydrologic model calibration?". Hydrology and Earth System Sciences, 2007, 11, 1437-1439. | 4.9 | 0 |
| 158 | Bridging river basin scales and processes to assess human-climate impacts and the terrestrial hydrologic system. Water Resources Research, 2006, 42, . | 4.2 | 32 |
| 159 | Parameter estimation and regionalization for continuous rainfall-runoff models including uncertainty. Journal of Hydrology, 2006, 320, 132-154. | 5.4 | 287 |
| 160 | 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 |
| 161 | Application of stochastic parameter optimization to the Sacramento Soil Moisture Accounting model. Journal of Hydrology, 2006, 325, 288-307. | 5.4 | 95 |
| 162 | How effective and efficient are multiobjective evolutionary algorithms at hydrologic model calibration?. Hydrology and Earth System Sciences, 2006, 10, 289-307. | 4.9 | 174 |

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| 163 | Model identification for hydrological forecasting under uncertainty. Stochastic Environmental Research and Risk Assessment, 2005, 19, 378-387. | 4.0 | 269 |
| 164 | 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 |
| 165 | Identification of rainfallâ€“runoff models for operational applications / Identification de modÃ¨les pluieâ€“dÃ©bit pour des applications opÃ©rationnelles. Hydrological Sciences Journal, 2005, 50, . | 2.6 | 29 |
| 166 | Ensemble predictions of runoff in ungauged catchments. Water Resources Research, 2005, 41, . | 4.2 | 253 |
| 167 | A hydroarchive for the free exchange of hydrological software Website:. Hydrological Processes, 2004, 18, 389-391. | 2.6 | 7 |
| 168 | Predictions in ungauged basins as a catalyst for multidisciplinary hydrology. Eos, 2004, 85, 451. | 0.1 | 43 |
| 169 | Calibration of a semi-distributed hydrologic model for streamflow estimation along a river system. Journal of Hydrology, 2004, 298, 112-135. | 5.4 | 234 |
| 170 | Towards reduced uncertainty in conceptual rainfall-runoff modelling: dynamic identifiability analysis. Hydrological Processes, 2003, 17, 455-476. | 2.6 | 448 |
| 171 | Evaluation of catchment models. Hydrological Processes, 2003, 17, 3375-3378. | 2.6 | 101 |
| 172 | Risk-based modelling of surface water quality: a case study of the Charles River, Massachusetts. Journal of Hydrology, 2003, 274, 225-247. | 5.4 | 38 |
| 173 | Identification and evaluation of watershed models. Water Science and Application, 2003, , 29-47. | 0.3 | 28 |
| 174 | Dynamic identifiability analysis of the transient storage model for solute transport in rivers. Journal of Hydroinformatics, 2002, 4, 199-211. | 2.4 | 43 |
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