

Research Articles

- 4 *Qian Dang and Megan Konar*
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*This article is part of a Special Section—Socio-hydrology: Spatial and Temporal Dynamics of Coupled Human-Water Systems
- 19 *Anne W. Baar, Jaco de Smit, Wim S. J. Uijttewaai, and Maarten G. Kleinhans*
Sediment Transport of Fine Sand to Fine Gravel on Transverse Bed Slopes in Rotating Annular Flume Experiments (<https://doi.org/10.1002/2017WR020604>)
- 46 *Markus Hilpert and William P. Johnson*
A Binomial Modeling Approach for Upscaling Colloid Transport Under Unfavorable Attachment Conditions: Emergent Prediction of Nonmonotonic Retention Profiles (<https://doi.org/10.1002/2017WR021454>)
- 61 *Natalia Siuliukina and Daniel M. Tartakovsky*
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- 72 *Bo Liang and Andres F. Clarens*
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- 88 *Eoghan Clifford, Sean Mulligan, Joanne Comer, and Louise Hannon*
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- 107 *Dieter Rickenmann*
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- 132 *Katrina E. Bennett, Jorge R. Urrego Blanco, Alexandra Jonko, Theodore J. Bohn, Adam L. Atchley, Nathan M. Urban, and Richard S. Middleton*
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- 150 *N. G. Lensky, I. M. Lensky, A. Peretz, I. Gertman, J. Tanny, and S. Assouline*
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- 161 *Ioannis Tsoukalas, Andreas Efstratiadis, and Christos Makropoulos*
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- 186 *Maria Pool and Marco Dentz*
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- 205 *Dipankar Dwivedi, Bhavna Arora, Carl I. Steefel, Baptiste Dafflon, and Roelof Versteeg*
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- 223 *M. Bakker, A. Costa, T. A. Silva, L. Stutenbecker, S. Girardclos, J.-L. Loizeau, P. Molnar, F. Schlunegger, and S. N. Lane*
Combined Flow Abstraction and Climate Change Impacts on an Aggrading Alpine River (<https://doi.org/10.1002/2017WR021775>)
- 243 *C. Bracke, K. D. Holman, B. Rajagopalan, and H. Moradkhani*
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- 256 *T. R. Ginn*
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- 271 *Scott K. Hansen, Claus P. Haslauer, Olaf A. Cirpka, and Velimir V. Vesselinov*
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- 286** *Connie A. Woodhouse and Gregory T. Pederson*
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- 301** *Christopher T. Green, Lixia Liao, Bernard T. Nolan, Paul F. Juckem, Christopher L. Shope, Anthony J. Tesoriero, and Bryant C. Jurgens*
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- 323** *Christian Mooneyham and Kyle Strom*
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- 345** *Mesfin M. Mekonnen and Arjen Y. Hoekstra*
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- 359** *Athanasios N. Papanicolaou, Benjamin K. B. Abban, Dimitrios C. Dermisis, Christos P. Giannopoulos, Dennis C. Flanagan, James R. Frankenberger, and Kenneth M. Wacha*
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- 381** *Eric Laloy, Romain Hérault, Diederik Jacques, and Niklas Linde*
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- 407** *Rosana Aguilera and John M. Melack*
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- 425** *Shengyang Chen, John C. Little, Cayelan C. Carey, Ryan P. McClure, Mary E. Lofton, and Chengwang Lei*
Three-Dimensional Effects of Artificial Mixing in a Shallow Drinking-Water Reservoir
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- 442** *Matthias Loschko, Thomas Wöhling, David L. Rudolph, and Olaf A. Cirpka*
Accounting for the Decreasing Reaction Potential of Heterogeneous Aquifers in a Stochastic Framework of Aquifer-Scale Reactive Transport (<https://doi.org/10.1002/2017WR021645>)
- 464** *James L. Wescoat Jr., Afreen Siddiqi, and Abubakr Muhammad*
Socio-Hydrology of Channel Flows in Complex River Basins: Rivers, Canals, and Tributaries in Punjab, Pakistan*
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- *This article is part of a Special Section—Socio-hydrology: Spatial and Temporal Dynamics of Coupled Human-Water Systems
- 480** *Mohamed K. Nassar, Deviyani Gurung, Mehrdad Bastani, Timothy R. Ginn, Babak Shafei, Michael G. Gomez, Charles M. R. Graddy, Doug C. Nelson, and Jason T. DeJong*
Large-Scale Experiments in Microbially Induced Calcite Precipitation (MICP): Reactive Transport Model Development and Prediction (<https://doi.org/10.1002/2017WR021488>)
- 501** *Fadji Zaoua Maina and Alberto Guadagnini*
Uncertainty Quantification and Global Sensitivity Analysis of Subsurface Flow Parameters to Gravimetric Variations During Pumping Tests in Unconfined Aquifers (<https://doi.org/10.1002/2017WR021655>)
- 519** *Shulei Zhang, Yuting Yang, Tim R. McVicar, and Dawen Yang*
An Analytical Solution for the Impact of Vegetation Changes on Hydrological Partitioning Within the Budyko Framework (<https://doi.org/10.1002/2017WR022028>)
- 538** *Michal Jenicek, Jan Seibert, and Maria Staudinger*
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(<https://doi.org/10.1002/2017WR021648>)
- 557** *Yan-Jun Shen, Yanjun Shen, Manfred Fink, Sven Kralisch, and Alexander Brenning*
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- *This article is part of a Special Section—Responses to Environmental Change in Aquatic Mountain Ecosystems
- 581** *Thomas L. Enzinger, Eric E. Small, and Adrian A. Borsa*
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Technical Reports: Data

- 600** *Xiongyu Chen, Rahul Verma, D. Nicolas Espinoza, and Maša Prodanović*
Pore-Scale Determination of Gas Relative Permeability in Hydrate-Bearing Sediments Using X-Ray Computed Micro-Tomography and Lattice Boltzmann Method (<https://doi.org/10.1002/2017WR021851>)

Technical Reports: Methods

609 *A. R. Kacimov and Y. V. Obnosov*

Analytical Solution for Interface Flow to a Sink With an Upconed Saline Water Lens: Strack's Regimes Revisited (<https://doi.org/10.1002/2017WR021391>)

Comment and Reply

621 *Xinhua Lu, Bing Mao, and Bingjiang Dong*

Comment on "An Efficient and Stable Hydrodynamic Model With Novel Source Term Discretization Schemes for Overland Flow and Flood Simulations" by Xilin Xia et al.* (<https://doi.org/10.1002/2017WR021563>)

*This article is a comment on Xia et al. [2018], <https://doi.org/10.1002/2016WR020055>

628 *Xilin Xia, Qiuhua Liang, Xiaodong Ming, and Jingming Hou*

Reply to Comment by Lu et al. on "An Efficient and Stable Hydrodynamic Model With Novel Source Term Discretization Schemes for Overland Flow and Flood Simulations"* (<https://doi.org/10.1002/2017WR021696>)

*This article is a reply to Lu et al. [2018], <https://doi.org/10.1002/2017WR021563>