# Contents

- Multi-basin and regional calibration based identification of distributed precipitation–runoff models for hourly runoff simulation: calibration and transfer of full and partial parameters  
  Tekle T. Hailegeorgis and Knut Alfredsen  
  239
- Hydrological modelling under climate change considering nonstationarity and seasonal effects  
  Kue Bum Kim, Hyun-Hee Kwon and Doo Seok Han  
  260
- Simulating water flow in variably saturated soils: a comparison of a 3D model with approximation-based formulations  
  Luisa Hopp, Simone Furtado and Valery V. Invers  
  274
- The hydrological performance of bio-retention cells in regions with cold climates: seasonal variation and implications for design  
  Kim H. Piao, Tae M. Mishima and Best C. Brukard  
  291
- A study on the estimating of sediment concentration with turbidity and acoustic backscatter signal for different sediment sizes  
  Ramazan Meral  
  305
- Effects of various input levels and different soil water retention curve models on water content estimation using different statistical methods  
  Hossein Bayat and Eisa Ebrahimi  
  312
- Development and evaluation of an extended inverse distance weighting method for streamflow estimation at an ungauged site  
  Muhammad Waseem, Muhammad Afzul, Syed Kam and Tae-Woong Kim  
  333
- Joint estimation of hydraulic conductivities of two sand samples in a W-tube system with a bi-exponential response  
  Marián Kaczmarik, Filip Wójcik and Marek Mercin  
  344
- Modeling the combined impact of future climate and land use changes on streamflow of Xinjiang Basin, China  
  Berhanu Yim, Jiacong Huang, Xue Ming, Junhao Gao and Longyin Qi  
  356
- Role of hydrogeochanical process in increasing groundwater salinity in the central Godavari delta  
  L. Surinaidu  
  373
- Soil water recharge for grassed and forested land covers on the Oak Ridges Moraine, southern Ontario, Canada  
  R. Rudkowski and F. M. Burt  
  390
- Stemflow and its controlling factors in the sub-shrub Artemisia eriopoda during two contrasting growth stages in the Mu Us sandy land of northern China  
  Liu Li, Xiao-Yan Li, Shu-Zi Zhang, Zhi-Yue Jiang, Xiao-Bao Zhang, Xiao-Bao Liu and Yong-Mei Huang  
  409
- Analysis and modelling of snow bulk density in the Tyrolean Alps  
  J. Schöber, S. Achleitner, J. Bellinger, J. Kirnbauer and F. Schöberl  
  419
- Contribution of glacial melt to river runoff as determined by stable isotopes at the source region of the Yangtze River, China  
  Zhaofei Liu, Zhijun Yao and Rui Wang  
  442
- Characteristics of integrated droughts based on a nonparametric standardized drought index in the Yellow River Basin, China  
  Yi Guo, Yanan Chang, Shengli Huang and Qing Huang  
  454
- Characterization of dynamic evolution of the spatial-temporal variation of rain-field in Hong Kong  
  Peng Lei and Yeo-Kwang Yong  
  468
- Assessing differences in snowmelt-dependent hydrologic projections using CMIP3 and CMIP5 climate forcing data for the western United States  
  Darren L. Fichtl, Sally L. Leininger, Iris T. Stewart and Edwin P. Maurer  
  483
- Spatial variations of river–groundwater interactions from upstream mountain to midstream oasis and downstream desert in Heihe River basin, China  
  Yi Guo, Weiwen Huang, Yi-Tong, Bo-Shi Wang, Ba Ni and Chunhua Zhao  
  501
- Calibration of the Hargreaves–Samani method for the calculation of reference evapotranspiration in different Kentucky climate classes  
  Javier Almenara and Jürgen Geiger  
  521
- The impact of climate changes on water level of Qinghai Lake in China over the past 50 years  
  Bo-Li Cai and Xiao-Yan Li  
  532