ოზგურ კისი

cv

პერსონალური ინფორმაცია

ელ. ფოსტა: ozgur.kisi@th-luebeck.de

ozgur.kisi@iliauni.edu.ge

განათლება

დოქტორის ხარისხი: 1999-2003   სტამბოლის ტექნიკური უნივერსიტეტი (ITU),

მეცნიერების და ტექნოლოგიის ინსტიტუტი

ჰიდრავლიკის ფაკულტეტი.

სადოქტორო ნაშრომის სათაური 'Modeling of suspended sediment yield in a river cross-section using fuzzy logic'.

მეცნიერებათა მაგისტრი: 1997-1999წწ,   Erciyes University (EU), მეცნიერების და ტექნოლოგიის ინსტიტუტი, ჰიდრავლიკის ფაკულტეტი.

სამაგისტრო ნაშრომის სათაური: 'Ten-stage discrete flood routing for dams having gated spillways'.

მეცნიერებათა ბაკალავრი: 1993-1997 კუკუროვას უნივერსიტეტი (CU), საინჟინრო

ფაკულტეტი,

სამოქალაქო ინჟინერიის ფაკულტეტი

1992-1993   კუკუროვას უნივერსიტეტის (CU) ინტენსიური ინგლისურის სკოლა საბაკალავრო პროგრამის სტუდენტებისთვის

სამუშაო გამოცდილება

2021- : მოწვეული პროფესორი, გამოყენებითი მეცნიერების უნივერსიტეტი, ლუბეკი, სამოქალაქო ინჟინერიის ფაკულტეტი

2017- : პროფესორი. დოქტორი, ილიას სახელმწიფო უნივერსიტეტი, ტექნოლოგიის სკოლა, სამოქალაქო ინჟინერიის ფაკულტეტი.

2012-2016 : პროფესორი. დოქტორი., ბასარის უნივერსიტეტი, არქიტექტურის და საინჟინრო ფაკულტეტის დეკანი

2011-2012 : პროფესორი. დოქტორი., Erciyes University, სამოქალაქო ინჟინერიის ფაკულტეტის ხელმძღვანელი.

2005-2011 : ასოცირებული პროფესორი. დოქტორი., Erciyes University

2003-2005 : ასისტენტ პროფესორი. დოქტორი., Erciyes University

1999-2003 : მკვლევარი-ასისტენტი, მეცნიერების და ტექნოლოგიის ინსტიტუტი, ITU

სითხის მექანიკის კურსი, ასისტენტი (ზაფხული, 2000)

ჰიდროლოგიის კურსი, ასისტენტი (ზაფხული, 2002)

ჰიდროლოგიის კურსი, ასისტენტი (გაზაფხული, 2003)

სითხის მექანიკის კურსი, ასისტენტი (ზაფხული, 2003)

1998-1999 : კვლევითი -ასისტენტი, მეცნიერების და ტექნოლოგიის ინსტიტუტი, EU

1997 : <mark>Analysis of floors and beams with finite elements method and the comparison with the classical methods used in practice,</mark> საბაკალავრო პროგრამის ფინალური პროექტი

1996 :, ტრენინგი სამოქალაქო ინჟინერიაში (ოფისში) OZIMKO Co, ადანა (ზაფხული)

1995 : ტრენინგი სამოქალაქო ინჟინერიაში სამუშაო ადგილზე (OZIMKO Co, ადანა (ზაფხული)

ჩატარებული საბაკალავრო კურსები

კალკულუსი

შესავალი სამოქალაქო ინჟინერიაში

სითხის მექანიკა

ჰიდრავლიკა

ჰიდროლოგია

ჰიდრავლიკური სტრუქტურები

კომპიუტერული პროგრამირება

კომპიუტერული აპლიკაციები საინჟინრო ჰიდროლოგიაში

არამკაფიო ლოგიკა და სამოქალაქო ინჟინერიის აპლიკაციები

ხელოვნური ნეირონული ქსელები და სამოქალაქო ინჟინერიის აპლიკაციები

ხელოვნური ინტელექტის შესავალი

PUBLICATIONS

Journal Papers (SCI)

Alizamir, M., Kazemi, Z., Kazemi, Z., Kemani, M., Kim, S., Heddam, S., Kisi, O., Chung, Il-Moon. Investigating landfill leachate and groundwater quality prediction using a robust integrated artificial intelligence model: gray wolf metaheuristic optimization algorithm and extreme learning machine, *Water*, (accepted for publication).

Sahoo, B.B., Sankalp, S., Kisi, O. A novel smoothing-based deep learning time-series approach for daily suspended sediment load prediction, *Water Resources Management*, (accepted for publication).

Adnan, R.M., Cao, X., Sadeghifar, T., Kuriqi, A., Kisi, O., Shahid, S. Improving significant wave height prediction using neuro fuzzy approach and marine predators algorithm, *Journal of Marine Science and Engineering*, (accepted for publication).

Seyedian, S.M., Kisi, O. Uncertainty analysis of discharge coefficient predicted for rectangular side weir using machine learning methods, Journal of Hydrology and Hydromechanics, (accepted for publication).

Jafarpour, M., Adib, A., Lotfirad, M., Kisi, O. Spatial evaluation of climate change-induced drought characteristics in different climates based on De Martonne Aridity Index in Iran, *Applied Water Science*, (accepted for publication).

Raza, A., Saber, K., Hu, Y., Ray, R.L., Kaya, Y.Z., Dehghanisanij, H., Kisi, O., Elbeltagi, A. Modelling reference evapotranspiration using principal component analysis and machine learning methods under different climatic environments, *Irrigation and Drainage,* (accepted for publication).

Adnan, R.M., Mostafa, R.R., Chen, Z., Heddam, S., Masood, A., Kisi, O. Enhancing accuracy of extreme learning machine in predicting river flow using improved reptile search algorithm, *Stochastic Environmental Research and Risk Assessment*, (accepted for publication).

Ahmed, K.O., Nariman, N., Hawez, D.M., Kisi, O., Amini, A. Predicting and optimizing the influenced parameters for culvert outlet scouring utilizing coupled flow 3D-surrogate modeling, *Iranian Journal of Science and Technology*, (accepted for publication).

Adnan, R.M., Dai, H-L., Ewees, A.A., Shiri, J., Kisi, O., Zounemat-Kermani, M. Application of novel robust machine learning method in the field of renewable energy resources, *Energy Reports*, (accepted for publication).

Ghazi, B., Jeihouni, E., Kisi, O. A comparative study of statistical model and soft computing methods in forecasting groundwater level response to climate change scenarios in the semi-arid region, *Theoretical and Applied Climatology*, (accepted for publication).

Khani, M.S., Shahsavani, Y., Mehraein, M., Kisi, O. 2023. Performance evaluation of the Savonious hydrokinetic turbine using soft computing techniques, *Renewable Energy*, 2015, 118906. https://doi.org/10.1016/j.renene.2023.118906.

Kim, S., Seo, Y., Malik, A., Kim, S., Heddam, S., Yaseen, Z.M., Kisi, O., Singh, V.P. 2023. Quantification of river total phosphorus using integrative artificial intelligence models, *Ecological Indicators*, 153, 110437. https://doi.org/10.1016/j.ecolind.2023.110437.

Adnan, R.M., Dai, H-L, Kuriqi, A., Kisi, O., Zounemat-Kermani, M. 2023. Improving drought modeling based on new heuristic machine learning methods, *Ain Shams Engineering Journal*, 14(10), 102168. https://doi.org/10.1016/j.asej.2023.102168.

Minaei, M., Kisi, O., Kamangar, M. 2023. Spatio-temporal analysis of carbon sequestration in different ecosystems of Iran and its relationship with agricultural droughts, *Sustainability*, 15, 6577. https://doi.org/10.3390/su15086577.

Vadiati, M., Ghasemi, L., Samani, S., Islam, Md.A., Ahmadi, A., Khaleghi, S., Movarej, M., Gorgij, A.D., Kisi, O., Davoodi, S., Dhama, K., Tiwari, A., Bhattacharya, P. 2023. A sustainable trend in COVID-19 research: an environmental perspective, *Frontiers in Environmental Science*, 11:1104679. https://doi.org/10.3389/fenvs.2023.1104679.

Mostafa, R.R., Kisi, O., Adnan, R.M., Sadeghifar, T., Kuriqi. A. 2023. Modeling potential evapotranspiration by improved machine learning methods using limited climatic data, *Water*, 15, 486. https://doi.org/10.3390/w15030486.

Adnan, R.M., Mostafa, R.R., Chen, Z., Parmar, K.S., Kisi, O., Zounemat-Kermani, M. 2023. Water temperature prediction using improved deep learning methods by reptile search algorithm and weighted mean of vectors optimizer, *Journal of Marine Science and Engineering*, 11, 259. https://doi.org/10.3390/jmse11020259.

Thieu, N.V., Barma, S.D., Lam, T.V., Kisi, O., Mahesha, A. 2023. Groundwater Level Modeling using Augmented Artificial Ecosystem Optimization, *Journal of Hydrology*, 617, Part C, 129034. https://doi.org/10.1016/j.jhydrol.2022.129034.

Adnan, R.M., Dai, H-L, Mostafa, R.R., Islam, ARMT, Kisi, O., Heddam, S., Zounemat-Kermani, M. 2023. Modeling groundwater level fluctuations by ELM merged advanced metaheuristic algorithms using hydroclimatic data, *Geocarto International*, 38(1), 2158951. https://doi.org/10.1080/10106049.2022.2158951.

Adnan, R.M., Hazarika, B.B., Gupta, D., Heddam, S., Kisi, O. 2023. Streamflow prediction in mountainous region using new machine learning and data preprocessing methods: A case study, *Neural Computing and Applications*, 35, 9053–9070. https://doi.org/10.1007/s00521-022-08163-8.

Difi, S., Elmeddahi, Y., Hebal, A., Singh, V.P., Heddam, S., Kim, S., Kisi. O. 2023. Monthly Streamflow prediction using hybrid extreme learning machine optimized by bat algorithm: Case study of Cheliff Watershed, Algeria, *Hydrol. Sci. J*.,, 68(2), 189-208. https://doi.org/10.1080/02626667.2022.2149334.

Samani, S., Vadiati, M., Nejatijahromi, Z., Etebari, B., Kisi, O. 2023. Groundwater Level Response Identification by Hybrid Wavelet–Machine Learning Conjunction Models Using Climatic Data, *Environmental Science and Pollution Research,* 30, 22863–22884. https://doi.org/10.1007/s11356-022-23686-2.

Keshtegar, B., Piri, J., Ul Hussan, W., Ikram, K., Yaseen, M., Kisi, O., Adnan, R.M., Adnan, M., Waseem, M. 2023. Prediction of sediment yields using novel data driven model: Radial M5 model tree, *Water*, 15, 1437. https://doi.org/10.3390/w15071437.

Adnan, R.M., Dai, H-L, Mostafa, R.R., Islam, ARMT, Kisi, O., Elbeltagi, A., Zounemat-Kermani, M. 2023. Application of novel binary optimized machine learning models for monthly streamflow prediction, *Applied Water Science*, 13, 110. https://doi.org/10.1007/s13201-023-01913-6.

Adnan, R.M., Mostafa, R.R., Dai, H-L, Heddam, S., Kuriqi, A., Kisi, O. 2023. Pan evaporation estimation by relevance vector machine tuned with new metaheuristic algorithms using limited climatic data, *Engineering Applications of Computational Fluid Mechanics*, 17(1), 2192258. https://doi.org/10.1080/19942060.2023.2192258.

Khosravinia, P., Nikpour, M.Z., Kisi, O., Adnan, R.M. 2023. Predicting discharge coefficient of triangular side orifice using least square support vector machine optimized by gravity search algorithm, *Water*, 15, 1341. https://doi.org/10.3390/w15071341.

Kisi, O., Parmar, K.S., Mahdavi-Meymand, A., Adnan, R.M., Shahid, S., Zounemat-Kermani, M. 2023. Water Quality Prediction of Yamuna River in India Using Hy-brid Neuro-Fuzzy Models, *Water,* 15, 1095. https://doi.org/10.3390/w15061095.

Dashti, Z., Nakhaei, M., Vadiati, M., Karami, G.H., Kisi, O. 2023. A Literature Review on Pumping Test Analysis (2000-2021), *Environmental Science and Pollution Research*, 30, 9184–9206. https://doi.org/10.1007/s11356-022-24440-4.

Karbasi, M., Jamei, M., Malik, A., Kisi, O., Yaseen, Z.M. 2023. Multi-steps drought forecasting in arid and humid climate environments: Development of integrative machine learning model, *Agricultural Water Management*, 281, 108210. https://doi.org/10.1016/j.agwat.2023.108210.

Adnan, R.M., Sadeghifar, T., Alizamir, M., Azad, M.T., Makarynskyy, O., Kisi, O., Barati, R., Ahmed, K.O. 2023. Short-term probabilistic prediction of significant wave height using Bayesian model averaging: case study of Chabahar Port, Iran, *Ocean Engineering*, 272, 113887. https://doi.org/10.1016/j.oceaneng.2023.113887.

Majedi-Asl, M., Fuladipanahb, M., Mahmoudpour, H., Ebrahimpour, E., Kisi, O. 2023. Optimization design of quality monitoring network of Urmia plain using genetic algorithm and vulnerability map, *Geocarto International,* 38(1), 2152492. https://doi.org/10.1080/10106049.2022.2152492.

Hassan, M.A., Salem, H., Bailek, N., Kisi, O. 2023. Random Forest Ensemble-based Predictions of On-road Vehic-ular Emissions and Fuel Consumption in Developing Urban Areas, *Sustainability*, 15, 1503. https://doi.org/10.3390/su15021503.

Adnan, R.M., Mostafa, R.R., Chen, Z., Islam, ARMT, Kisi, O., Kuriqi, A., Zounemat-Kermani, M., 2023. Advanced hybrid metaheuristic machine learning models application for reference crop evapotranspiration prediction: A case study from data-scarce humid region, Bangladesh, *Agronomy*, 13, 98. https://doi.org/10.3390/agronomy13010098.

Jamei, M., Ahmadianfar, I, Karbasi, M., Malik, A., Kisi, O., Yaseen, Z.M. 2023. Development of Wavelet-Based Kalman Online Sequential Extreme Learning Machine optimized with Boruta-Random Forest for Drought Index Forecasting, *Engineering Applications of Artificial Intelligence*, 117, 105545. https://doi.org/10.1016/j.engappai.2022.105545.

Heddam, S., Ptak, M., Sojka, M., Kim, S., Malik, A., Kisi, O., Zounemat-Kermani, M. 2022. Least Square Support Vector Machine Based Variational Mode Decomposition: A New Hybrid Model for Daily River Water Temperature Modeling, *Environmental Science and Pollution Research*, 29(47), 71555-71582. https://doi.org/10.1007/s11356-022-20953-0.

Mohammed, A., Yaseen, Z.M., Heddam, S., Malik, A., Kisi, O. 2022. Advanced machine learning models development for suspended sediment prediction: comparative analysis study, Geocarto International, 37:21, 6116-6140. https://doi.org/10.1080/10106049.2021.1933210.

Sihag, P., Nouri, M., Ahmadpari, H., Seyyedzadeh, A., Kisi, O. 2022. Approximation of the discharge coefficient of radial gates using metaheuristic regression approach, *Sustainability*, 14(22), 15145; https://doi.org/10.3390/su142215145.

Adnan, R.M., Ewees, A.A., Parmar, K.S., Yaseen, Z.M., Shahid, S., Kisi, O. 2022. The viability of extended marine predators algorithm – based artificial neural networks for streamflow prediction, *Applied Soft Computing*, 131, 109739. https://doi.org/10.1016/j.asoc.2022.109739.

Mehraein, M., Mohanavelu, A., Naganna, S.R., Kulls, C., Kisi, O. 2022. Monthly streamflow prediction by metaheuristic regression approaches considering satellite precipitation data, *Water*, 14, 3636. https://doi.org/10.3390/w14223636.

Adnan, R.M., Jaafari, Milan, S.G., Kisi, O., Heddam, S., Zounemat-Kermani, M., 2022. Hybridized an Adaptive Neuro-Fuzzy Inference System with Metaheuristics Algorithms for Modeling Monthly Pan Evaporation, *Water*, 14, 3549. https://doi.org/10.3390/w14213549.

Chauhan, A.S., Maurya, R.K.S., Rani, A., Malik, A., Kisi, O., Danodia, A. 2022. Rainfall dynamics observed over India during last century (1901–2020) using innovative trend methodology, *Water Supply*, 22(8): 6909–6944. https://doi.org/10.2166/ws.2022.291

Samani, S., Vadiati, M., Azizi, F., Zamani, E., Kisi, O. 2022. Groundwater Level Simulation Using Soft Computing Methods with Emphasis on Major Meteorological Components, *Water Resources Management*, 36, 3627–3647. https://doi.org/10.1007/s11269-022-03217-x

Mirboluki, A., Mehraein, M., Kisi, O. 2022. Improving accuracy of neuro fuzzy and support vector regression for drought modeling using grey wolf optimization, *Hydrol. Sci. J.*, 67(10), 1582-1597, https://doi.org/10.1080/02626667.2022.2082877

Chauhan, A.S., Singh, S., Maurya, R.K.S., Kisi, O., Rani, A., Danodia, A. 2022. Spatio-temporal analysis of rainfall dynamics of 120 years (1980-2020) in Haryana, India, *Sustainability*, 4(9):4888. https://doi.org/10.3390/su14094888

Basak, A., Sakiur Rahman, A.T.M., Das, J., Hosono, T., Kisi, O. 2022. Drought forecasting using the Prophet Model in semi-arid climate region of western India, *Hydrological Sciences Journal*, 67(9), 1397-1417. https://doi.org/10.1080/02626667.2022.2082876

Adnan, R.M., Dai, H-L, Mostafa, R.R., Parmar, K.S., Heddam, S., Kisi, O. 2022. Modeling multi-step ahead dissolved oxygen concentration using improved support vector machines by a hybrid metaheu-ristic algorithm, *Sustainability*, 14, 3470. https://doi.org/10.3390/su14063470.

Kisi, O., Mirboluki, A., Naganna, S.R., Malik, A., Kuriqi, A., Mehraein, M. 2022. Comparative evaluation of deep learning and machine learning in modelling pan evaporation using limited inputs, *Hydrological Sciences Journal*, 67(9), 1309-1327, https://doi.org/10.1080/02626667.2022.2063724

Afan, H.A., Yafouz, A., Birima, A.H., Ahmed, A.N., Kisi, O., Chaplot, B., El-Shafie, A. 2022. Linear and stratifed sampling-based deep learning models for improving the river streamfow forecasting to mitigate fooding disaster, *Natural Hazards*, 112, 1527–1545. https://doi.org/10.1007/s11069-022-05237-7.

Adnan, R.M., Mostafa, R., Elbeltagi, A., Yaseen, Z.M., Shahid, S., Kisi, O. 2022. Development of new machine learning model for streamflow prediction: Case studies in Pakistan, *Stochastic Environmental Research and Risk Assessment*, 36, 999–1033. https://doi.org/10.1007/s00477-021-02111-z

Ahmed, A.N., Yafouz, A., Birima, A.H., Kisi, O., Huang, Y.F., Sherif, M., Sefelnasr, A., El-Shafie, A. 2022. Water Level Prediction Using Various Machine Learning Algorithms: A case study of Durian Tunggal river, Malaysia, *Engineering Applications of Computational Fluid Mechanics*, 16(1), 422–440. https://doi.org/10.1080/19942060.2021.2019128

Mohanavelu, A., Bankaru-Swamy, S., Kisi, O. 2022. Modeling Multi-objective Pareto-optimal Reservoir Operation Policies Using State-of-the-art Modeling Techniques, *Water Resources Management*, 36, 3107–3128. https://doi.org/10.1007/s11269-022-03191-4.

Kim, S., Alizamir, M., Seo, Y., Heddam, S., Chung, I.M., Kim, Y., Kisi, O., Singh, V.P. 2022. Estimating the incubated river water quality indicator based on machine learning and deep learning paradigms: BOD5 Prediction, *Mathematical Biosciences and Engineering*, 19(12): 12744–12773. http://www.aimspress.com/journal/MBE

Adnan, R.M., Goliatt, L., Kisi, O., Trajkovic, S., Shahid, S. 2022. Covariance Matrix Adaptation Evolution Strategy for Improving Machine Learning Approaches in Streamflow Prediction, *Mathematics*, 10(6), 2971. https://doi.org/10.3390/math10162971

Vadiati, M., Rajabi, Z., Eskandari, E., Nakhai, M., Kisi, O. 2022. Application of artificial intelligence models for prediction of groundwater level fluctuations (Case study: Tehran-Karaj alluvial aquifer), *Environmental Monitoring and Assessment*, 194:619, https://doi.org/10.1007/s10661-022-10277-4.

Jamei, M., Karbasi, M., Malik, A., Jamei, M., Kisi, O., Yaseen, Z.M. 2022. Long-term multi-step ahead forecasting of root zone soil moisture in different climates: Novel ensemble-based complementary data-intelligent paradigms, *Agricultural Water Management*, 269, 107679. https://doi.org/10.1016/j.agwat.2022.107679.

Kisi, O., Heddam, S., Keshtegar, B., Piri, J., Adnan, R., M. 2022. Predicting daily streamflow in a cold climate using a novel data mining technique: Radial M5 model tree, *Water*, 14, 1449. https://doi.org/10.3390/w14091449.

Shahsavani, Y., Mohajeri, H., Mehraein, M., Kisi, O. 2022. Prediction of temporal variation of scour hole dimensions due to plane wall jets: application of new soft computing techniques, *Ocean Engineering*, 251, 111031.

Eskandaria, E., Mohammadzadeh, H., Nassery, H., Vadiati, M., Mohammadzadeh, A., Kisi, O. 2022. Delineation of Isotopic and Hydrochemical Evolution of Karstic Aquifers with Different Cluster-Based (HCA, KM, FCM and GKM) Methods, *Journal of Hydrology*, 609, 127706. https://doi.org/10.1016/j.jhydrol.2022.127706.

Lama, G.F.C., Sadeghifar, T., Azad, M.T., Sihag, P., Kisi, O. 2022. On the Indirect Estimation of Wind Wave Heights over the Southern Coasts of Caspian Sea: A Comparative Analysis, *Water*, 14, 843. https://doi.org/10.3390/w14060843

Adnan, R.M., Kisi, O., Ahmed, A.N., El-Shafie, A., Mostafa, R. 2022. The potential of novel support vector machine trained with modified mayfly optimization algorithm for streamflow prediction, *Hydrological Sciences Journal*, 67(2), 161–174. https://doi.org/10.1080/02626667.2021.2012182

Mirboluki, A., Heddam, S., Parmar, K.S., Trajkovic, S., Mehraein, M., Kisi, O. 2022. Comparison of the advanced machine learning methods for better prediction accuracy of solar radiation using only temperature data: A case study, *International Journal of Energy Research*, 46(3), 2709-2736. https://doi.org/10.1002/er.7341

Mostaghimzadeh, E., Adib, A., Ashrafi, S.M., Kisi, O. 2022. Investigation of a composite two-phase hedging rule policy for a multi reservoir system using streamflow forecast, *Agricultural Water Management*, 265, 107542. https://doi.org/10.1016/j.agwat.2022.107542.

Adnan, R.M., Yaseen, Z.M., Heddam, S., Shahid, S., Sadeghi-Niaraki, A., Kisi, O. 2022. Predictability performance enhancement for suspended sediment in rivers: Inspection of newly developed hybrid adaptive neuro-fuzzy system model, *International Journal of Sediment Research*, 37(3), 383-398. https://doi.org/10.1016/j.ijsrc.2021.10.001

Gorgij, A.D., Alizamir, M., Kisi, O., Elshafie, A. 2022. Drought Modeling by Standard Precipitation Index (SPI) in a Semi-Arid Climate using Deep Learning Method: Long Short-Term Memory, *Neural Computing and Applications*, 34, 2425-2442. https://doi.org/10.1007/s00521-021-06505-6.

Sadeghifar, T., Lama, G.F.C., Sihag, P., Bayram, A., Kisi, O. 2022. Wave height predictions on complex sea flows through soft-computing models: Case study of Persian Gulf, *Ocean Engineering,* 245, 110467. https://doi.org/10.1016/j.oceaneng.2021.110467.

Esmaeili-Gisavandani, H., Farajpanah, H., Adib, A., Kisi, O., Riyahi, M.M., Lotfirad, M., Salehpoor, J. 2022. Evaluating ability of three types of discrete wavelet transforms for improving performance of diferent ML models in estimation of daily-suspended sediment load, *Arabian Journal of Geosciences*, 15:29. https://doi.org/10.1007/s12517-021-09282-7.

Kisi, O., Mansouri, I., Awoyera, P.O., Lee, C-H. 2021. Modeling flexural overstrength factor for steel beams using heuristic soft computing methods, *Structures*, 34, 3238-3246. https://doi.org/10.1016/j.istruc.2021.09.075.

Tao, H., Al-Khafaji, Z.S., Qi, C., Zounemat-Kermani, M., Kisi, O., Tiyasha, T., Chau, K-W., Nourani, V., Melesse, A.M., Elhakeem, M., Farooque, A.A., Nejadhashemi, A.P., Khedher, K.M., Alawi, O.A., Deo, R.C., Shahid, S., Singh, V.P., Yaseen, Z.M. (2021) Artificial intelligence models for suspended river sediment prediction: state-of-the art, modeling framework appraisal, and proposed future research directions, *Engineering Applications of Computational Fluid Mechanics*, 15:1, 1585-1612, DOI: 10.1080/19942060.2021.1984992.

Meshram, S.G., Singh, V.P., Kisi, O., Meshram, C. 2021. Soil erosion modeling of watershed using cubic, quadratic and quintic splines, *Natural Hazards*, 108, 2701–2719. https://doi.org/10.1007/s11069-021-04796-5.

Aoulmi, Y., Marouf, N., Amireche, M., Kisi, O., Shubair, R., Keshtegar, B. 2021. Highly Accurate Prediction Model for Daily Runoff in Semi-Arid Basin Exploiting Metaheuristic Learning Algorithms, *IEEE Access*, 9, 92500-92515, doi: 10.1109/ACCESS.2021.3092074.

Adib, A., Zaerpour, A., Kisi, O., Lotfirad, M. 2021. A Rigorous Wavelet-Packet Transform to Retrieve Snow Depth from SSMIS Data and evaluation of its reliability by uncertainty parameters, *Water Resources Management*, 35, 2723-2740, https://doi.org/10.1007/s11269-021-02863-x.

Adib, A., Kisi, O., Khoramgah, S., Gafouri, H.Z., Liaghat, A., Lotfirad, M., Moayyeri, N. 2021. A new approach for suspended sediment load calculation based on generated flow discharge considering climate change, *Water Supply*, 21(5), 2400-2413.

Hassanvand, M.R., Salimi, A.H., Kisi, O., Mohammadi, H.O., Abouzari, N. 2021. Investigating Application of Adaptive Neuro Fuzzy Inference Systems Method and Epanet Software for Modeling Green Space Water Distribution Network. *Iran J Sci Technol Trans Civ Eng* 45, 2765–2777. https://doi.org/10.1007/s40996-021-00625-8.

Kim, S., Maleki, N., Rezaie-Balf, M., Singh, V.P., Alizamir, M., Kim, N.W., Lee, J-T, Kisi, O. 2021. Assessment of the total organic carbon employing the different nature-inspired approaches in the Nakdong River, South Korea. *Environ Monit Assess* 193, 445. https://doi.org/10.1007/s10661-021-08907-4.

Hojjati, E., Mahtabi, G., Taran, F., & Kisi, O. 2021. Estimating evaporation from reservoirs using energy budget and empirical methods: Alavian Dam reservoir, NW Iran. *Italian Journal of Agrometeorology*, (2), 19-34. https://doi.org/10.13128/ijam-1033.

Adnan, R.M., Mostafa, R., Islam, A.R.M.T., Gorgij, A.D., Kuriqi, A., Kisi, O. 2021. Improving drought modeling using hybrid random vector functional link methods, *Water*, 13, 3379. https://doi.org/10.3390/w13233379.

Adnan, R.M., Mostafa, R., Islam, A.R.M.T., Kisi, O. Alban Kuriqi, A., Heddam, S. 2021. Estimating reference evapotranspiration using hybrid adaptive fuzzy inferencing coupled with heuristic algorithms, *Computers and Electronics in Agriculture*, 191, 106541. https://doi.org/10.1016/j.compag.2021.106541.

Lotfirad, M., Adib, A., Salehpoor, J., Ashrafzadeh, A., Kisi, O. 2021. Simulation of the impact of climate change on runoff and drought in an arid and semi-arid basin (the Hablehroud, Iran), *Applied Water Science*, 11(168). https://doi.org/10.1007/s13201-021-01494-2

Afan, H.A., Osman, A.I.A., Essam, Y., Ahmed, A.N., Huang, Y.F., Kisi, O., Sherif, M., Sefelnasr, M., Chau, K-W., El-Shafie, A. 2021. Modelling the fluctuations of groundwater level by employing ensemble deep learning techniques, *Engineering Applications of Computational Fluid Mechanics*, 15(1), 1420-1439.

Zounemat-Kermani, M., Keshtegar, B., Kisi, O., Scholz, M. 2021. Towards a comprehensive assessment of statistical versus soft computing models in hydrology: application to monthly pan evaporation prediction, *Water*, 13, 2451. https://doi.org/10.3390/w13172451.

Adnan, R.M., Mostafa, R., Yaseen, Z.M., Kisi, O., Shahid, S., Zounemat-Kermani, M. 2021. Improving streamflow prediction using a new hybrid ELM model combined with hybrid particle swarm optimization and grey wolf optimization, *Knowledge-Based Systems*, 230, 107379. https://doi.org/10.1016/j.knosys.2021.107379.

Kisi, O., Khosravinia, P., Heddam, S., Nazir Karimi, B., Karimi, N. 2021. Modeling wetting front redistribution of drip irrigation systems using a new machine learning method: Adaptive neuro- fuzzy system improved by hybrid particle swarm optimization – gravity search algorithm, *Agricultural Water Management*, 256, 107067. https://doi.org/10.1016/j.agwat.2021.107067

Kisi, O. 2021. Machine Learning with Metaheuristic Algorithms for Sustainable Water Resources Management, *Sustainability*, 13(15), 8596.

Malik, A., Tikhamarine, Y., Souag-Gamane, D., Rai, P., Sammen, S.S., Kisi, O. 2021. Support vector regression integrated with novel meta-heuristic algorithms for meteorological drought prediction, *Meteorology and Atmospheric Physics*, 133(3), 891-909.

Darabi, H., Mohamadi, S., Karimidastenaei, Z., Kisi, O., Ehteram, M., Elshafie, A., Haghighi, A.T. 2021. Prediction of daily suspended sediment load (SSL) using new optimization algorithms and soft computing models, *Soft Computing*, 25(11), 7609-7626.

Aghelpour, P., Kisi, O., Varshavian, V. 2021. A multivariate drought forecasting in short and long-term horizons, using Multivariate SPI (MSPI) and data-driven approaches, *Journal of Hydrologic Engineering*, 26(4), 04021006.

Eini, M.R., Javadi, S., Shahdany, M.H., Kisi, O. 2021. Comprehensive assessment and scenario simulation for future of the hydrological processes in Dez river basin, Iran, *Water Supply*, 21(3), 1157-1176.

Adnan, R.M., Jaafari, A., Mohanavelu, A., Kisi, O., Elbeltagi, A. 2021. Novel Ensemble Forecasting of Streamflow using Locally Weighted Learning Algorithm, *Sustainability*, 13, 5877, https://doi.org/10.3390/su13115877

Muhammad, M.K.I., Shahid, S., Ismail, T., Harun, S., Kisi, O., Yaseen, Z.M. 2021. The development of evolutionary computing model for simulating reference evapotranspiration over Peninsular Malaysia, *Theoretical and Applied Climatology*, 144, 1419–1434 (2021). https://doi.org/10.1007/s00704-021-03606-z

Harkat, S., Kisi, O. 2021. Trend Analysis of Precipitation Records Using an Innovative Trend Methodology in a Semi-Arid Mediterranean Environment: Cheliff Watershed Case (Northern Algeria)*, Theory and Applied Climatology*, 144(3-4), 1001–1015. https://doi.org/10.1007/s00704-021-03520-4.

Adnan, R.M., Liang, Z., Parmar, K.S., Soni, K., Kisi, O. 2021. Modeling monthly streamflow in mountainous basin by MARS, GMDH and DENFIS using hydroclimatic data, *Neural Computing and Applications,* 33(7), 2853-2871.

Ehteram, M., Ahmed, A.N., Latif, S.D., Feng, H.Y., Alizamir, M., Kisi, O., Mert, C., El-Shafie, A. 2021. Design of a Hybrid ANN-Multi Objective Whale Algorithm for Suspended Sediment Load Predicting, *Environmental Science and Pollution Research*, 28(2), 1596-1611.

Bayatvarkeshi, M., Imteaz, M., Kisi, O., Zarei, M., Yaseen, Z.M. 2021. Application of M5 model tree optimized with Excel Solver Platform for water quality parameters estimation, *Environmental Science and Pollution Research*, 28(6), 7347-7364.

Meshram, S.G., Singh, V.P., Kisi, O., Karimi, V., Meshram, C. 2021. Application of Artificial Neural Networks, Support Vector Machine and Multiple Model - ANN to Sediment Yield Prediction, *Water Resources Management*, 34(15), 4561-4575. https://doi-org.ezproxy.neu.edu.tr/10.1007/s11269-020-02672-8

Malik, A., Kumar, A., Kisi, O., Khan, N., Salih, S.Q., Yaseen, Z.M. 2021. Analysis of dry and wet climate characteristics at Uttarakhand (India) using effective drought index, *Natural Hazards*, 105(2), 1643-1662. https://doi-org.ezproxy.neu.edu.tr/10.1007/s11069-020-04370-5

Bayat-Varkeshi, M., Bhagat, S.K., Mohammadi, K., Kisi, O., Mohammad, F., Hassani, A., Deo, R., Yaseen, Z.M. 2021. Modelling soil temperature based on air temperature features in diverse climatic conditions using complementary machine learning models, *Computers and Electronics in Agriculture*, 185, 106158. https://doi.org/10.1016/j.compag.2021.106158.

Adnan, R.M., Heddam, S., Parmar, K.S., Shahid, S., Kisi, O. 2021. Suspended sediment modeling using a heuristic regression method hybridized with Kmeans clustering, *Sustainability*, 13, 4648, https://doi.org/10.3390/su13094648.

Adnan, R.M., Petroselli, A., Heddam, S., Santos, C.A.G., Kisi, O. 2021. Short term rainfall-runoff modeling using machine learning and physically event-based method, EBA4SUB, *Stochastic Environmental Research and Risk Assessment*, 35, 597-616, https://doi.org/10.1007/s00477-020-01910-0.

Karimi-Rizvandi, S., Goodarzi, H.V., Afkoueieh, J.H., Chung, Il-M, Kisi, O., Kim, S., Linh, N.T.T. 2021. Mapping of groundwater potential zones using self-learning Bayesian network model: A comparison among metaheuristic algorithms, *Water*, 13, 658, https://doi.org/10.3390/w13050658.

Azad, A., Farzin, S., Sanikhani, H., Karami, H., Kisi, O., Singh, V.P. 2021. Approaches for Optimizing the Performance of Adaptive Neuro-Fuzzy Inference System and Least-Squares Support Vector Machine in Precipitation Modeling, ASCE *J. of Hydrologic Eng.*, 26(4), 04021010.

Ahmed, A.N., Lam, T.V., Nguyen, D-H, Nguyen, V-T, Kisi, O., El-Shafie, A. 2021. A Comprehensive Comparison of Recent Developed Meta-Heuristic Algorithms for Streamflow Time Series Forecasting Problem, *Applied Soft Computing*, 105, 107282, https://doi.org/10.1016/j.asoc.2021.107282.

Adnan, R.M., Petroselli, A., Heddam, S., Santos, C.A.G., Kisi, O. 2021. Comparison of different methodologies for rainfall-runoff modeling: machine learning vs conceptual approach, *Natural Hazards*, 105(3), 2987-3011, https://doi.org/10.1007/s11069-020-04438-2.

Adnan, R.M., Khosravinia, P., Karimi, B., Kisi, O. 2021. Prediction of hydraulics performance in drain envelopes using new modeling strategy: Hybridization of MARS and

Kmeans clustering, *Applied Soft Computing*, 100, 107008. https://doi.org/10.1016/j.asoc.2020.107008

Kazemi, M.H., Majnooni-Heris, A., Kisi, O., Shiri, J. 2021. Generalized gene expression programming models for estimating reference evapotranspiration through cross-station assessment and exogenous data supply, *Environmental Science and Pollution Research*, 28(6), 6520-6532.

Adnan, R.M., Heddam, S., Yaseen, Z.M., Shahid, S., Kisi, O., Li, B. 2021. Prediction of Potential Evapotranspiration Using Temperature-Based Heuristic Approaches, *Sustainability*, 13, 297. https://doi.org/10.3390/su13010297.

Biazar, S.M., Rahmani, V., Isazadeh, M., Kisi, O., Dinpashoh, Y. 2020. New input selection procedure for machine learning methods in estimating daily global solar radiation, *Arabian Journal of Geoscience*, 13, 431. https://doi.org/10.1007/s12517-020-05437-0

Tikhamarine, Y., Malik, A., Souag-Gamane, D., Kisi, O. 2020. Artificial intelligence models versus empirical equations for modeling monthly reference evapotranspiration, *Environmental Science and Pollution Research*, 27, 30001-30019. https://doi.org/10.1007/s11356-020-08792-3

Shiri, J., Zounemat-Kermani, M., Kisi, O., Mohsenzadeh, S. 2020. Comprehensive assessment of 12 soft computing approaches for modeling reference evapotranspiration in humid locations, *Meteorological Applications,* 27(1), e1841m. https://doi.org/10.1002/met.1841

Azad, A., Kashi, H., Farzin, S., Singh, V.P., Kisi, O., Karami, H., Sanikhani, H. 2020. Novel approaches for air temperature prediction: Comparison of four hybrid evolutionary fuzzy models, *Meteorological Applications*, 27(1), e1817. https://doi.org/10.1002/met.1817.

Sadeghi-Niaraki, A., Kisi, O., Choi, S-M. 2020. Spatial modeling of long-term air temperatures for sustainability: Evolutionary fuzzy approach and neuro-fuzzy methods, *PeerJ*, 8:e8882 https://doi.org/10.7717/peerj.8882.

Nhu, V.H., Khosravi, K., Cooper, J.R., Karimi, M., Kisi, O., Pham, B.T., Lyu, Z. 2020. Monthly suspended sediment load prediction using artificial intelligence: testing of a new random subspace method, *Hydrological Sciences Journal*, 65(12), 2116-2127.

Alizamir, M., Kisi, O., Adnan, R.M., Kuriqi, A. 2020. Modelling reference evapotranspiration by combining neuro-fuzzy and evolutionary strategies, *Acta Geophysica,* 68(4), 1113-1126.

Kisi, O., Alizamir, M., Trajkovic, S., Shiri, J. 2020. Solar radiation modeling using a novel ensemble method: Bayesian model averaging, *Neural Processing Letters,* (accepted for publication).

Aghelpour, P., Mohammadi, B., Biazar, S.M., Kisi, O., Sourmirinezhad, Z. 2020. A theoretical approach for forecasting different types of drought simultaneously using data mining methods, *International Journal of Geo-Information*, 9, 701; doi:10.3390/ijgi9120701.

Farajpanah, H., Lotfirad, M., Adib, A., Esmaeili- Gisavandani, H., Kisi, O., Riyahi, M.M., Salehpoor, J. 2020. Ranking of hybrid wavelet-AI models by TOPSIS method for estimation of daily flow discharge. Water Supply 20(8): 3156- 3171. https://doi.org/ 10.2166/ws.2020.211.

Kim, S., Alizamir, M., Kim, N.W., Kisi, O. 2020. Bayesian model averaging: a unique model enhancing forecasting accuracy for daily streamflow based on different antecedent time series, *Sustainability*, 12, 9720; doi:10.3390/su12229720.

Malik, A., Tikhamarine, Y., Souag-Gamane, D., Kisi, O., Pham. Q.B. 2020. Support vector regression optimized by meta-heuristic algorithms for daily streamflow prediction, *Stochastic Environmental Research and Risk Assessment*, 34, 1755-1773. https://doi.org/10.1007/s00477-020-01874-1

Golabi, M.R., Radmanesh, F., Akhoond-Ali, A.M., Niksokhan, M.H., Kisi, O. 2020. Development of an indirect method for modeling water footprint of electricity using wavelet transform coupled with random forest model, *Hydrological Sciences Journal*, 65(15), 2521-2534. https://doi.org/10.1080/02626667.2020.1817926

Rahman, A.T.M.S., Hosono, T., Kisi, O., Dennis, B., Imon, A.H.M.R. 2020. A Minimalistic Approach for Evapotranspiration Estimation Using Prophet Model, *Hydrological Sciences Journal*, 65(12), 1994-2006.
https://doi.org/10.1080/02626667.2020.1787416

Tikhamarine, Y., Malik, A., Pandey, K., Sammen, S.S., Souag-Gamane, D., Kisi, O. 2020. Monthly evapotranspiration estimation using optimal climatic parameters: efficacy of hybrid support vector regression integrated with whale optimization algorithm, *Environmental Monitoring and Assessment,* 192(11), 696.

Aghelpour, P., Guan, Y., Bahrami-Pichaghchi, H., Mohammadi, B., Kisi, O., Zhang, D. 2020. Using MODIS Sensor for Snow Cover Modeling and Assessment of Drought Effect by Machine Learning Techniques in Mountainous Area, *Remote Sensing*, 12, 3437; doi:10.3390/rs12203437.

Jafari, H., Rajaee, T., Kisi, O. 2020. Improved Water Quality Prediction with Hybrid Wavelet–Genetic Programming Model and Shannon Entropy, *Natural Resources Research*, 29(6), 3819-3840.

Esmaeilbeiki, F., Nikpour, M.R., Singh, V.K., Kisi, O., Sihag, P., Sanikhani, H. 2020. Exploring the application of soft computing techniques for evaluation of groundwater quality variables, *Journal of Cleaner Production*, 276, 124206.

Nouri, M., Sihag, P., Salmasi, F., Kisi, O. 2020. Energy loss in skimming flow over cascade spillways: comparison of artificial intelligence-based and regression methods, *Applied Sciences,* 10, 6903; doi:10.3390/app10196903.

Mohamadi, S., Sammen, S., Panahi, F., Ehteram, M., Kisi, O., Mosavi, A., Ahmed, A.N., Al-Ansari, N., El Shafie, A. 2020. Zoning Map for Drought Prediction Using Integrated Machine Learning Models with a Nomadic People Optimization Algorithm, *Natural Hazards*, 104, 537-579.

Alizamir, M., Kim, S., Kisi, O., Zounemat-Kermani, M. 2020. A comparative study of several machine learning based non-linear regression methods in estimating solar radiation: case studies of the USA and Turkey regions, *Energy,* 197, 117239. https://doi.org/10.1016/j.energy.2020.117239

Tikhamarine, Y., Souag-Gamane, D., Samnen, S.S., Ahmed, A.N., Kisi, O., El-Shafie, A. 2020. Rainfall-Runoff Modeling using Improved Machine Learning Methods: Harris Hawks' Optimizer vs Particle Swarm Optimization, *J. of Hydrology*, 589, 125133.

Alizamir, M., Kisi, O., Kim, S., Heddam, S. 2020. A novel method for lake level prediction: Deep Echo State Network, *Arabian Journal of Geoscience*, 13(18), 956.

Kim, S., Alizamir, M., Zounemat-Kermani, M., Kisi, O., Singh, V.P. 2020. Assessing the biochemical oxygen demand using neural networks and ensemble tree approaches in South Korea, *Journal of Environmental Management*, 270, 110834, https://doi.org/10.1016/j.jenvman.2020.110834

Adnan, R.M., Liang, Z., Heddam, S., Zounemat-Kermani, M., Kisi, O. 2020. Least square support vector machine and multivariate adaptive regression splines for streamflow prediction in mountainous basin using hydro-meteorological data as inputs, *J. of Hydrology,* 586, 124371.

Malik, A., Rai, Heddam, S., Kisi, O., Sharafati, A., Salih, S.Q., Al-Ansari, N., Yaseen, Z.M. 2020. Pan evaporation estimation in Uttarakhand and Uttar Pradesh States, India: Validity of an integrative data intelligence model, *Atmosphere*, 11(6), 553. https://doi.org/10.3390/atmos11060553.

Genc, O., Kisi, O., Ardiclioglu, M. 2020. Modeling velocity distributions in small streams using different neuro-fuzzy and neural computing technique, *Journal of Water and Climate Change*, 11(2), 390-401.

Alizamir, M., Kisi, O., Ahmed, A.N., Mert, C., Fai, C.M., Kim, S., Kim, N.W., El-Shafie, A. 2020. Advanced machine learning model for better prediction accuracy of soil temperature at different depths, *PLOS ONE,* 15(4): e0231055. https://doi.org/10.1371/journal.pone.0231055

Adnan, R.M., Chen, Z., Yuan, X., Kisi, O., El-Shafie, A., Kruqi, A., Ikram, M. 2020. Reference evapotranspiration modeling using new heuristic methods, *Entropy*, 22, 547; doi:10.3390/e22050547.

Gholampour, A., Mansouri, I., Kisi, O., Ozbakkaloglu, T. 2020. Evaluation of mechanical properties of concretes containing coarse recycled concrete aggregates using multivariate

adaptive regression splines (MARS), M5 model tree (M5Tree), and least squares support vector regression (LSSVR) models, *Neural Computing and Applications*, 32(1), 295-308.

Kisi, O., Alizamir, M., Gorgij, A. 2020. Dissolved oxygen prediction using a new ensemble method, *Environmental Science and Pollution Research*, 27(9), 9589-9603.

Mohammadrezapour, O., Kisi, O., Pourahmad, F. 2020. Fuzzy c-means and K-means clustering with genetic algorithm for identification of homogeneous regions of groundwater quality, *Neural Computing and Applications*, 32(8), 3763-3775.

Bayatvarkeshi, M., Mohammadi, K., Kisi, O., Fasihi, R. 2020. A new wavelet conjunction approach for estimation of relative humidity: wavelet principal component analysis combined with ANN, *Neural Computing and Applications*, 32(9), 4989-5000.

Heddam, S., Keshtegar, B., Kisi, O. 2020. Predicting Total Dissolved Gas Concentration on a Daily Scale Using Kriging Interpolation, Response Surface Method and Artificial Neural Network: Case Study of Columbia River Basin Dams, USA, *Natural Resources Research*, 29(3), 1801-1818.

Alizamir, M., Kim, S., Kisi, O., Zounemat-Kermani, M. 2020. Deep echo state network: a novel machine learning approach to model dew point temperature using meteorological variables, *Hydrol. Sci. J.*, 65(7), 1173–1190. https://doi.org/10.1080/02626667.2020.1735639.

Ashrafzadeh, A., Kisi, O., Aghelpour, P., Biazar, A.M., Masouleh, M.A. 2020. Comparative study of time series models, support vector machines, and GMDH in forecasting long-term evapotranspiration rates in northern Iran, ASCE *Journal of Irrigation and Drainage Engineering*, 146(6): 04020010.

Bayatvarkeshi, M., Zhang, B., Fasihi, R., Adnan, R.M., Kisi, O., Yuan, X. 2020. Investigation into the effects of climate change on reference evapotranspiration using the HadCM3 and LARS-WG, *Water*, 12, 666; doi:10.3390/w12030666.

Shiri, J., Keshavarzi, A., Kisi, O., Karimi, S.M., Karimi, S., Nazemi, A.H., Rodrigo-Comino, J. 2020. Estimating soil available phosphorus content through coupled wavelet-data driven models, *Sustainability*, *12*, 2150; doi:10.3390/su12052150.

Cengiz, T.M., Tabari, H., Onyutha, C., Kisi, O. 2020. Combined use of graphical and statistical approaches for analyzing historical precipitation changes in Turkey, *Water*, *Water*, 12, 705; doi:10.3390/w12030705.

Khosravinia, P., Nikpour, M.R., Kisi, O., Yaseen, Z.M. 2020. Application of novel data mining algorithms in prediction of discharge and end depth in trapezoidal sections, *Computers and Electronics in Agriculture,* 170, 105283, https://doi.org/10.1016/j.compag.2020.105283.

Aghelpoura, P., Bahrami-Pichaghchi, H., Kisi, O. 2020. Comparison of three different bio-inspired algorithms to improve ability of neuro fuzzy approach in prediction of drought based on three different indexes, *Computers and Electronics in Agriculture,* 170, 105279, https://doi.org/10.1016/j.compag.2020.105279.

Tikhamarine, Y., Souag-Gamane, D., Ahmed, A.N., Kisi, O., El Shafie, A. 2020. Improving artificial intelligence models accuracy for monthly streamflow forecasting using grey Wolf optimization (GWO) algorithm, *J. of Hydrolog*, 582, 124435.

Salih, S.Q., Sharafati, A., Khosravi, K., Faris, H., Kisi, O., Tao, H., Ali, M., Yaseen, Z.M. 2020. River suspended sediment load prediction based on river discharge information: application of newly developed data mining models, *Hydrol. Sci. J*., 65(4), 624-637, https://doi.org/10.1080/02626667.2019.1703186.

Samadianfard, S., Majnooni-Heris, A., Qasem, S.N., Kisi, O., Shamshirband, S., Chau, K.W. 2019. Daily global solar radiation modeling using data-driven techniques and empirical equations in a semi-arid climate, *Engineering Applications of Computational Fluid Mechanics*, 13(1), 142–157.

Jing, W, Yaseen, ZM, Shahid, S, Saggi, MK, Tao, H, Kisi, O, Salih, SQ, Al-Ansari, N, Chau, KW. 2019. Implementation of evolutionary computing models for reference evapotranspiration modeling: short review, assessment and possible future research directions, *Engineering Applications of Computational Fluid Mechanics*, 13(1), 811-823. DOI: 10.1080/19942060.2019.1645045

Kim, S., Seo, Y., Rezaie-Balf, M., Kisi, O., Ghorbani, M.A., Singh, V.P. 2019. Evaluation of daily solar radiation flux density using soft computing approaches based on different meteorological information: Peninsula vs Continent, *Theoretical and Applied Climatology*, 137(1-2), 693-712.

Shiri, J., Nazemi, A.H., Sadraddini, A.A., Marti, P., Fard, A.F., Kisi, O., Landeras, G. 2019. Alternative heuristics equations to the Priestley-Taylor approach: assessing reference evapotranspiration estimation, *Theoretical and Applied Climatology*, 138(1-2), 831-848.

Malik, A., Kumar, A., Ghorbani, M.A., Kashani, M.H., Kisi, O., Kim, S. 2019. The viability of co-active fuzzy inference system model for monthly reference evapotranspiration estimation: case study of Uttarakhand State, *Hydrology Research*, 50(6), 1623-1644.

Ehteram, M., Ghotbi. S., Kisi, O., Ahmed, A.N., Hayder, G., Fai, C.M., Salih, G.H.A., Krishnan, M., Afan, H.A., EL-Shafie, A. 2019. Investigation on the Potential to Integrate Different Artificial Intelligence Models with Metaheuristic Algorithms for Improving River Suspended Sediment Predictions, *Applied Sciences*, 9, 4149, doi:10.3390/app9194149.

Adnan, R.M., Liang, Z., El-Shafie, A., Zounemat-Kermani, M., Kisi, O. 2019. Prediction of suspended sediment load using data-driven models, *Water,* 11, 2060; https://doi.org/10.3390/w11102060.

Ehteram, M., Singh, V.P., Ferdowsi, A., Mousavi, S-F., Farzin, S., Karami, H., Mohd, N.S., Afan, H.A., Lai, S.H., Kisi, O., Malek, M.A., Ahmed, A.N., El Shafie, A. 2019. An improved model based on support vector machine & cuckoo algorithm for simulating reference evapotranspiration, *PLOS ONE*, 14(5), e0217499. https://doi.org/10.1371/journal.pone.0217499.

Ehteram, M., Ghotbi. S., Kisi, O., Elshafie, A. 2019. Application of a coordination model for a large number of stakeholders with a new game theory model, *Water Resources Management*, 33, 5207-5230.

Farahani, N., Karami, H., Farzin, S., Ehteram, M., Kisi, O., El Shafie, A. 2019. A new method for flood routing: Four-parameter nonlinear Muskingum and shark algorithm, *Water Resources Management*, 33, 4879-4893.

Rezaie-balf, M., Naganna, S.R., Kisi, O., El-Shafie, A. 2019. Enhancing Streamflow Forecasting Using Augmenting Ensemble Procedure Coupled with Machine Learning Models: Case Study of Aswan High Dam, *Hydrol. Sci. J.*, 64(13), 1661417.

Kisi, O., Khosravinia, P., Nikpour, M.R., Sanikhani, H. 2019. Hydrodynamics of river-channel confluence: Toward modeling separation zone using GEP, MARS, M5 Tree and DENFIS techniques, *Stochastic Environmental Research and Risk Assessment*, 33, 1089-1107.

Adnan, R.M., Malik, A., Kumar, A., Parmar, K.S., Kisi, O. 2019. Pan evaporation modeling by three different neuro-fuzzy intelligent systems using climatic inputs, *Arabian Journal of Geosciences,* 12, 606.

Kisi, O., Karimi, S.M., Shiri, J., Keshavarzi, A. 2019. Modeling long term monthly rainfall using geographical inputs: Assessing heuristic and geo-statistical models, *Meteorological Applications*, 33, 1089-1107.

Karami, H., Ehteram, M., Mousavi, S-F., Farzin, S., Kisi, O., El Shafie, A. 2019. Optimization of energy management and conversion in the water systems based on evolutionary algorithms, *Neural Computing and Applications*, 31, 5951-5964.

Mirabbasi, R., Kisi, O., Sanikhani, H., Demir, V., Meshram, S.G. 2019. Monthly long-term rainfall estimation in Central India using M5Tree, MARS, LSSVR, ANN and GEP models, *Neural Computing and Applications*, 31, 6843-6862.

Moradi, F., Bonakdari, H., Kisi, O., Ebtehaj, I., Shiri, J., Gharabaghi, B. 2019. Abutment scour depth modeling using different neuro-fuzzy embedded techniques, *Marine Georesources &Geotechnology*, 37(2), 190-200.

Tikhamarine, Y., Malik, A., Kumar, A., Souag-Gamane, D., Kisi, O. 2019. Estimation of monthly reference evapotranspiration using novel hybrid machine learning approaches, *Hydrol. Sci. J.*, 64, 1824-1842.

Ali, R., Kuriqi, A., Abubaker, S., Kisi, O. 2019. Hydrologic Alteration at Upper and Middle Part of the Yangtze River, China: Towards Sustainable Water Resource Management under Increasing Water Exploitation, *Sustainability*, 11, 5176; doi:10.3390/su11195176.

Kisi, O., Gorgij, A.D., Zounemat-Kermani, M., Mahdavi-Meymand, A., Kim, S. 2019. Drought forecasting using novel heuristic methods in a semi-arid environment, *J. of Hydrology*, 578, 124053.

Keshtegar, B., Heddam, S., Kisi, O., Zhu, S-P. 2019. Modeling total dissolved gas (TDG) concentration at Columbia river basin dams: high-order response surface method (H-RSM) vs. M5Tree, LSSVM, and MARS, *Arabian Journal of Geosciences*, 12, 544, https://doi.org/10.1007/s12517-019-4687-3.

Zounemat-Kermani, M., Kermani, S.G., Kiyaninejad, M., Kisi, O. 2019. Evaluating the application of data-driven intelligent methods to estimate the discharge over triangular arced labyrinth weir, *Flow Measurement and Instrumentation*, 68, 101573.

Malik, A., Kumar, A., Kisi, O., Shiri, J. 2019. Evaluating the performance of four different heuristic approaches with Gamma test for daily suspended sediment concentration modeling, *Environmental Science and Pollution Research*, 26(22), 22670-22687.

Kermani, S.G., Sayari, S., Kisi, O., Zounemat-Kermani, M. 2019. Comparing data driven models versus numerical models in simulation of waterfront advance in furrow irrigation, *Irrigation Science*, 37(5), 547-560.

Kisi, O., Choubin, B., Deo, R.C., Yaseen, Z.M. 2019. Incorporating synoptic-scale climate signals for streamflow modeling over the Mediterranean region using machine learning models, *Hydrological Sciences Journal*, 64(10), 1240-1252.

Keshtegar, B., Kisi, O., Zounemat-Kermani, M. 2019. Polynomial chaos expansion and response surface method for nonlinear modelling of reference evapotranspiration, *Hydrological Sciences Journal*, 64(6), 720-730.

Kisi, O., Heddam, S. 2019. Evaporation modeling by heuristic regression approaches using only temperature data, *Hydrological Sciences Journal*, 64(6), 653-672.

Kisi, O., Azad, A., Kashi, H., Saeedian, A., Hashemi, S.A.A., Ghorbani, S. 2019. Modeling groundwater quality parameters using hybrid neuro-fuzzy methods, *Water Resources Management*, 33(2), 847-861.

Ali, R., Kuriqi, A., Abubaker, S., Kisi, O. 2019. Long-term Trends and Seasonality Detection of the Observed Flow in Yangtze River Using Mann-Kendall and Sen's Innovative Trend Method, *Water*, 11, 1855; doi:10.3390/w11091855.

Tikhamarine, Y., Souag-Gamane, D., Kisi, O. 2019. A new intelligent method for monthly streamflow prediction: Hybrid wavelet support vector regression based on grey wolf optimizer

(WSVR-GWO), *Arabian Journal of Geosciences*, 12, 540. https://doi.org/10.1007/s12517-019-4697-1.

Fallah, H., Kisi, O., Kim, S., Rezaie-Balf, M. 2019. A new optimization approach for the least-cost design of water distribution networks: Improved crow search algorithm, *Water Resources Management*, 33, 3595-3613.

Jahanpanah, E., Khosravinia, P., Sanikhani, H., Kisi, O. 2019. Estimation of Discharge with Free Overfall in Rectangular Channel Using Artificial Intelligence Models, *Flow Measurement and Instrumentation*, 67, 118-130.

Rezaie-Balf, M., Adamowski, J.F., Quilty, J., Kisi, O. Ghaemi, A. 2019. On the applicability of maximum overlap discrete wavelet transform integrating with MARS and M5 model tree for monthly pan evaporation prediction, *Agricultural and Forest Meteorology*, 278, 107647.

Adnan, R.M., Liang, Z., Trajkovic, S., Zounemat-Kermani, M., Li, B., Kisi, O. 2019. Daily streamflow prediction using optimally pruned extreme learning machine, *J. of Hydrology,* 577, 123981.

Zounemat-Kermani, M., Kisi, O., Piri, J., Mahdavi-Meymand, A. 2019. Assessment of Artificial Intelligence–Based Models and Metaheuristic Algorithms in Modeling Evaporation, *J. of Hydrologic Engineering*, 24(10), 04019033.

Karami, H., Farzin, S., Jahangiri, A., Ehteram, M., Kisi, O., El Shafie, A. 2019. Multi-Reservoir System Optimization Based on Hybrid Gravitational Algorithm to Minimize Water-Supply Deficiencies, *Water Resources Management*, 33, 2741-2760.

Maroufpoor, S., Sanikhani, H., Kisi, O., Deo, R.C., Yaseen, Z.M. 2019. Long-term modeling of wind speeds using six different heuristic artificial intelligence approaches, *International J. of Climatology*, 39(8), 3543-3557.

Malik, A., Kumar, A., Kushwaha, D.P., Kisi, O., Salih, S., Al-Ansari, N., Yaseen, Z.M. 2019. The implementation of hybrid model for hilly sub-watersheds prioritization using morphometric variables: Case study in India, *Water*, 11, 1138; doi:10.3390/w11061138.

Malik, A., Kumar, A., Guhathakurta, P., Kisi, O. 2019. Spatial-temporal trend analysis of seasonal and annual rainfall (1966-2015) using innovative trend analysis method with significance test, *Arabian Journal of Geosciences*, 12(10), 328. https://doi.org/10.1007/s12517-019-4454-5.

Sanikhani, H., Kisi, O., Maroufpoor, E., Yaseen, Z.M. 2019. Temperature-based modeling of reference evapotranspiration using several artificial intelligence models: Application of different modeling scenarios, *Theoretical and Applied Climatology*, 135(1-2), 449-462.

Mohammadrezapour, O., Piri, J., Kisi, O. 2019. Comparison of SVM, ANFIS and GEP in modeling monthly potential evapotranspiration in an arid region (Case study: Sistan and Baluchestan Province, Iran), *Water Science and Technology: Water Supply*, 19(2), 392-403.

Adnan, R.M., Yuan, X., Kisi, O., Yuan, Tayyab, M., Lei, X. 2019. Application of soft computing models in streamflow forecasting, *Water Management*, 172(3), 123-134.

Valikhan-Anaraki, M., Mousavi, S-F, Farzin, S., Karami, H., Ehteram, M., Kisi, O., Fai, C.M., Hossain, M.S., Salih, G.H.A., Ahmed, A.N., El-Shafie, A.H., Hashim, H.B., Afan, H.A., Hin, L.S., El-Shafie, A. 2019. Development of Novel Hybrid Optimization 3 Algorithm for Minimizing Irrigation Deficiencies, *Sustainability*, 11, 2337. doi:10.3390/su11082337

Rezaie-Balf, M., Kisi, O., Chua, L.H.C. 2019. Application of ensemble empirical mode decomposition based on machine learning methodologies in forecasting monthly pan evaporation, *Hydrology Research*, 50(2), 498-516.

Kisi, O., Heddam, S. Yaseen, Z.M. 2019. The implementation of univariable scheme-based air temperature for solar radiation prediction: New development of dynamic evolving neural-fuzzy inference system model, *Applied Energy*, 241, 184-195.

Adnan, R.M., Liang, Z., Yuan, X., Kisi, O., Akhlaq, M., Li, B. 2019. Comparison of LSSVR, M5RT, NF-GP, and NF-SC Models for Predictions of Hourly Wind Speed and Wind Power Based on Cross-Validation, *Energies, 12(2), 329.* https://doi.org/10.3390/en12020329.

Qasem, S.N., Samadianfard, S., Kheshtgar, S., Majnooni-Heris, A., Jarhan, S., Kisi, O., Shamshirband, S., Chau, K.W. 2019. Modeling monthly pan evaporation using wavelet support vector regression and wavelet artificial neural networks in arid and humid climates, *Engineering Applications of Computational Fluid Mechanics*, 13(1), 142–157.

Kisi, O., Yaseen, Z.M. 2019. The potential of hybrid evolutionary fuzzy intelligence model for suspended sediment concentration prediction, *Catena*, 174, 11-23.

Sulaiman, S.O., Shiri, J., Shiralizadeh, H., Kisi, O., Yaseen, Z.M. 2018. Precipitation pattern modeling using cross-station perception: regional investigation, Environmental Earth Sciences, 77, 709.

Shaghaghi, S., Bonakdari, H., Gholami, A., Kisi, O., Shiri, J., Binns, A.D., Gharabaghi, B. 2018. Stable alluvial channel design using evolutionary neural networks, *J. of Hydrology*, 566, 770-782.

Farzin, S., Singh, V.P., Karami, H., Farahani, N., Ehteram, M., Kisi, O., Allawi, M.F., Mohd, N.S., El-Shafie, A. 2018. Flood Routing in River Reaches Using a Three-Parameter Muskingum Model Coupled with an Improved Bat Algorithm, *Water*, 10, 1130, doi:10.3390/w10091130.

Ehteram, M., Karami, H., Mousavi, S-F., Farzin, S., Singh, V.P., Kisi, O. 2018. Improved krill algorithm for reservoir operation, *Water Resources Management*, 32(10), 3353-3372.

Heddam, S., Kisi, O. 2018. Modelling daily dissolved oxygen concentration using least square support vector machine, multivariate adaptive regression splines and M5 model tree, *J. of Hydrology*, 559, 499-509.

Yaseen, Z.M., Ramal, M.M., Diop, L., Jaafar, O., Demir, V., Kisi, O. 2018. Hybrid adaptive neuro-fuzzy models for water quality index estimation, *Water Resources Management*, 32(7), 2227-2245.

Azad, A., Farzin, S., Kashi, H., Sanikhani, H., Karami, H., Kisi, O. 2018. Prediction of River Flow Using Hybrid Neuro Fuzzy Models, *Arabian Journal of Geosciences*, 11, 718. https://doi.org/10.1007/s12517-018-4079-0.

Khosravi, K., Mao, L., Kisi, O., Yaseen, Z.M., Shahid, S. 2018. Quantifying hourly suspended sediment load using data mining models: Case study of a glacierized Andean catchment in Chile, Chile, *J. of Hydrology*, 567, 165-179.

Singh, V.K., Kumar, D., Kashyap, P.S., Kisi, O.2018. Simulation of suspended sediment based on gamma test, heuristic and regression-based techniques, Environmental Earth Sciences, 77(19), 708.

Mohammadrezapour, O., Moradi, A., Kisi, O., Sharifazari, S. 2018. Evolutionary support vector machine for evapotranspiration estimation (case Study: Haji Abad region, Hormozgan province), *Desalination and Water Treatment*, 111, 183-191.

Adnan, R.M., Yuan, X., Kisi, O., Adnan, M, Mehmood, A. 2018.Stream flow forecasting of poorly gauged mountainous watershed by least square support vector machine, fuzzy genetic algorithm and M5 model tree using climatic data from nearby station, *Water Resources Management*, 32(14), 4469-4486.

Gorgij, A.D., Kisi, O., Moayeri, M.M., Moghaddam, A.A. 2018. Hydraulic conductivity estimation via the AI-based numerical model optimization using the harmony search algorithm, *Hydrology Research*, 49(5), 1669-1683.

Kisi, O., Alizamir, M. 2018. Modelling reference evapotranspiration using a new wavelet conjunction heuristic method: Wavelet extreme learning machine vs wavelet neural networks, *Agricultural and Forest Meteorology*, 263, 41-48.

Sanikhani, H., Kisi, O., Mirabbasi, R., Meshram, S.G. 2018. Trend analysis of rainfall pattern over the Central India during 1901- 2010, *Arabian Journal of Geosciences*, 11(15), 437. https://doi.org/10.1007/s12517-018-3800-3.

Eray, O., Mert, C., Kisi, O. 2018. Comparison of multi-gene genetic programming and dynamic evolving neural-fuzzy inference system in modeling pan evaporation, *Hydrology Research*, 49(4), 1221-1233.

Karimi, S., Shiri, J., Kisi, O., Xu, T. 2018. Forecasting daily streamflow values: assessing heuristic models, *Hydrology Research*, 49(3), 658-669.

Sanikhani, H., Deo, R.C., Samui, P., Kisi, O., Mert, C., Mirabbasi, R., Gavili, S., Yaseen, Z.M. 2018.Survey of different data-intelligent modeling strategies for forecasting air temperature using geographic information as model predictors, *Computers and Electronics in Agriculture,* 152, 242-260.

Kisi, O., Santos, C.A.G., Silva, R.M., Zounemat-Kermani, M. 2018. Trend analysis of monthly streamflows using Şen's innovative trend method, *Geofizika*, 35(1), 53-68.

Keshtegar, B., Kisi, O. 2018. RM5Tree: Radial basis M5 model tree for accurate structural reliability analysis, *Reliability Engineering and System Safety,* 180, 49-61.

Malik, A., Kumar, A., Kisi, O. 2018. Daily pan evaporation estimation using heuristic methods with Gamma test, *J. of Irrigation and Drainage Engineering*, 144(9): 04018023.

Zounemat-Kermani, M., Charmhineh, A.R., Adamowski, J., Kisi, O. 2018. Investigating the management performance of disinfection analysis of water distribution networks using data mining approaches, *Environmental Monitoring and Assessment*,190: 397.

Sanikhani, H., Deo, R.C., Yaseen, Z.M., Eray, O., Kisi, O. 2018.Non-tuned data intelligent model for soil temperature estimation: A new approach, Geoderma, 330, 52–64.

Anita, S., Malik, A., Kumar, A., Kisi, O. 2018. Rainfall-runoff modelling in hilly watershed using heuristic approaches with gamma Test, *Arabian Journal of Geosciences,* 11(11), 261.

Singh, V.K., Singh, B.P.,Kisi, O., Kushwaha, D.P. 2018. Spatial and multi-depth temporal soil temperature assessment by assimilating satellite imagery, artificial intelligence and regression based models in arid area, *Computers and Electronics in Agriculture,* 150, 205-219.

Santos, C.A.G., Kisi, O., Silva, R.M., Zounemat-Kermani, M.2018. Wavelet-based variability on streamflow at 40-year timescale in the Black Sea Region of Turkey, *Arabian Journal of Geosciences,*11(8), 169.

Choubin, B., Zehtabian, G., Azareh, A., Rafei-Sardooi, E., Sajedi-Hosseini, F., Kisi, O. 2018. Precipitation forecasting using classifcation and regression trees (CART) model: a comparative study of diferent approaches, *Environmental Earth Sciences*, (77), 314.

Maroufpoor, E., Sanikhani, H., Emamgholizadeh, S., Kisi O. 2018. Estimation of wind drift and evaporation losses from the sprinkler irrigation system by different data-driven methods, *Irrigation and Drainage*, 67(2), 222-232.

Sanikhani, H., Kisi, O., Amiratace, B. 2018. Impact of climate change on runoff in Lake Urmia basin, Iran, *Theoretical and Applied Climatology*, 132(1-2), 491-502.

Noori, H., Karami, H., Farzin, S., Siadatmousavi, S.M., Mojaradi, B., Kisi, O. 2018. Investigation of RS and GIS Techniques on MPSIAC Model to Estimate Soil Erosion, *Natural Hazards*, 91(1), 221-238.

Keshtegar, B., Kisi, O., Arab, H.G., Zounemat-Kermani, M.2018.Subset modeling basis ANFIS for prediction of the reference evapotranspiration, *Water Resources Management*, 32(3), 1101-1116.

Gavili, S., Sanikhani, H., Kisi, O., Mahmoudi, M.H. 2018. Evaluation of several soft computing methods in monthly evapotranspiration modeling, *Meteorological Applications*, 25(1), 128-138.

Samadianfard, S., Asadi, E., Jarhan, S., Kazemi, H., Kheshtgar, S., Kisi, O., Sajjadi, S., Manaf, A.A. 2018. Wavelet neural networks and gene expression programming models to predict short-term soil temperature at different depths, *Soil & Tillage Research*, 175, 37-50.

Keshtegar, B., Mert, C., Kisi, O. 2018. Comparison of four heuristic regression techniques in solar radiation modeling: Kriging method vs RSM, MARS and M5 model tree, *Renewable & Sustainable Energy Reviews*, 81, 330-341.

Alizamir, M., Kisi, O., Zounemat-Kermani, M. 2018. Modeling long-term groundwater fluctuations by extreme learning machine using hydro-climatic data, *Hydrological Sciences Journal*, 63(1), 63-73.

Mansouri, I., Gholampour, A., Kisi, O., Ozbakkaloglu, T. 2018. Evaluation of peak and residual conditions of actively confined concrete columns using neuro fuzzy and neural computing techniques, *Neural Computing and Applications*, 29(3), 873-888.

Yaseen, Z.M., Karami, H., Ehteram, M., Mohd, N.S., Mousavi, S-F., Hin, L.S., Kisi, O., Farzin, S., Kim, S., El-Shafie, A. 2018. Optimization of Reservoir Operation by Using New Hybrid Method, *KSCE Journal of Civil Engineering*, 22(11), 4668-4680.

Rezaie-Balf, M., Kisi, O. 2017. New formulation for forecasting streamflow: evolutionary polynomial regression vs. extreme learning machine**,** *Hydrology Research*, 49(3), 939-953.

Cobaner, M., Citakoglu, H., Haktanir, T., Kisi, O. 2017. Modifying Hargreaves-Samani equation with meteorological variables for estimation of reference evapotranspiration in Turkey, *Hydrology Research*, 48(2), 480-497.

Wang, L., Kisi, O., Hu, B., Bilal, M., Zounemat-Kermani, M., Li, H. 2017. Evaporation modeling using different machine learning techniques, *International J. of Climatology*, 37(S1), 1076-1092.

Wang, L., Kisi, O., Zounemat-Kermani, M., Zhu, Z., Gong, W., Niu, Z., Liu, H., Liu, Z. 2017. Prediction of solar radiation in China using different adaptive neuro-fuzzy methods and M5 model tree, *International J. of Climatology*, 37(3), 1141-1155.

Wang, L., Hu, B., Kisi, O., Zounemat-Kermani, M., Gong, W. 2017. Prediction of diffuse photosynthetically active radiation using different soft computing techniques, *Quarterly Journal of the Royal Meteorological Society*, 143(706), 2235-2244.

Malik, A., Kumar, A., Kisi, O. 2017.Monthly pan-evaporation estimation in Indian central Himalayas using different heuristic approaches and climate based models, *Computers and Electronics in Agriculture*, 143, 302-313.

Abdollahi, S., Raeisi, J., Khalilianpour, M., Ahmadi, F., Kisi, O. 2017. Daily Mean Streamflow Prediction in Perennial and Non-Perennial Rivers using Four Data Driven Techniques, *Water Resources Management*, 31(15), 4855-4874.

Naderianfar, M., Piri, J., Kisi, O. 2017. Pre-processing data to predict groundwater levels using the fuzzy standardized evapotranspiration and precipitation index (SEPI), *Water Resources Management*, 31, (14), 4433-4448.

Kisi, O., Demir, V., Kim, S. 2017. Estimation long-term monthly temperatures by three different adaptive neuro-fuzzy approaches using geographical inputs, *J. of Irrigation and Drainage Engineering*, , 143(12), 04017052.

Kisi, O., Mansouri, I., Hu, J.W. 2017.A new method for evaporation modeling: Dynamic evolving neural-fuzzy inference system (DENFIS), *Advances in Meteorology*, Article ID 5356324, 9 pages, https://doi.org/10.1155/2017/5356324.

Ehteram, M., Karami, H., Mousavi, S-F, *Farzin, S.*, Kisi, O. 2017. Optimization of Energy Management and Conversion in the Multi-Reservoir Systems Based on Evolutionary Algorithms, Journal of Cleaner Production, 168, 1132-1142.

Shiri, J., Keshavarzi, A., Kisi, O., Karimi, S. 2017. Using soil easily measured parameters for estimating soil water capacity: Soft computing approaches, *Computers and Electronics in Agriculture*, 141, 327–339.

Keshtegar, B., Kisi, O. 2017. Modified response surface method: New approach for modeling pan evaporation, *J. of Hydrologic Engineering*, 22(10), 04017045.

Mansouri, I., Kisi, O., Sadeghian, P., Lee, C-H, Hu, J.W. 2017. Prediction of Ultimate Strain and Strength of FRP-Confined Concrete Cylinders Using Soft Computing Methods, *Applied Sciences*, 7, 751, doi:10.3390/app7080751.

Shafaei, M., Kisi, O. 2017. Predicting river daily flow using wavelet-artificial neural networks based on regression analyses in comparison to artificial neural networks and support vector machines models, *Neural Computing and Applications*, 28, S15-S28.

Kisi, O., Keshavarzi, A., Shiri, J., Zounemat-Kermani, M., Omran, E-S.E. 2017. Groundwater Quality Modeling Using Neuro-Particle Swarm Optimization and Neuro-Differential Evolution Techniques, *Hydrology Research*, 48(6), 1508-1519.

Ehteram, M., Karami, H., Mousavi, S-F., Farzin, S., Kisi, O., Chau, K-W. 2017. Evaluation of contemporary evolutionary algorithms for optimization in reservoir operation and water supply, *Journal of Water Supply: Research and Technology - AQUA*, 67(1), jws2017109, DOI: 10.2166/aqua.2017.109.

Kisi, O., Parmar, K., Soni, K., Demir, V. 2017. Modeling of Air Pollutants using Least Square Support Vector Regression, 1 Multivariate Adaptive Regression Spline and M5 Model Tree Models, *Air Quality, Atmosphere & Health*, 10(7), 873-883.

Kiafar, H., Babazadeh, H., Marti, P., Kisi, O., Landeras, G., Karimi, S., Shiri, J. 2017.Evaluating the generalizability of GEP models for estimating reference evapotranspiration in distant humid and arid locations, *Theor Appl Climatol*, 130, 377-389.

Izady, A., Sanikhani, H., Abdalla, O., Kisi, O. 2017. Impurity effect on clear water evaporation: toward modeling wastewater evaporation using ANN, ANFIS-SC and GEP techniques, *Hydrol.Sci. J.*, 62(11), 1856-1866.

Kisi, O., Sanikhani, H., Cobaner, M. 2017. Soil temperature modeling at different depths using neuro-fuzzy, neural network, and genetic programming techniques, *Theoretical and Applied Climatology*, 129(3-4), 833-848.

Ehteram, M., Mousavi, S-F, Karami, H., *Farzin, S.,* Emami, M., Othman, F.B., Amini, Z., Kisi, O., El-Shafie, A. 2017. Fast convergence optimization model for single and multi-purpose reservoirs using hybrid algorithm, *Advanced Engineering Informatics*, 32, 287-298.

Heddam, S., Kisi, O. 2017. Extreme Learning Machines: A New Approach for Modelling Dissolved Oxygen (DO) Concentration with and without Water Quality Variables as Predictors, *Environmental Science and Pollution Research*, 24, 16702-16724.

Ay, M., Kisi, O. 2017. Estimation of dissolved oxygen by using neural networks and neuro fuzzy computing techniques, *KSCE Journal of Civil Engineering*, 21(5), 1631-1639.

Keshtegar, B., Kisi, O. 2017. M5 model tree and Monte Carlo simulation for efficient structural reliability analysis, *Applied Mathematical Modelling*, 48, 899-910.

Shiri, J., Keshavarzi, A., Kisi, O., Karimi, S., Iturraran-Viveros, U. 2017. Modeling soil bulk density through a complete data scanning procedure: Heuristic alternatives, *J. of Hydrolog*, 549, 592-602.

Tosunoglu, F., Kisi, O. 2017. Trend analysis of maximum hydrologic drought variables using Mann- Kendall and Şen's innovative trend method, *River Research and Applications*, 33(4), 597-610.

Wang, L., Niu, Z., Kisi, O., Li, C., Yu, D. 2017. Pan evaporation modeling using four different heuristic approaches, *Computers and Electronics in Agriculture*, *140, 203-213*.

Karimi, S., Kisi, O., Kim, S., Shiri, J. 2017. Modeling daily reference evapotranspiration in humid locationsof South Korea using local and cross-station data management scenarios, *International J. of Climatology*, 37, 3238-3246.

Gorgij, A.D., Kisi, O., Moghaddam, A.A. 2017. Groundwater budget forecasting using hybrid neuro-wavelet-genetic programming: Azarshahr Plain, East Azerbaijan, Iran, *Hydrology Research*, 48(2), 455-467.

Alizadeh, M.J., Kavianpour, M.R., Kisi, O., Nourani, V. 2017. A new approach for simulating and forecasting the rainfall-runoff process within the next two months, *J. of Hydrolog*, 548, 588-597.

Ay, M., Kisi, O. 2017. Kızılırmak Nehri Akımlarının Eğilim (Trend) Analizi, *IMO Teknik Dergi*, 28(2), 7779-7794.

Kisi, O., Alizamir, M., Zounemat-Kermani, M. 2017. Modeling groundwater fluctuations by three different evolutionary neural network techniques using hydroclimatic data, *Natural Hazards*, 87(1), 367-381.

Ravansalar, M., Rajaee, T., Kisi, O. 2017. Wavelet-linear genetic programming: A new approach for modelling monthly streamflow, *J. of Hydrolog*, 549, 461-475.

Gorgij, A.D., Kisi, O., Moghaddam, A.A., Taghipour, A. 2017. Groundwater Quality Ranking for Drinking Purposes, Using the Entropy Method and Spatial Autocorrelation Index, *Environmental Earth Sciences*, 76: 269. doi:10.1007/s12665-017-6589-6.

Naghibi, S.A., Moghaddam, D.D., Kalantar, B., Pradhan, B., Kisi, O. 2017. A Comparative Assessment of GIS- Based Data Mining Models and a Novel Ensemble Model in Groundwater Well Potential Mapping, *J. of Hydrolog*, 548, 471-483.

Shiri, J., Keshavarzi, A., Kisi, O., Iturraran-Viveros, U., Bagherzadeh, A., Mousavi, R., Karimi, S. 2017.Modeling Soil Cation Exchange Capacity using Soil parameters: Assessing the Heuristic Models, *Computers and Electronics in Agriculture*, 135, 242-251.

Mir, A., Piri, J. Kisi, O. 2017. Spatial monitoring and zoning water quality of Sistan River in the wet and dry years using GIS and Geostatistics, *Computers and Electronics in Agriculture*, 135, 38–50.

Kim, S., Kisi, O., Seo, Y., Singh, V.P., Lee, C-J. 2017. Assessment of rainfall aggregation and disaggregation using data-driven models and wavelet decomposition, *Hydrology Research*, 48(1), 99-116.

Kisi, O., Ozkan, C. 2017. A new approach for modeling sediment-discharge relationship: Local weighted linear regression, *Water Resources Management*, 31, 1-23.

Adnan, R.M., Yuan, X., Kisi, O., Anam, R. 2017.Improving accuracy of river flow forecasting using LSSVR with gravitational search algorithm, *Advances in Meteorology*, Article ID 2391621, 23 pages, https://doi.org/10.1155/2017/2391621.

Wang, L., Kisi, O., Zounemat-Kermani, M., Li, H. 2017. Pan evaporation modeling using six different heuristic computing methods in different climates of China, *J. of Hydrolog*, 544, 407-427.

Deo, R.C., Kisi, O., Singh, V.P. 2017. Drought forecasting in eastern Australia using multivariate adaptive regression spline, least square support vector machine and M5Tree model, *Atmospheric Research*, 184, 149-175.

Gerger, R., Kisi, O., Dursun, O.F., Emiroglu, M.E. 2016. Applicability of several soft computing approaches in modeling oxygen transfer efficiency at baffled chutes, *J. of Irrigation and Drainage Engineering*, 143(5), 04016085.

Kisi O. 2016. Suspended sediment concentration estimation by using fuzzy genetic approach, Kisi, O.: A new approach for modeling suspended sediment: Evolutionary fuzzy approach, *Hydrol. Earth Syst. Sci. Discuss.*, doi:10.5194/hess-2016-213.

Keshtegar, B., Kisi, O. 2016. A nonlinear modelling-based high-order response surface method for predicting monthly pan evaporations, *Hydrology and Earth System Sciences Discussions*, DOI: 10.5194/hess-2016-191.

Mansouri, I., Lim, J.C., Kisi, O., Ozbakkaloglu, T. 2016. Predicting behavior of FRP-confined concrete using neuro fuzzy, neural network, multivariate adaptive regression splines and M5 model tree techniques, *Materials and Structures*, 49(10), 4319-4334.

Yaseen, Z.M., Kisi, O., Demir, V. 2016. Enhancing streamflow forecasting and predicting using periodicity data component: Application of artificial intelligence, *Water Resources Management*, 30(12), 4125-4151.

Kisi, O., Zounemat-Kermani, M. 2016. Suspended Sediment Modeling Using Neuro-Fuzzy Embedded Fuzzy c-Means Clustering Technique, *Water Resources Management*, 30(11), 3979-3994.

Yaseen, Z.M., Jaafar, O., Deo, R.C., Kisi, O., Adamowski, J., Quilty, J., Elshafie, A. 2016. Stream-flow forecasting using extreme learning machines: A case study in a semi-arid region in Iraq, *J. of Hydrolog*, 542, 603-614.

Shiri, J., Shamshirband, S., Kisi, O. Karimi, S., Bateni, S.M., Nezhad, S.H.H., Hashemi, A. 2016. Prediction of Water-Level in the Urmia Lake Using the Extreme Learning Machine Approach, *Water Resources Management*, 30(14), 5217-5229.

Tosunoglu, F., Kisi, O. 2016. Joint modelling of annual maximum drought severity and corresponding duration, *J. of Hydrolog*, 543, 406-422.

Mansouri, I., Safa, M., Ibrahim, Z., Kisi, O., Tahir, M.M., Baharom, S., Azimi, M. 2016. Strength prediction of rotary brace damper using MLR and MARS, Structural Engineering and Mechanics, 60(3), 471-488.

Genc, O., Kisi, O., Ardiclioglu, M. 2016. Modeling shear stress distribution in natural streams by neural networks and neuro-fuzzy systems, *Geofizika*, 33(2), 137-156.

Mansouri, I., Hu, J.W., Kisi, O. 2016. Novel predictive model of the debonding strength for masonry members, *Applied Sciences*, 6, 337, doi:10.3390/app6110337.

Kisi, O., Kilic, Y. 2016. An investigation on generalization ability of artificial neural networks and M5 model tree in modeling reference evapotranspiration, *Theoretical and Applied Climatology*, 126, 413-425.

Samadianfard, S., Kazemi, H., Kisi, O., Liu, W-C, Chen, W-B. 2016. Water temperature prediction in a subtropical subalpine lake using soft computing techniques, *Earth Sciences Research Journal*, 20(2), D1-D11.

Seo, Y., Kim, S., Kisi, O., Singh, V.P., Parasuraman, K. 2016. River Stage Forecasting Using Wavelet Packet Decomposition and Machine Learning Models, *Water Resources Management*, 30(11), 4011-4035.

Trajkovic, S., Kisi, O., Markus, M., **Tabari, H., Gocic, M., Shamshirband, S.** 2016.Hydrological Hazards in a Changing Environment: Early Warning, Forecasting, and Impact Assessment, *Advances in Meteorology*, Volume 2016, Article ID 2752091, 2 pages,http://dx.doi.org/10.1155/2016/2752091.

Keshtegar, B., Piri, J., Kisi, O. 2016.A Nonlinear Mathematical Modeling of Daily Pan Evaporation Based on Conjugate Gradient Method, *Computers and Electronics in Agriculture*, 127, 120-130.

Choubin, B., Khalighi-Sigaroodi, S., Malekian, A., Kisi, O. 2016. Multiple linear regression, multi-layer perceptron network and adaptive neuro-fuzzy inference system for the prediction of precipitation based on large-scale climate signals, *Hydrol. Sci. J.*, 61(6), 1001–1009.

Wang, L., Kisi, O., Zounemat-Kermani, M., Salazar, G.A., Zhu, Z., Gong, W. 2016. Solar radiation prediction using different techniques: model evaluation and comparison, *Renewable & Sustainable Energy Reviews*, 61, 384-397.

Kisi, O. 2016.Modeling reference evapotranspiration using three different heuristic regression approaches, *Agricultural Water Management*, 169, 162-172.

Zounemat-Kermani, M., Kisi, O., Adamowski, J., Ramezani-Charmahineh, A. 2016.Evaluation of data driven models for river suspended sediment concentration modeling, *J. of Hydrolog*, 535, 457-472.

Kisi, O., Genc, O., Dinc, S., Zounemat-Kermani, M. 2016. Daily pan evaporation modeling using Chi-squared automatic interaction detector, neural networks, classification and regression tree, *Computers and Electronics in Agriculture*, 122, 112-117.

Demir, V., Kisi, O. 2016. Flood hazard mapping by using geographic information system and hydraulic model: Mert River, Samsun, Turkey, *Advances in Meteorology*, Volume 2016, Article ID: 4891015, 9 pages,http://dx.doi.org/10.1155/2016/4891015.

Wang, L., Kisi, O., Zounemat-Kermani, M., Hu, B., Gong, W. 2016. Modeling and comparison of hourly Photosynthetically Active Radiation in different ecosystems, *Renewable & Sustainable Energy Reviews*, 56, 436-453.

Shafaei, M., Kisi, O. 2016. Lake Level Forecasting Using Wavelet-SVR, Wavelet-ANFIS and Wavelet-ARMA Conjunction Models, *Water Resources Management*, 30, 79-97.

Kisi, O., Parmar, K.S. 2016. Application of Least Square Support Vector Machine and Multivariate Adaptive Regression Spline Models in Long Term Prediction of River Water Pollution *J. of Hydrolog*, 534, 104–112.

Mirzavand, M., Khoshnevisan, B., Shamahirband, S., Kisi, O., Ahmad, R.B., Akib, S. 2015. Evaluating groundwater level fluctuation by support vector regression and neuro-fuzzy methods: a comparative study, *Natural Hazards*, DOI 10.1007/s11069-015-1602-4.

Aydin, K., Kisi, O. 2015. Damage detection in structural beam elements using hybrid neuro fuzzy systems, *Smart Structures and Systems*, 16(6), 1107-1132.

Shiri, J., Sadraddini, A.A., Nazemi, A.H., Marti, P., Fard, A.F., Kisi, O., Landeras, G. 2015. Independent testing for assessing the calibration of the Hargreaves-Samani equation: New heuristic alternatives for Iran, *Computers and Electronics in Agriculture*, 117, 70-80.

Kisi, O., Sanikhani, H. 2015. Prediction of long-term monthly precipitation using several soft computing methods without climatic data, *International J. of Climatology*, 35(14), 4139-4150.

Kisi, O., Sanikhani, H. 2015. Modeling long-term monthly temperatures by several data-driven methods using geographical inputs, *International J. of Climatology*, 35(13), 3834-3846.

Kisi O. 2015. Streamflow forecasting and estimation using least square support vector regression and adaptive neuro-fuzzy embedded fuzzy c-means clustering, *Water Resources Management*, 29, 5109-5127.

Kisi, O., Shiri, J., Karimi, S., Shamshirband, S., Motamedi, S., Petkovic, D., Hashim, R. 2015. A survey of water level fluctuation predicting in Urmia Lake using support vector machine with firefly algorithm, *Applied Mathematics and Computation*, 270, 731-743.

Unes, F., Demirci, M., Kisi, O. 2015. Prediction of Millers Ferry Dam Reservoir level in USA using artificial neural network, *Periodica Polytechnica Civil Engineering*, 59(3), 309-318.

Latifoglu, L., Kisi, O., Latifoglu, F. 2015. Importance of hybrid models for forecasting of hyrdrological variable, *Neural Computing and Applications*, 26(7), 1669-1680.

Aydin, K., Kisi, O. 2015. Applicability of fuzzy genetic system for crack diagnosis in Timoshenko beams, *ASCE J. of Comp. in Civ. Eng.*, 29(5),04014073.

Kisi, O. 2015. Pan evaporation modeling using least square support vector machine, multivariate adaptive regression splines and M5 model tree, *J. of Hydrology*, 528, 312–320.

Kim, S., Shiri, J., Singh, V.P., Kisi, O., Landeras, G. 2015. Predicting daily pan evaporation by soft computing models with limited climatic data, *Hydrol. Sci. J.*, 60(6), 1120-1136.

Kisi, O., Tombul, M., Zounemat-Kermani, M.2015. Modeling soil temperatures at different depths by using three different neural computing techniques, *Theoretical and Applied Climatology*, 121, 377-387.

Kisi, O. 2015. An innovative method for trend analysis of monthly pan evaporations, *J. of Hydrology*, 527, 1123-1129.

Unes, F., Joksimovic, D., Kisi, O. 2015. Plunging Flow Depth Estimation in a Stratified Dam Reservoir Using Neuro-Fuzzy Technique, *Water Resources Management*, 29, 3055-3077.

Kisi, O., Sanikhani, H., Zounemat-Kermani, M., Niazi, F. 2015. Long-term monthly evapotranspiration modeling by several data-driven methods without climatic data, *Computers and Electronics in Agriculture*, 115, 66-77.

Abdullah, S.S., Malek, M.A., Abdullah, N.S., Kisi, O., Yap, K.S. 2015. Extreme Learning Machines: A new approach for prediction of reference evapotranspiration, *J. of Hydrolog*, 527, 184-195.

Aydin, K., Kisi, O. 2015. Damage diagnosis in beam-like structures by artificial neural networks, *J. of Civil Eng. and Management*, 21(5), 591-604.

Shiri, J., Marti, P., Nazemi, A.H., Sadraddini, A.A., Kisi, O., Landeras, G., Fard, A.F. 2015. Local vs. external training of neuro-fuzzy and neural networks models for estimating reference evapotranspiration assessed through k-fold testing, *Hydrology Research*, 46(1), 72-88.

Ay, M., Kisi, O. 2015. Investigation of trend analysis of monthly total precipitation by an innovative method, *Theoretical and Applied Climatology*, 120, 617-629. https://doi.org/10.1007/s00704-014-1198-8.

Zounemat-Kermani, M., Kisi, O. 2015. Time series analysis on marine wind-wave characteristics using chaos theory, *Ocean Engineering*, 100, 46-53.

Kashani, M.H., Daneshfaraz, R., Ghorbani, M.A., Najafi, M.R., Kisi, O. 2015. Comparison of different methods for developing a stage–discharge curve of the Kizilirmak River, *J. of Flood Risk Management*, 8, 71-86.

Sanikhani, H., Kisi, O., Kifar, H., Ghavidel, S.Z.Z. 2015. Comparison of different data-driven approaches for modeling lake level fluctuations: the case of Manyas and Tuz lakes (Turkey), *Water Resources Management*, 29(5), 1557-1574.

Piri, J., Kisi, O. 2015. Modeling solar radiation reached to the Earth using ANFIS, NN-ARX, and Empirical models (Case studies: Zahedan and Bojnurd Stations), *Journal of Atmospheric and Solar-Terrestrial Physics*, 123, 39–47.

Seo, Y., Kim, S., Kisi, O., Singh, V.P. 2015. Daily water level forecasting using wavelet decomposition and artificial intelligence techniques, *J. of Hydrology*, 520, 224-243.

Mansouri, I., Kisi, O. 2015. Prediction of debonding strength of retrofitted masonry elements using neuro fuzzy and neural network approaches, *Composites Part B*, 70, 247-255.

Samadianfard, S., Sattari, M.T., Kisi, O., Kazemi, H. 2014. Determining flow friction factor in irrigation pipes using data mining and artificial intelligence approaches, *Applied Artificial Intelligence*, 28, 793-813.

Cobaner, M., Citakoglu, H., Kisi, O., Haktanir, T. 2014. Estimation of mean monthly air temperatures in Turkey, *Computers and Electronics in Agriculture*, 109, 71-79.

Shiri, J., Nazemi, A.H., Sadraddini, A.A., Landeras, G., Kisi, O., Fard, A.F., Marti, P. 2014. Comparison of heuristic and empirical approaches for estimating reference evapotranspiration from limited inputs in Iran, *Computers and Electronics in Agriculture*, 108, 230-241.

Aytek, A., Kisi, O., Guven, A. 2014. A genetic programming technique for lake level modeling, *Hydrology Research*, 45(4-5), 529-539.

Kisi, O., Latifoglu, L., Latifoglu, F. 2014. Investigation of empirical mode decomposition in forecasting of hydrological time series, *Water Resources Management*, 28(12), 4045-4057.

Genc, O., Kisi, O., Ardiclioglu, M. 2014. Determination of mean velocity and discharge in natural streams using neuro-fuzzy and neural network approaches, *Water Resources Management*, 28, 2387-2400.

Kisi, O., Ay, M. 2014. Comparison of Mann-Kendall and innovative trend method for water quality parameters of the Kizilirmak River, Turkey, *J. of Hydrology*, 513, 362-375.

Kisi, O., Zounemat-Kermani, M. 2014.Comparison of two different adaptive neuro-fuzzy inference systems in modelling daily reference evapotranspiration, *Water Resources Management*, 28, 2655-2675.

Nourani, V., Baghanam, A.H., Adamowski, J., Kisi, O. 2014. Applications of hybrid wavelet-Artificial Intelligence models in hydrology: A review, *J. of Hydrology*, 514, 358-377.

Shiri, J., Kim, S., Kisi, O. 2014. Estimation of daily dew point temperature using genetic programming and neural networks approaches, *Hydrology Research*, 45(2), 165-181.

Aydin, K., Kisi, O. 2014. Damage detection in Timoshenko beam structures by multi-layer perceptron and radial basis function networks, *Neural Computing and Applications*, 24, 583-597.

Kisi, O., Shiri, J. 2014. Prediction of long-term monthly air temperature using geographical inputs, *InternationalJ. of Climatology*, 34(1), 179-186.

Toprak, Z.F., Hamidi, N., Kisi, O, Gerger, R. 2014. Modeling Dimensionless Longitudinal Dispersion Coefficient in Natural Streams Using Artificial Intelligence Methods, *KSCE Journal of Civil Engineering*, 18(2), 718-730.

Ay, M., Kisi, O. 2014. Modelling of chemical oxygen demand by using ANNs, ANFIS and k-means clustering techniques, *J. of Hydrology*, 511, 279-289.

Kisi, O. 2014. Modeling solar radiation of Mediterranean region of Anatolia in Turkey by using fuzzy genetic approach, *Energy,* 64(1), 429-436.

Kisi, O. 2014. Comparison of different empirical methods for estimating daily reference evapotranspiration in Mediterranean climate, *ASCE J. of Irr. and Drain. Eng.*, 140(1), 1-8.

Citakoglu, H., Cobaner, M., Haktanir, T., Kisi, O. 2014. Estimation of Monthly Mean Reference Evapotranspiration in Turkey, *Water Resources Management*, 28, 99-113.

Shiri, J., Sadraddini, A.A., Nazemi, A.H., Kisi, O., Landeras, G., Fard, A.F., Marti, P. 2014. Generalizability of Gene Expression Programming-based models for Estimating Daily Reference Evapotranspiraton in Coastal stations of Iran, *J. of Hydrology*, 508, 1-11.

Kisi, O. & Aytek, A.,2013. Explicit neural network in suspended sediment load estimation, *Neural Network World*, 23(6), 587-607.

Kisi, O., Akbari, N., Pour, M.S., Hashemi, A., Shiri, J. 2013. Modeling of dissolved oxygen in river water using artificial intelligence techniques, *J. of Environmental Informatics*, 22(2), 92-101.

Shiri, J., Nazemi, A.H., Sadraddini, A.A., Kisi, O., Landeras, G., Fard, A.F., Marti, P.2013. Evaluation of different data management scenarios for estimating daily reference evapotranspiration, *Hydrology Research*, 44(6), 1058-1070.

Zounemat-kermani, M., Kisi, O., Rajaee, T. 2013. Performance of Radial Basis and LM-Feed Forward Artificial Neural Networks for Predicting Daily Watershed Runoff, *Applied Soft Computing*, 13(12), 4633-4464.

Kisi, O., Kim, S., Shiri, J. 2013. Estimation of dew point temperature using neuro-fuzzy and neural network techniques, *Theoretical and Applied Climatology*, 114, 365-373.

Kisi, O., Bilhan, O., Emiroglu, M.E. 2013. Anfis to estimate discharge capacity of rectangular side weir, *Water Management*, 166, WM9, 479-487.

Kisi, O. 2013. Applicability of Mamdani and Sugeno fuzzy genetic approaches for modeling reference evapotranspiration, *J. of Hydrology*, 504, 160-170.

Guven, A., Kisi, O.2013. Monthly pan evaporation modeling using linear genetic programming, *J. of Hydrology*, 503, 178-185.

Samadianfard, S., Deleare-hasannia, D., Kisi, O., Agirre-Basurko, E. 2013. Comparative analysis of ozone level prediction models using gene expression programming and multiple linear regression, *GEOFIZIKA*, 30(1), 43-74.

Kisi, O., Cengiz, T.M. 2013. Fuzzy genetic approach for estimating reference evapotranspiration of Turkey: Mediterranean region, *Water Resources Management*, 27(10), 3541-3553.

Kisi, O. 2013. Evolutionary neural networks for monthly pan evaporation modeling, *J. of Hydrology*, 498, 36-45.

Kisi, O.2013. Least squares support vector machine for modeling daily reference evapotranspiration, *Irrigation Science*, 31(4), 611-619.

Kim, S., Shiri, J., Kisi, O. and Singh, V.P. 2013. Estimating Daily Pan Evaporation Using DifferentData-Driven Methods and Lag-Time Patterns, *Water Resources Management*, 27(7), 2267-2286.

Shiri, J., Kisi, O., Yoon, H., Lee, K-K. 2013. Predicting groundwater level fluctuations with meteorologicaleffect implications - A comparative study among soft computing techniques, *Computers & Geosciences*, 56, 32-44.

Emiroglu, M.E., Kisi, O. 2013. Prediction of discharge coefficient for trapezoidal labyrinth side weir using a neuro-fuzzy approach, *Water Resources Management*, 27(5), 1473-1488.

Shiri, J., Nazemi, A.H., Sadraddini, A.A., Landeras, G., Kisi, O., Fard, A.F., Marti, P.2013. Global cross-station assessment of neuro-fuzzy models for estimating daily reference evapotranspiration, *J. of Hydrology*, 480, 46-57.

Kisi, O., Tombul, M. 2013. Modeling monthly pan evaporations using fuzzy genetic approach, *J. of Hydrology*, 477, 203-212.

Baba, A.P-A, Shiri, J., Kisi, O., Fard, A.F., Kim, S., Amini, R.2013.Estimating daily reference evapotranspiration using available and estimated climatic data by adaptive neuro-fuzzy inference system (ANFIS) and artificial neural network (ANN), *Hydrology Research*, 44(1), 131-146.

Karimi, S., Kisi, O., Shiri, J., Makarynskyy, O. 2013. Neuro-fuzzy and neural network techniques for forecasting sea levelin Darwin Harbor, Australia, *Computers & Geosciences*, 52, 50–59.

Kisi, O., Shiri, J., Tombul, M. 2013. Modeling Rainfall-runoff process using soft computing techniques, *Computers & Geosciences*, 51, 108-117.

Samadianfard, S., Sadraddini, A.A., Nazemi, A.H., Provenzano, G., Kisi, O. 2012.Estimating Soil Wetting Patterns for Drip Irrigation Using Genetic Programming, *Spanish Journal of Agricultural Research*, 10(4), 1155-1166.

Sanikhani, H., Kisi, O., Nikpour, M.R., Dinpashoh, Y. 2012. Estimation of Daily Pan Evaporation Using Two Different Adaptive Neuro-Fuzzy Computing Techniques, *Water Resources Management*, 26(15), 4347-4365.

Shiri, J., Kisi, O. 2012. Estimation of daily suspended sediment load by using wavelet conjunction models, *ASCE J. of Hydrol. Eng.*, 17(9), 986-1000.

Kim, S., Shiri, J., Kisi, O. 2012. Pan Evaporation Modeling using Neural Computing Approach for Different Climatic Zones, *Water Resources Management*, 26(11), 3231-3249.

Kisi, O. 2012. Modeling discharge-sediment relationship using least square support vector machine, *J. of Hydrology* 456-457, 110-120.

Landeras, G., Lopez, J.J., Kisi, O., Shiri, J. 2012. Comparison of gene expression programming with neuro-fuzzy and neural network computing techniques in estimating daily incoming solar radiation in the Basque Country (Northern Spain), *Energy Conversion and Management*, 62, 1-13.

Kisi, O., Dailr, A.H., Cimen, M., Shiri, J. 2012. Suspended sediment modeling using genetic programming and soft computing techniques, *J. of Hydrology*, 450-451, 48-58.

Ay, M., Kisi, O. 2012. Modeling of dissolved oxygen concentration using different neural network techniques in Foundation Creek, El Paso County, Colorado, USA, *ASCE J. of Environmental Engineering*, 138(6), 654-662.

Tabari, H., Kisi, O., Ezani, A., Talaee, P.H. 2012. SVM, ANFIS, regression and climate based models for reference evapotranspiration modeling using limited climatic data in a semi-arid highland environment, *J. of Hydrology*, 444-445, 78-89.

Kisi, O., Ali-Baba, A.P., Shiri, J. 2012. Generalized neuro-fuzzy models for estimating daily evaporation values from weather data, *ASCE J. of Irr. and Drain. Eng.*, 138(4), 349-362.

Kisi, O., Shiri, O. 2012.River suspended sediment estimation by climatic variables implication: Comparative study among soft computing technique, *Computers & Geosciences*, 43, 73-82.

Sanikhani, H., Kisi, O. 2012. River flow estimation and forecasting by using two different adaptive neuro-fuzzy approaches, *Water Resources Management*, 26(6), 1715-1729.

Kisi, O. &Cimen, M. 2012. Precipitation forecasting by using wavelet-support vector machine conjunction model, *Engineering Applications of Artificial Intelligence,*25(4), 783-792.

Kisi, O., Shiri, J., Nikufar, B. 2012. Forecasting daily lake levels using artificial intelligence approaches, *Computers & Geosciences*, 41, 169-180.

Kisi, O., Ozkan, C., Akay, B. 2012. Modeling discharge-sediment relationship using neural networks with artificial bee colony algorithm, *J. of Hydrology*, 428-429, 94-103.

Kisi, O., Shiri, J. 2012. Wavelet and neuro-fuzzy conjunction model for predicting water table depth fluctuations, *Hydrology Research*, 43(3), 286-300.

Kisi, O, Nia, A.M., Gosheh, M.G., Tajabadi, M.R.J. 2012. Intermittent streamflow forecasting by using several data driven techniques, *Water Resources Management*, 26(2), 457–474.

Shiri, J., Kisi, O., Landeras, G., Nazemi, A.H., Stuyt, L.C.P.M. 2012. Daily reference evapotranspiration modeling by using genetic programming approach in the Basque Country (Northern Spain), *J. of Hydrology*, 414-415, 302-316.

Khatibi, R., Sivakumar, B., Ghorbani, M.A., Kisi, O, Kocak, K., Zadeh, D.F. 2012. Investigating chaos in river stage and discharge time series, *J. of Hydrology*, 414-415, 108-117.

Kisi, O., Emiroglu, M.E., Bilhan, O., Guven, A. 2012. Prediction of lateral outflow over triangular labyrinth side weirs under subcritical conditions using soft computing approaches, *Expert System with Applications,* 39(3), 3454-3460.

Shiri, J., Makarynskyy, O., Kisi, O., Dierickx, W., Fard, A.F. 2011. Prediction of short-term operational water levels using an adaptive neuro-fuzzy inference system, *ASCE J. of Waterway, Port, Coastal and Ocean Engineering*, 137(6), 344-354.

Kisi, O. 2011. A combined generalized regression neural networkwavelet model for monthly streamflow prediction, *KSCE Journal of Civil Engineering*, 15(8), 1469-1479.

Kisi, O.2011. Modeling reference evapotranspiration using evolutionary neural networks, *ASCE J. of Irr. and Drain. Eng.*, 137(10), 636-643.

Ozkan, C, Kisi, O, Akay, B.2011. Neural networks with artificial bee colony algorithm for modeling daily reference evapotranspirations, *Irrigation Science*, 29(6), 431-441.

Kisi, O., Shiri, J. 2011.Precipitation forecasting using wavelet-genetic programming and wavelet-neuro-fuzzy conjunction models, *Water Resources Management*, 25(13), 3135-3152.

Shiri, J., Kisi, O.2011. Comparison of genetic programming with neuro-fuzzy systems for predicting short-term water table depth fluctuations, *Computers & Geosciences*, 37(10), 1692-1701.

Rajaee, T., Nourani, V., Mirbagheri, S.A., Vafaee, F., Kisi, O.2011. River suspended sediment load prediction: use of ANN and wavelet conjunction model, *ASCE J. of Hydrol. Eng.*,16(8), 613-627.

Kisi, O. & Partal, T.2011. Wavelet and neuro-fuzzy conjunction model for streamflow forecasting, *Hydrology Research*, 42(6), 447-456.

Shiri, J., Kisi, O.2011. Applicationof artificial intelligence to estimate daily pan evaporation using availableand estimated climatic data in the Khozestan Province (South West Iran), *ASCE J. of Irr. and Drain. Eng.*, 137(7), 412-425.

Khatibi, R., Ghorbani, M.A., Kashani, M.H., Kisi, O.2011. Comparison of Three Artificial Intelligence Techniques for Discharge Routing, *J. of Hydrology*, 403(3-4), 201-212.

Hamid, Z.A., Moghaddamnia, A., Maryam, B.V., Adel, G., Kisi, O.2011. Performance Evaluation of ANN and ANFIS Models for Estimating Garlic Crop Evapotranspiration, *ASCE J. of Irr. and Drain. Eng.*, 137(5), 280-286.

Bilhan, O., Kisi, O., Emiroglu, M.E. 2011. Use of Artificial Neural Networks for Prediction of Discharge Coefficient of Triangular Labyrinth Side Weir in Curved Channels, *Advances in Engineering Software*, 42(4), 208-214.

Nourani, V., Kisi, O., Komasi, M. 2011. Two hybrid artificial intelligence approaches for black–box modeling of rainfall–runoff process, *J. of Hydrology*, 402(1-2), 41-59.

Kisi, O. 2011. Evapotranspiration modeling using a wavelet regression model, *Irrigation Science*, 29(3), 241-252.

Kisi, O., Cimen, M. 2011. A wavelet-support vector machine conjunction model for monthly streamflow forecasting, *J. of Hydrology*, 399(1-2), 132-140.

Guven, A., Kisi, O. 2011. Daily pan evaporation modeling using linear genetic programming technique, *Irrigation Science*, 29(2), 135-145.

Guven A., Kisi, O. 2011. Estimation of Suspended Sediment Yield in Natural Rivers Using Machine-coded Linear Genetic Programming, *Water Resources Management*, 25(2), 691-704.

Kisi, O. 2011. Wavelet regression model as an alternative to neural networks for river stage forecasting, *Water Resources Management*, 25(2), 579-600.

Emiroglu, M.E., Bilhan, O., Kisi, O. 2011. Neural networks for estimation of discharge capacity of triangular labyrinth side-weir located on a straight channel, *Expert System with Applications*, 38(1), 867-874.

Haktanir, T., **Cobaner, M., Kisi, O.** 2010. Frequency analyses of annual extreme rainfall series from 5 minutes to 24 hours, *Hydrological Processes*, 24, 3574-3588.

Shiri, J., Kisi, O. 2010. Short-term and long-term streamflow forecasting using a wavelet and neuro-fuzzy conjunction model, *J. of Hydrology*, 394(3-4), 486-493.

Kisi, O., Guven, A. 2010. Evapotranspiration modeling using linear genetic programming technique, *ASCE J. of Irr. and Drain. Eng.*, 136(10), 715-723.

Kisi, O. 2010. Daily suspended sediment estimation using neuro-wavelet models, *International Journal of Earth Sciences*, 99(6), 1471-1482.

Kisi, O., Guven, A. 2010. A machine code-based genetic programming for suspended sediment concentration estimation, *Advances in Engineering Software*, 41(7-8), 939-945.

Kisi, O. 2010. Wavelet regression model for short-term streamflow forecasting, *J. of Hydrology*, 389(3-4), 344-353.

Ghorbani, M.A., Kisi, O, Kocak, K. (2010). A probe into the chaotic nature of daily streamflow time series by correlation dimension and largest Lyapunov methods, *Applied Mathematical Modelling*, 34(12), 4050-4057.

Kisi, O. (2010). River suspended sediment concentration modeling using a neural differential evolution approach, *J. of Hydrology*, 389(1-2), 227-235.

Bilhan, O., Emiroglu, M.E., Kisi, O., 2010. Application of two different neural network techniques to lateral outflow over rectangular side weirs located on a straight channel, *Advances in Engineering Software*, 41(6), 831-837.

Kisi, O., 2010. Fuzzy genetic approach for modeling reference evapotranspiration, *ASCE J. of Irr. and Drain. Eng.*, 136(3), 175-183.

Emiroglu, M.E., Kisi, O., Bilhan, O., 2010. Predicting discharge capacity of triangular labyrinth side weir located on a straight channel by using an adaptive neuro-fuzzy technique, *Advances in Engineering Software*, 41(2), 154-160.

Kisi, O., 2009. Wavelet regression model as an alternative to neural networks for monthly streamflow forecasting, *Hydrological Processes*, 23(25), 3583-3597.

Kocabas, F., Kisi, O. & Ardiclioglu, M., 2009. An artificial neural network model for prediction of critical submergence for an intake in a stratified fluid media, *Civil Engineering & Environmental Systems*, 26(4), 367-375.

Cimen, M. & Kisi, O., 2009. Comparison of two different data driven techniques in modelingsurfacewater level fluctuations of Lake Van, Turkey, *J. of Hydrology,* 378(3-4), 253-262.

Kisi, O. & Cimen, M., 2009. Evapotranspiration modelling using support vector machines, *Hydrol. Sci. J.*, 54(5), 918-928.

Mamak, M., Seckin, G., Cobaner, M. & Kisi, O., 2009. Bridge afflux analysis through arched bridge constrictions using artificial intelligence methods, *Civil Engineering & Environmental Systems*, 26(3), 279-793.

Kisi, O., 2009. Neural networks and wavelet conjunction model for intermittent streamflow forecasting, *ASCE J. of Hydrol. Eng.*, 14(8), 773-782.

Kisi, O., 2009. Modelling monthly evaporation using two different neural computing techniques, *Irrigation Science*, 27(5), 417-430.

Kisi, O., 2009. Neural network and wavelet conjunction model for modeling monthly level fluctuations of Van Lake in Turkey, *Hydrological Processes*, 23(14), 2081-2092.

Kisi, O., 2009. Evolutionary fuzzy models for river suspended sediment concentration estimation, *J. of Hydrology*, 372(1-4), 68-79.

Kisi, O., Haktanir, T., Ardiclioglu, M., Ozturk, O., Yalcin, E. & Uludag, S., 2009. Adaptive neuro-fuzzy computing technique for suspended sediment estimation, *Advances in Engineering Software*, 40(6), 438-444.

Cobaner, M., Unal, B. & Kisi, O. 2009. Suspended sediment concentration estimation by an adaptive neuro-fuzzy and neural network approaches using hydro-meteorological data, *J. of Hydrology*, 367(1-2), 52-61.

Kisi, O., Cobaner, M., 2009.Modelling river stage-discharge relationship using different neural networks, *CLEAN – Soil, Air, Water,*37(2), 160-169.

Kisi, O., 2009.Daily pan evaporation modelling using multi-layer perceptrons and radial basis neural networks, *Hydrological Processes*, 23, 213-223.

Kisi, O, Yuksel, I. & Dogan, E., 2008. Modelling daily suspended sediment of rivers in Turkey using several data driven techniques, *Hydrol. Sci. J.*, 53(6), 1270-1285.

Kisi, O., 2008. Stream flow forecasting using neuro-wavelet technique, *Hydrological Processes*, 22(20), 4142-4152.

Cobaner, M., Seckin, G., Kisi, O., 2008. Initial Assessment of Bridge Backwater UsingArtificial Neural Network Approach, *Canadian J. of Civ. Eng.*, 35(5), 500-510.

Kisi, O., 2008. Constructing neural network sediment estimation models using a data-driven algorithm, *Mathematics and Computers in Simulation*, 79(1), 94-103.

Kisi, O., 2008. The potential of different ANN techniques in evapotranspiration modelling, *Hydrological Processes*, 22, 1449-2460.

Cobaner, M., Haktanir, T., Kisi, O., 2008. Prediction of hydropower energy using ANN for the feasibility of Hydropower Plant Installation to anExisting Irrigation Dam, *Water Resources Management*, 22(6), 757-774.

Altun, F., **Kisi, O., Aydin K.,** 2008. Predicting the compressive strength of steel fiber added lightweight concrete using neural network, *Computational Materials Science*, 42(2), 259-265.

Aytek, A. & Kisi, **O.,** 2008. A genetic programming approach to suspended sediment modeling, *J. of Hydrology*, 351(3-4), 288-298.

Kisi, O., 2008. River flow forecasting and estimation using different artificial neural network techniques, *Hydrology Research*, 39(1), 27–40.

Kisi, O. and Cigizoglu, H.K., 2007. Comparison of different ANN techniques in river flow prediction, *Civil Engineering & Environmental Systems*, 24(3), 211-231.

Dogan, E., Yuksel, I. & Kisi, O., 2007. Estimation of Sediment Concentration Obtained Estimation of total sediment load concentration obtained by experimental study using artificial neural networks, *Environmental Fluid Mechanics*, 7, 271-288.

Kisi, O., 2007. Streamflow forecasting using different artificial neural network algorithms, *ASCE J. of Hydrol. Eng.*, 12(5), 532-539.

Partal, T., Kisi, O., 2007. Wavelet and neuro-fuzzy conjunction model for precipitation forecasting, *J. of Hydrology*, 342(1-2), 199-212.

Kisi, O., Ozturk, O., 2007. Adaptive Neuro-Fuzzy Computing Technique for Evapotranspiration Estimation, *ASCE J. of Irr. and Drain. Eng.*,133(4), 368-379.

Kisi, O., 2007.Evapotranspiration modelling from climatic data using a neural computing technique, *Hydrological Processes*, 21, 1925-1934.

Ardiclioglu, M., Kisi, O., Haktanır, T., 2007. Suspended sediment prediction by using two different feed-forward backpropagation algorithms, *Canadian J. of Civ. Eng.*,34(1), 1-6.

Kisi, O., Karahan, M.E., Şen, Z., 2006. River suspended sediment modeling using fuzzy logic approach, *Hydrological Processes*, 20, 4351-4362.

Kisi, O., 2006. Generalized regression neural networks for evapotranspiration modelling, *Hydrol. Sci. J.*, 51(6), 2006, 1092-1105.

Kisi, O., 2006.Daily pan evaporation modelling using a neuro-fuzzy computing technique, *J. of Hydrology*, 329, 636-646.

Kisi, O., 2006. Evapotranspiration estimation using feed-forward neural networks, *Nordic Hydrology*, 37(3), 247-260.

Cigizoglu, H.K. and Kisi, O., 2006.Methods to improve the neural network performance in suspended sediment estimation, *J. of Hydrology*, 317, 221-238.

Kisi, O., Uncuoglu E., 2005. Comparison of Three Backpropagation Training Algorithms For Two Case Studies, *Indian J. of Eng. & Materials Sciences*, 12, 443-450.

Kisi, O., 2005. Suspended sediment estimation using neuro-fuzzy and neural network approaches, *Hydrol. Sci. J.*, 50(4), 683-696.

Cigizoglu, H.K. and Kisi, O., 2005. Flow Prediction by Three Back Propagation Techniques Using k-fold Partitioning of Neural Network Training Data, *Nordic Hydrology*, 36(1), 49-64.

Kisi, O., 2004. Multi-layer perceptrons with Levenberg-Marquardt training algorithm for suspended sediment concentration prediction and estimation, *Hydrol. Sci. J.*, 49(6), 1025-1040.

Kisi, O., 2004. Daily suspended sediment modelling using a fuzzy differential evolution approach, *Hydrol. Sci. J.*, 49(1), 183-197.

Kisi, O., 2004. River flow modeling using artificial neural networks, *ASCE J. of Hydrol. Eng.*, 9(1), 60-63.

Haktanır, T. and Kisi, O., 2001. Ten-stage discrete flood routing for dams having gated spillways, *ASCE J. of Hydrol. Eng.*, 6(1), p. 86.

Journal Discussions (SCI)

Kisi, O., Liepelt, K., Kulls, C. 2023. Comments on "Improving Prediction Accuracy of Hydrologic Time Series by Least-Squares Support Vector Machine Using Decomposition Reconstruction and Swarm Intelligence" Wen-jing Niu, Zhong-kai Feng, Yin-shan Xu, Bao-fei Feng, and Yao-wu Min, *Journal of Hydrologic Engineering*, 28(4), https://doi.org/10.1061/JHYEFF.HEENG-5743.

Aghelpour, P., Kisi, O., Varshavian, V. 2022. Closure to " Multivariate Drought Forecasting in Short- and Long-Term Horizons Using MSPI and Data-Driven Approaches", *Journal of Hydrologic Engineering*, 27(11), 07022006-1.

Ebtehaj, I., Bonakdari, H., Kisi, O. 2022. Discussion of "ANFIS Modeling with ICA, BBO, TLBO, and IWO Optimization Algorithms and Sensitivity Analysis for Predicting Daily Reference Evapotranspiration" by Maryam Zeinolabedini Rezaabad1; Sadegh Ghazanfari2; and Maryam Salajegheh", *Journal of Hydrologic Engineering*, 26(12), 07021006.

Ashrafzadeh, A., Kisi, O., Aghelpour, P., Biazar, A.M., Masouleh, M.A. 2021. "Closure to A comparative study of time series models, support vector machines, and GMDH in forecasting long-term evapotranspiration rates in northern Iran", *Journal of Irrigation and Drainage Engineering*, 147(6): 07021006.

Adnan, R.M., Liang, Z., Kisi, O. 2020. Letter to the Editor "Transfer learning for neural network model in chlorophyll-a dynamics prediction" by Wenchong Tian, Zhenliang Liao, and Xuan Wang, *Environmental Science and Pollution Research*, 27, 30899-30900. https://doi.org/10.1007/s11356-020-09009-3

Adnan, R.M., Liang, Z., Kisi, O. 2020. Comment on "Predicting permeability changes with injecting CO_2 in coal seams during CO_2 geological sequestration: A comparative study among six SVM-based hybrid models" *Science of the Total Environment*, 744, 139486. https://doi.org/10.1016/j.scitotenv.2020.139486

Adnan, R.M., Liang, Z., Kisi, O. 2020. Discussion of "Performance Enhancement of a Conceptual Hydrological Model by Integrating Artificial Intelligence" by Ahmet Ali Kumanlioglu and Okan Fistikoglu, *J. of Hydrologic Engineering*, 25(9), 07020018.

Zounemat-Kermani, M., Kisi, O., Piri, J., Mahdavi-Meymand, A. 2020. Closure to "Assessment of Artificial Intelligence–Based Models and Metaheuristic Algorithms in Modeling Evaporation" by Mohammad Zounemat-Kermani, Ozgur Kisi, Jamshid Piri, and Amin Mahdavi-Meymand, *J. of Hydrologic Engineering*, 25(9), 07020015.

Kisi, O. 2018. Discussion of "Combination of Computational Fluid Dynamics, Adaptive Neuro-Fuzzy Inference System, and Genetic Algorithm for Predicting Discharge Coefficient of Rectangular Side Orifices" by by Hamed Azimi, Saeid Shabanlou, Isa Ebtehaj, Hossein Bonakdari, and Saeid Kardar, *Journal of Irrigation and Drainage Engineering*, 144(5): 07018020.

Kisi, O. 2017. Discussion of "Prediction of Daily Dewpoint Temperature Using a Model Combining the Support Vector Machine with Firefly Algorithm" by Eiman Tamah Al-Sammari, Kasra Mohammadi, Afram Keivani, Siti Hafizah Ab Hamid, Shatirah Akib, Shahaboddin Shamshirband, and Dalibor Petkovic, *J. of Irrigation and Drainage Engineering*, 143(11), 07017016.

Kisi, O. 2017. Discussion of "Prediction of Discharge Capacity over Two-Cycle Labyrinth Side Weir Using ANFIS" by M. Cihan Aydin and Korhan Kayisli, *J. of Irrigation and Drainage Engineering*, 143(7), 07017009.

Kisi, O. 2017. Discussion of "Estimation of Furrow Irrigation Sediment Loss Using an Artificial Neural Network" by Bradley A. King, P.E.; David L. Bjorneberg, P.E.; Thomas J. Trout, P.E.; Luciano Mateos, Aff. M. ASCE; Danielle F. Araujo; and Raimundo N. Costa, *J. of Irrigation and Drainage Engineering*, 143(5), 07016025.

Kisi, O., Ay, M. 2016. Reply to the comments on "Comparison of Mann-Kendall and innovative trend method for water quality parameters of the Kizilirmak River, Turkey" by Kisi, O. and Ay, M. [J. Hydrol. 513 (2014) 362-375] and "An innovative method for trend analysis of monthly pan evaporations" by Kisi, O. [J. Hydrol. 527 (2015) 1123-1129, *J. of Hydrology*, 538, 883-884.

Kisi, O. 2016. Discussion of "Monthly Mean Streamflow Prediction Based on Bat Algorithm-Support Vector Machine" by Bing Xing, Rong Gan, Guodong Liu, Zhongfang Liu, Jing Zhang, and Yufeng Ren, *J. of Hydrologic Engineering*, 21(8), 07016010.

Kisi, O. 2015. Discussion of "Comparison of Wavelet-Based ANN and Regression Models for Reservoir Inflow Forecasting" by Krishna Budu, *ASCE J. of Hydrologic Engineering*, 20(9), 07015011.

Kisi, O. 2015. Discussion of "Improved Particle Swarm Optimization–Based Artificial Neural Network for Rainfall-Runoff Modeling" by Mohsen Asadnia, Lloyd H. C. Chua, X. S. Qin and Amin Talei, *ASCE J. of Hydrologic Engineering*, 20(9), 07015009.

Kisi, O. 2015. Discussion of "Evapotranspiration Modeling Using Second-Order Neural Networks" by Sirisha Adamala, N. S. Raghuwanshi, Ashok Mishra, and Mukesh K. Tiwari, *ASCE J. of Hydrologic Engineering*, 20(9),07015013.

Kisi, O. 2015. Discussion of "Runoff Estimation by Machine Learning Methods and Application to the Euphrates Basin in Turkey" by Abdullah Gokhan Yilmaz and Nitin Muttil, *ASCE J. of Hydrologic Engineering*, 20(7), 07014016.

Kisi, O. 2015. Closure to "Comparison of different empirical methods for estimating daily reference evapotranspiration in Mediterranean climate" by Ozgur Kisi, *ASCE J. of Irrigation and Drainage Engineering*, 141(4), 07014045.

Kisi, O. 2014. Discussion of "Simple ET_0 Forms of Penman's Equation without Wind and/or Humidity Data. I: Theoretical Development" by John D. Valiantzas, *ASCE J. of Irr. and Drain. Eng.*, 140(7), DOI: 10.1061/(ASCE)IR.1943-4774.0000520.

Kisi, O. 2014. Discussion of "Evaluation of MLP-ANN Training Algorithms for Modeling Soil Pore-Water Pressure Responses to Rainfall" by M. R. Mustafa; R. B. Rezaur; S. Saiedi; H. Rahardjo; and M. H. Isa, *ASCE J. of Hydrologic Engineering*, 19, 1271-1271.

Kisi, O. 2014. Discussion of "Comparison of Artificial Neural Network Models for Sediment Yield Prediction at Single Gauging Station of Watershed in Eastern India" by Ajai Singh; Mohd Imtiyaz; R.K. Isaac; and D.M. Denis, *ASCE J. of Hydrologic Engineering*, 19(3), 661-662.

Kisi, O., Shiri, J. 2012. REPLY to Discussion of "Precipitation forecasting using wavelet-genetic programming and wavelet-neuro-fuzzy conjunction models" by Beriro et al., *Water Resources Management*,26(12), 3663-3665.

Kisi, O. 2010. Discussion of Application of neural network and adaptive neuro-fuzzy inference systems for river flow prediction, *Hydrol.Sci. J.*, 55(8), 1453-1454.

Kisi, O., Cimen, M. 2010. REPLY to Discussion of 'Evapotranspiration modelling using support vector machines', *Hydrol.Sci. J.*, 55(8), 1451-1452.

Kisi, O. 2010. REPLY to Comment on "Daily pan evaporation modeling using multi-layer perceptrons and radial basis neural networks." by Moreno et al., *Hydrological Processes*,24(21), 3119-3120.

Kisi, O. 2010. Discussion of Daily Pan Evaporation Modeling in a Hot and Dry Climate by JJ. Piri; S. Amin; A. Moghaddamnia; A. Keshavarz; D. Han; and R. Remesan, *ASCE J. of Hydrol. Eng.*, 15(8), 667-668.

Kisi, O. 2010. Discussion of Comparative Study of ANNs versus Parametric Methods in Rainfall Frequency Analysis" by J. He and C. Valeo, *ASCE J. of Hydrol. Eng.*,15(4), 321-322.

Kisi, O., 2010. Comment on 'An ANN-based model for spatiotemporal groundwater level forecasting. Hydrological Processes, 22: 5054-5066', *Hydrological Processes*, 24(3), 368-369.

Kisi, O., 2009. Comment on "Evaporation estimation using artificial neural networks and adaptive neuro-fuzzy inference system techniques" by A. Moghaddamnia, M. Ghafari Gousheh, J. Piri, S. Amin, D. Han, *Advances in Water Resources*, 32(6), 966.

Kisi, O., 2008. REPLY to Comment on "Evapotranspiration modelling from climatic data using neural network computing technique" by Aksoy et al., *Hydrological Processes*,22, 2718-1720.

Kisi, O., 2007. Reply to Discussion of "Generalized regression neural networks for evapotranspiration modelling" byAksoy et al., *Hydrol. Sci. J.*, 52(4), 829–831.

Kisi, O., 2007. Reply to Discussion of "Generalized regression neural networks for evapotranspiration modelling" byDemetris Koutsoyiannis, *Hydrol. Sci. J.*, 52(4), 836–839.

Kisi, O., 2005. Discussion of Fuzzy logic model approaches to daily pan evaporation estimation in western Turkey, *Hydrol. Sci. J.*, 50(4), 727-728.

Kisi, O., Yildirim, G., 2005. Discussion of Forecasting of Reference Evapotranspiration by Artificial Neural Networks by S. Trajkovic; B. Todorovic; and M. Stankovic, *ASCE J. of Irr. and Drain. Eng.*, 131(4), 390-391.

Kisi, O., Yildirim, G., 2005. Discussion of Estimating Actual Evapotranspiration from Limited Climatic Data Using Neural Computing Technique by K.P. Sudheer; A.K. Gosain; and K.S. Ramasastri, *ASCE J. of Irr. and Drain. Eng.*, 131(2), 219-220.

Other Journal Papers

Azad, M.T., Lari, K., Oudi, R., Sadeghifar, T., Kisi, O. 2022. Study of Dust Phenomena Effect on Sea Surface Temperature in the Western Basin of Persian Gulf, *Standards*, 2, 246-259. https://doi.org/10.3390/standards2030018.

Shiri, J., Kisi, O., Yoon, H., Kazemi, M.H., Shiri, N., Poorrajabali, M., Karimi, S. 2022. Prediction of groundwater level variations in coastal aquifers with tide and rainfall effects using heuristic data driven models, *ISH Journal of Hydraulic Engineering*, 28:sup1, 188-198, DOI: 10.1080/09715010.2020.1729876.

Kaur, H., Alam, M.A., Mariyam, S., Alankar, B., Chauhan, R., Adnan, R.M., Kisi, O. 2021. Predicting water availability in water bodies under the influence of precipitation and water management actions using VAR/VECM/LSTM, Climate, 9, 144. https://doi.org/10.3390/cli9090144.

Zeggane, H., Ghernaout, R., Boutoutaou, D., Abdullah, S.S., Remini, B., Kisi, O. 2021. Multidimensional Analysis of Precipitation 1 in Central-Northern Algeria, *Larhyss Journal*, 47, 209-231.

Adnan, R.M., Liang, Z., Kuriqi, A., Kisi, O., Malik, A., Li, B., Mortazavizadeh, F. 2021. Air temperature prediction using different machine learning models, *Indonesian Journal of Electrical Engineering and Computer Science*, 22(1), 534-541.

Piri, J., Malik, A., Kisi, O. 2020. Assessment and Simulation of Evaporation Front Depth and Intensity from Different Soil Surface Regarding Diverse Static Levels, *Water Productivity Journal*, (1)1, 1-20.

Salimi, A., Karami, H., Farzin, S., Hassanvanda, M., Azad, A., Kisi, O. 2020. Design of water supply system from rivers using artificial intelligence to model water hammer, *ISH Journal of Hydraulic Engineering*, 26(2), 153-162.

Karimi, S.M., Kisi, O., Poorrajabali, M., Rouhani-nia, F., Shiri, J. 2020. Evaluation of the support vector machine, random forest and geo-statistical methodologies for predicting long term air temperature, *ISH Journal of Hydraulic Engineering*, 26(4), 376-386.

Ali, R., Kuriqi, A., Kisi, O. 2020. Human–Environment Natural Disasters Interconnection in China: A Review, *Climate*, 8, 48; doi:10.3390/cli8040048.

Shaghaghi, S., Bonakdari, H., Gholami, A., Kisi, O., Binns, A., Gharabaghi, B. 2019. Predicting the Geometry of Regime Rivers Using M5 Model Tree, Multivariate Adaptive Regression Splines and Least Square Support Vector Regression Methods, *International Journal of River Basin Management*, 17(3), 333-352. DOI: 10.1080/15715124.2018.1546731

Heddam, S., Sanikhani, H., Kisi, O. 2019. Application of Artificial Intelligence to Estimate Phycocyanin Pigment Concentration using Water Quality Data: A Comparative Study, *Applied Water Science*, 9(7), UNSP 164. DOI: 10.1007/s13201-019-1044-3

Ebrahimi, F., Nakaei, M., Naseri, H.R., Khodaei, K., Kisi, O. 2019. Light non-aqueous phase liquids simulation using artificial intelligence models: Esmaeilabad aquifer case study, *Groundwater for Sustainable Development*, 8, 245-254.

Azad, A., Pirayesh, J., Farzin, S., Malekani, L., Moradinasab, S., Kisi, O. 2019. Application of heuristic algorithms in improving performance of soft computing models for prediction of min, mean and max air temperatures, *Engineering Journal*, 23(6), 83-98.

Azad, A., Karami, H., Farzin, S., Mousavi, S-F., Kisi, O. 2019. Modeling river water quality parameters using modified adaptive neuro fuzzy inference system, *Water Science and Engineering*, 12(1), pp. 45-54.

Adnan, R.M., Yuan, X., Kisi, O., Yuan, Y. 2017. Application of time series models for streamflow forecasting, *Journal of Civil and Environmental Research*, 9(3), 56-63.

Adnan, R.M., Yuan, X., Kisi, O., Yuan, Y. 2017. Forecasting Streamflow of Astore River with Seasonal Autoregressive Integrated Moving Average Model, *European Scientific Journal*, 13(12), 145-156.

Adnan, R.M., Yuan, X., Kisi, O., Yuan, Y. 2017. Streamflow Forecasting Using Artificial Neural Network and Support Vector Machine Models, *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 29(1), 286-294.

Kisi, O., Eray, O., Mert, C. 2016.Solar Radiation Modeling Using M5 Model Tree, *Journal of Technical Science & Technologies*, 5(2), 53-57.

Kisi, O., Eray, O., Mert, C. 2016. Trend Analysis of Long-term Temperatures in Tbilisi, Georgia, *Journal of Technical Science & Technologies*, 5(2), 59-63.

Kisi, O., Demir, V. 2016. Evapotranspiration estimation using six different multi-layer perceptron algorithms, *Irrigation & Drainage Systems Engineering*, 5, 164, doi:10.4172/2168-9768.1000164

Karimi, S., Shiri, J., Kisi, O., Shiri, A.A. 2016. Short-term and long-term streamflow prediction by using wavelet-genetic programming approach, *ISH Journal of Hydraulic Engineering*, 22(2), 148-162.

Karimi, S., Kisi, O., Shiri, J., Makarynskyy, O. 2015. A Wavelet and Neuro-Fuzzy Conjunction Model to Forecast Air Temperature Variations at Coastal Sites, *International Journal of Ocean and Climate System,* 6(4), 159-172.

Kisi, O., Karimi, S., Shiri, J., Makarynskyy, O., Yoon, H. 2014. Forecasting sea water levels at Mukho station, South Korea using soft computing techniques, *International Journal of Ocean and Climate System*, 5(4), 175-188.

Ay, M., Kisi, O. 2013. Modelling COD concentration by using different artificial intelligence methods, *Journal of Selcuk University Natural and Applied Science*, ICOEST Conf. 2013 (Part 2), 477-489.

Kisi, O. 2013. Estimation of Reference Evapotranspiration: Need for Generalized Models. *Irrigat Drainage Sys Eng 2:e116. doi: 10.4172/2168-9768.1000e116.*

Heydari, M., Olyaie, E., Mohebzadeg, H., Kisi, O. 2013. Development of a Neural Network Technique for Prediction of Water Quality Parameters in the Delaware River, Pennsylvania, *Middle-East Journal of Scientific Research*, 13(10), 1367-1376.

Shiri, J., Kisi, O., Makarynskyy, O., Shiri, A-A, Nikoofar, B. 2012. Forecasting daily streamflows using artificial intelligence approaches, *ISH Journal of Hydraulic Engineering*, 18(3), 204-214.

Karimi, S., Shiri, J., Kisi, O., Makarynskyy, O.2012. Forecasting Water Level Fluctuations of Urmieh Lake using Gene Expression Programming and Adaptive Neuro-Fuzzy Inference System, *International Journal of Ocean and Climate System*, 3(2), 109-125.

Kisi, O., Shiri, J., Nazemi, A-H. 2012. A wavelet-genetic programming model for predicting short-term and long-term air temperatures, *Online Journal of Civil Engineering and Urbanism*, 1(1), 25-37.

Kisi, O., Shiri, J., Makarynskyy, O. 2011. Wind speed prediction by using different wavelet conjunction models, *International Journal of Ocean and Climate System*, 2(3), 189-208.

Kisi, O., Afsar, S. 2010. Yapay Sinir Ağı ve Bulanık-Yapay Sinir Ağı Yöntemleri Kullanılarak Tava Buharlaşma Tahmini, *TABAD*, *Tarım Bilimleri Araştırma Dergisi*, 3(1), 45-51.

Baylar, A, Kisi, O., Emiroglu, M.E., 2009. Modeling Air Entrainment Rate and Aeration Efficiency of Weirs Using ANN Aproach, *G.U. Journal of Science*, 22(2), 107-116.

Kisi, O., Emiroglu, M.E., **Baylar, A.,** 2008.Flow regime prediction in stepped channels using neural computing technique, *International Journal of Science and Technology*, 3(1), 109-121.

Baylar, A, Kisi, O., **Emiroglu, M.E.**, 2008. Aeration Efficiency Estimation in Stepped Cascade Aerators Using Neural Network Approach, *e-Journal of New World Sciences Academy*, 3 (2), 360-371.

Kisi, O., 2007. Development of streamflow-suspended sediment rating curve using a range dependent neural network, *International Journal of Science and Technology*, 2(1), 49-61.

Cobaner, M., Unal, B., Kisi, O., Unal, S., 2006. Nehirlerdeki katı madde miktarının yapay sinir ağları kullanılarak tahmini, *Çukurova Üniversitesi Müh. Mim. Fakültesi Dergisi,* 21(1-2), 229-235.

Kisi, O., 2005. Daily river flow forecasting using artificial neural networks and auto-regressive models, *Turk. J. Eng. Environ. Sci.,*29, 9-20.

Kişi, Ö., Karahan, M.E., Şen, Z., 2003. Nehirlerdeki askı maddesi miktarının bulanık mantık ile modellenmesi, *İTÜ Dergisi*, 2(3), 43-54.

Book Chapters

Malik, A., Tikhamarine, Y., Souag-Gamane, D., Sammen, S.S., Kisi, O. SVR optimized by novel nature-inspired algorithms for daily evaporation estimation, Elsevier (in press).

Heddam, S., Kim, S., Elbeltagi, A., Malik, A., Zounemat-Kermani, M., Kisi, O. 2022. Predicting Nitrate Concentration in River Using Advanced Artificial Intelligence Techniques: Extreme Learning Machines versus Deep Learning, In book: Chatterjee, U., Pradhan, B., Kumar, S., Saha, S., Zakwan, M. (eds.), *Water, Land, and Forest Susceptibility and Sustainability: Geospatial Approaches and Modeling*, Chapter 5, Elsevier, https://www.elsevier.com/books/water-land-and-forest-susceptibility-and-sustainability/chatterjee/978-0-323-91880-0.

Heddam, S., Kim, S., Elbeltagi, A., Kisi, O. 2022. Hybrid extreme learning machine optimized bat algorithm based on ensemble empirical mode decomposition for modeling dissolved oxygen in river, In book: M. Zakwan, A. Wahid, M. Niazkar, D.M. Sharma (eds.), *Water Resource Modeling and Computational Technologies: Volume 7, Chapter 25,* Elsevier, https://doi.org/10.1016/B978-0-323-91910-4.00025-X.

Heddam, S., Kim, S., Elbeltagi, A., Kisi, O. 2022. Random vector functional link network based on variational mode decomposition for predicting river water turbidity, In book: M. Zakwan, A. Wahid, M. Niazkar, D.M. Sharma (eds.), *Water Resource Modeling and*

Computational Technologies: Volume 7, Chapter 15, Elsevier, https://doi.org/10.1016/B978-0-323-91910-4.00015-7.

Heddam, S., Kim, S., Elbeltagi, A., Kisi, O. 2022. Bidirectional long short-term memory-based empirical wavelet transform: A new hybrid artificial intelligence model for robust prediction of soil moisture content, In book: M. Zakwan, A. Wahid, M. Niazkar, D.M. Sharma (eds.), *Water Resource Modeling and Computational Technologies: Volume 7, Chapter 3,* Elsevier, https://doi.org/10.1016/B978-0-323-91910-4.00003-0.

Heddam S., Kim S., Danandeh Mehr A., Zounemat-Kermani M., Malik A., Elbeltagi A., Kisi O. 2022. Predicting Dissolved Oxygen Concentration in River using New Advanced Machine Learning: Long-Short Term Memory (LSTM) Deep Learning, Computers in Earth and Environmental Sciences, Elsevier, 1-20. https://doi.org/10.1016/B978-0-323-89861-4.00031-2.

Kisi, O., Sanikhani, H. 2021. Modeling short-term ground water level fluctuations using multi variate adaptive regression spline, Advances in Geoethics and Groundwater Management : Theory and Practice for a Sustainable Development: Proceedings of the 1st Congress on Geoethics and Groundwater Management (GEOETH&GWM'20), Porto, Portugal 2020, Springer, https://link.springer.com/book/10.1007%2F978-3-030-59320-9.

Heddam, S., Kisi, O. 2021. A New Heuristic Method for Monthly Streamflow Forecasting: Outlier-Robust Extreme Learning Machine, In book: P. Sharma, D. Machiwal (eds.), *Advances in Streamflow Forecasting, 1st Edition, From Traditional to Modern Approaches,* Elsevier, https://www.elsevier.com/books/advances-in-streamflow-forecasting/sharma/978-0-12-820673-7.

Malik, A., Kumar, A., Tikhamarine, Y., Souag-Gamane, D., Kisi, O. 2021. Hybrid Artificial Intelligence Models for Predicting Daily Runoff, In book: P. Sharma, D. Machiwal (eds.), *Advances in Streamflow Forecasting, 1st Edition, From Traditional to Modern Approaches,* Elsevier, https://www.elsevier.com/books/advances-in-streamflow-forecasting/sharma/978-0-12-820673-7.

Heddam S., Kisi O. (2021) Evolving Connectionist Systems Versus Neuro-Fuzzy System for Estimating Total Dissolved Gas at Forebay and Tailwater of Dams Reservoirs. In: Deo R., Samui P., Kisi O., Yaseen Z. (eds) Intelligent Data Analytics for Decision-Support Systems in Hazard Mitigation. Springer Transactions in Civil and Environmental Engineering. Springer, Singapore 109-126, https://doi.org/10.1007/978-981-15-5772-9_6.

Adnan, R.M., Zounemat-Kermani, M., Kuriqi, A., Kisi, O. 2021. Machine Learning Method in Prediction Streamflow Considering Periodicity Component, In: Deo R., Samui P., Kisi O., Yaseen Z. (eds) Intelligent Data Analytics for Decision-Support Systems in Hazard Mitigation. Springer Transactions in Civil and Environmental Engineering. Springer, Singapore, 383-403. https://doi.org/10.1007/978-981-15-5772-9_18.

Kisi, O., Alizamir, M., Shiri, J. (2021) Conjunction Model Design for Intermittent Streamflow Forecasts: Extreme Learning Machine with Discrete Wavelet Transform. In: Deo R., Samui P., Kisi O., Yaseen Z. (eds) Intelligent Data Analytics for Decision-Support

Systems in Hazard Mitigation. Springer Transactions in Civil and Environmental Engineering. Springer, Singapore, 171-181. https://doi.org/10.1007/978-981-15-5772-9_9.

Abderrazek, S., Heddam, S., Kisi, O., Djemili, L., Houichi, L. (2020). Comparison of Evolving Connectionist Systems (ECoS) and Neural Networks for Modelling Daily Pan Evaporation from Algerian Dams Reservoirs, In book: A. Negm et al. (eds.), *Water Resources in Algeria-Part I: Assessment of Surface and Groundwater Resources*, *The Handbook of Environmental Chemistry*. Springer, Berlin, Heidelberg, https://doi.org/10.1007/698_2020_527.

Heddam, S., Kisi, O., Abderrazek, S., Houichi, L., Djemili, L. 2020. New Formulation for Predicting Daily Reference Evapotranspiration (ET0) in the Mediterranean Region of Algeria Country: Optimally Pruned Extreme Learning Machine (OP-ELM) vs. Online Sequential Extreme Learning Machine (OS-ELM), In book: A. Negm et al. (eds.), *Water Resources in Algeria-Part I: Assessment of Surface and Groundwater Resources*, *The Handbook of Environmental Chemistry*. Springer, Berlin, Heidelberg. https://doi.org/10.1007/698_2020_528.

Heddam, S., Kisi, O., Abderrazek, S., Houichi, L., Djemili, L. 2020. Predicting Water Quality Indicators from Conventional and Nonconventional Water Resources in Algeria Country: Adaptive Neuro-Fuzzy Inference Systems Versus Artificial Neural Networks. In book: A. Negm et al. (eds.), *Water Resources in Algeria-Part I: Assessment of Surface and Groundwater Resources*, *The Handbook of Environmental Chemistry*. Springer, Berlin, Heidelberg. https://doi.org/10.1007/698_2019_399.

Kisi, O., Shiri, J., Karimi, S., Adnan, R.M. 2018. Three Different Adaptive Neuro Fuzzy Computing Techniques for Forecasting Long-Period Daily Streamflows. In: Roy S., Samui P., Deo R., Ntalampiras S. (eds) Big Data in Engineering Applications. Studies in Big Data, vol 44. Springer, Singapore. https://doi.org/10.1007/978-981-10-8476-8_15, 303-321.

Kisi, O., Shiri, J., Demir, V. 2017. Hydrological time series forecasting using three different heuristic regression techniques, in *Handbook of Neural Computation*, edited by Pijush Samui, Sanjiban Sekhar Roy, Valentina E. Balas, Elsevier, London. https://doi.org/10.1016/B978-0-12-811318-9.00003-X, 45-65.

Kisi, O., Fedakar, H.I. 2014. Modeling of Suspended Sediment Concentration Carried in Natural Streams Using Fuzzy Genetic Approach. In: Islam T., Srivastava P., Gupta M., Zhu X., Mukherjee S. (eds) Computational Intelligence Techniques in Earth and Environmental Sciences. Springer, Dordrecht. https://doi.org/10.1007/978-94-017-8642-3_10, 175-196.

Book Editorship

Chaminé, H.I., Barbieri, M., Kisi, O., Chen, M., Merkel, B.J. (Eds.), (2018). Advances in Sustainable and Environmental Hydrology, Hydrogeology, Hydrochemistry and Water Resources, Proceedings of the 1st Springer Conference of the Arabian Journal of Geosciences (CAJG-1), Tunisia.

Deo, R., Samui, P., Kisi, O., Zaher, Y. (Eds.), (2020). Intelligent Data Analytics for Decision-Support Systems in Hazard Mitigation: Theory and Practice of Hazard Mitigation, Springer Transactions in Civil and Environmental Engineering, Springer, Singapore.

Kisi, O. (Ed.), (2021). Machine Learning with Metaheuristic Algorithms for Sustainable Water Resources Management, MDPI, Switzerland. https://www.mdpi.com/books/pdfview/book/4122

Conference Papers

Ghasemi, L., Vadiati, M., and Kisi, O., 2023. A comparative study of machine learning approaches with wavelet transforms for groundwater level modeling (Case study: Unconfined Tehran aquifer, Iran), EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-4463, https://doi.org/10.5194/egusphere-egu23-4463.

Aoulmi, Y., Marouf, N., Amireche, M., Kisi, O., Shubair, R.M. 2021. Accuracy Improvement for Daily Runoff Predicting Models Through Metaheuristic Approaches, 4th Conference of the Arabian Journal of Geosciences (CAJG), Springer (submitted for presentation).

Kisi, O., Sanikhani, H. 2020. Modeling short-term ground water level fluctuations using multi variate adaptive regression spline, Geoethics & Groundwater Management Congress 2020, May 18-22.

Adnan, R.M., Liang, Z., Kuriqi, A., Kisi, O., Malik, A., Li, B. 2020. Streamflow forecasting using heuristic machine learning methods, 2020 International Conference on Computer and Information Sciences (ICCIS), October 13-15.

Sanikhani, H., Mirabbasi, R., Kisi, O. 2019. Pan evaporation modelling in Central India using soft computing techniques, 11th World Congress on Water Resources and Environment (EWRA 2019) "Managing Water Resources for a Sustainable Future", 25-29 June, Madrid, Spain, pp: 209-210.

Geyikli, M.S., Demir, V., Kisi, O. 2016. Orta Karadeniz Bölümünde Toplam Yağışlar Artıyor mu Azalıyor mu? *International Symposium of Water and Wastewater Management*, October 26-28, Malatya, Turkey.

Demir, V., Kisi, O. 2016. Comparison of Mann-Kendall and innovative trend method (Şen trend) for monthly total precipitation (Middle Black Sea Region, Turkey), 3rd International Balkans Conference on Challenges of Civil Engineering, 3-BCCCE, 19-21 May 2016, Epoka University, Tirana, Albania, 344-351.

Ay, M., Kisi, O.2015. Trend analysis of streamflow and sediment variables, VIII. Ulusal Hidroloji Kongresi, 8-10 Ekim, Harran Üniversitesi, Şanlıurfa, 289-299.

Demir, V., Kisi, O. 2015. Determinaton of inundation maps by using geographic information systems: Mert River (Samsun), VIII. Ulusal Hidroloji Kongresi, 8-10 Ekim, Harran Üniversitesi, Şanlıurfa, 107-120.

Demir, V., Kisi, O. 2015. HEC-RAS ve Coğrafi Bilgi sistemleri kullanarak Samsun Mert Irmağı taşkın haritaları üzerine bir araştırma: Yıllık Anlık Maksimum Taşkınlar, Başarı Öğrenci Sempozyumu, 8 Mayıs, Canik Başarı Üniversitesi, p. 1-6.

Demir, V.,Aktaş, B., Akgül, B., Eğmen B., Kisi, O. 2015. FLO- 2D yazılımı ile Taşkın Modelleme, Başarı Öğrenci Sempozyumu, 8 Mayıs, Canik Başarı Üniversitesi, Samsun, p. 7-24.

Ay, M., Kisi, O. 2014. Trend analysis of streamflow in the Kizilirmak River, Turkey, *11th International Congress on Advances in Civil Engineering*, 21-25 October, Istanbul Technical University, Istanbul, HYDRO-8, Proc. No: 1042.

Kisi, O., Demir, V. 2014. Evapotranspiration modeling using six different multi-layer perceptron algorithms, *Internatıional Civil Engineering & Architecture Symposium for Academicians*, ICESA 2014, 17-20 May, Antalya, Turkey, pp. 115.

Aydin, K., Kisi, O. 2014. Efficacy of hybrid neuro fuzzy system in detecting damage in structural beam elements, *Internatıional Civil Engineering & Architecture Symposium for Academicians*, ICESA 2014, 17-20 May, Antalya, Turkey, pp. 9.

Kisi, O., Ay, M. Nehir akışlarının yeni bir eğilim metoduyla incelenmesi, *Taşkın ve Heyelan Sempozyumu*, 24-26 Ekim 2013, Karadeniz Teknik Üniversitesi, Trabzon, 423-431.

Kisi, O., Latifoğlu, L., Latifoğlu, F., Genç, O. Ampirik kip ayrışım ve yapay sinir ağları kullanarak hidrolojik verilerin tahmini, *Taşkın ve Heyelan Sempozyumu*, 24-26 Ekim 2013, Karadeniz Teknik Üniversitesi, Trabzon, 433-441.

Kisi, O., Ay, M. 2013. Türkiye'deki bazı illerin aylık toplam yağış yüksekliklerine göre yağış eğilimlerinin araştırılması, *VI. Ulusal Hidroloji Kongresi*, 26-27 Eylül, Süleyman Demirel Üniversitesi, Isparta, 513-521.

Cobaner, M., Citakoglu, H., Haktanir, T., Kisi, O., Ugurlu, A. 2013. Hargreaves-Samani denkleminin kıyı bölgelerde referans evapotranspirasyonun hesabı için modifiye edilmesi, *VI. Ulusal Hidroloji Kongresi*, 26-27 Eylül, Süleyman Demirel Üniversitesi, Isparta, 109-118.

Cobaner, M., Citakoglu, H., Haktanir, T., Kisi, O., Yurtal, R., Karaboran, O. 2013. Modifying Ritchie equation for estimation of reference evapotranspiration at coastal regions of Anatolia, *2nd International Balkans Conference on Challenges of Civil Engineering*, BCCCE, 23-25 May, Epoka University, Tirana, Albania, pp. 901.

Ay, M., Kisi, O. 2013. Türkiye'deki bazı illerin yağış eğilimlerinin araştırılması, *III. Türkiye İklim Değişikliği Kongresi*, TİKDEK 2013, 3-5 Haziran, İstanbul, pp. 109.

Kisi, O., Ay, M. 2013. Yapay Zekânın Su Kaynakları Alanındaki Kullanımı, *6.Mühendislik ve Teknoloji Sempozyumu*, 25-26 Nisan, Çankaya Üniversitesi, Ankara, pp. 3.

Kisi, O., Ay, M. 2013. Modelling COD concentration by using three different ANFIS techniques, *2ⁿᵈ International Balkans Conference on Challenges of Civil Engineering*, BCCCE, 23-25 May, Epoka University, Tirana, Albania, pp. 477.

Ay, M., Kisi, O. 2013. Modeling Dissolved Oxygen Concentration Using Neural Network and ARMA Techniques, *6ᵗʰ International Perspective on Water Resources & Environment Conference*, IPWE 2013, 7-9 January, Izmir, Turkey, Proc. No: 24.

Citakoglu, H., Kisi, O., Haktanir, T., Cobaner, M. 2013. Modifying Hargreaves Equation for Estimation of Reference Evapotranspiration the Mediterranean Region, *6ᵗʰ International Perspective on Water Resources & Environment Conference*, IPWE 2013,7-9 January, Izmir, Turkey, Poster. No: 640.

Kisi, O., Ay, M. 2013. Modeling Dissolved Oxygen Concentration Using Soft Computing Techniques, *6ᵗʰ International Perspective on Water Resources & Environment Conference*, IPWE 2013,7-9 January, Izmir, Turkey, Proc. No: 31.

Sanikhani, H., Farzin, S., Zarghami, M., Kisi, O. 2013. Comparison of Artificial Neural Network with Neuro-fuzzy Systems for Forecasting Water Level Fluctuation of Urmia Lake, *6ᵗʰ International Perspective on Water Resources & Environment Conference*, IPWE 2013, 7-9 January, Izmir, Turkey, Poster No: 121.

Citakoglu, H., Kisi, O., Haktanir, T., Cobaner, M. 2012. Hargreaves denkleminin İç Anadolu Bölgesi'nde referans evapotranspirasyonun hesabı için modifiye edilmesi, *İnşaat Mühendisliği' nde 100. Yıl Teknik Kongresi*, 22-24 Kasım, Yıldız Teknik Üniversitesi, Istanbul.

Kisi, O., Ay, M. 2012. Comparison of ANN and ANFIS techniques in modeling dissolved oxygen, *Sixteenth International Water Technology Conference*, IWTC-16 2012, 7-10 May,Istanbul, Turkey, pp. 141.

Landeras, G., Lopez, J.J., Kisi, O., Shiri, J. 2012. Temperature based daily incoming solar radiation modeling based on gene expression programming, neuro-fuzzy and neural network computing techniques, EGU General Assembly 2012, ...

Kisi, O., Fedakar, H.I. 2011. Prediction of Suspended Sediment Concentration Using Fuzzy-Genetic Approach, *Innovation as a Function of Engineering Development Conference*, 25-26 November, Nis, Serbia, 109-124.

Ay, M., Kişi, Ö. 2011. Sulama Suyu Kalitesini Etkileyen Na+ (Ca++ + Mg++) HCO-3, Cl- ve SO4-2 Değişkenleri İle Tuz Konsantrasyonunun Modellenmesi, *II.Ulusal Toprak ve Su Kaynakları Kongresi*, 22-25 Kasım, Ankara, 104-111.

Kisi, O., Ay, M. 2011. Modeling Dissolved Oxygen (DO) Concentration Using Different Neural Network Technique, *International Balkans Conference on Challenges of Civil Engineering*, BCCCE, 19-21 May, EPOKA University, Tirana, ALBANIA, p. 122.

Kisi, O., Ardiclioglu, M., Cobaner, M., 2010. Wavelet Regression Model as an Alternative to Neural Networks for Monthly Streamflow Forecasting, *9th International Congress on Advances in Civil Engineering*, 27-30 September, Karadeniz Technical University, Trabzon, Turkey, pp. 37.

Bilhan, O., Emiroglu, M.E., Kisi, O., 2010. Application of Artificial Intelligence Methods for the Estimation of Discharge Capacity of Side Weirs, *9th International Congress on Advances in Civil Engineering*, 27-30 September, Karadeniz Technical University, Trabzon, Turkey, pp. 201.

Kisi, O., Shiri, J., 2010. A Comparison of Genetic Programming and ANFIS in Forecasting Daily, Monthly and Yearly Streamflows, INISTA'2010, International Symposium on INnovations in Intelligent SysTems and Applications, 21-24 June, Kayseri & Cappadocia, TURKEY, 118-122.

Kisi, Ö., Güneş, M, Yaşlı, E.2010. Sultan Sazlığı Göl Su Seviyelerinin Yapay Sinir Ağı - Dalgacık Modeli ile Tahmini, *VI. Ulusal Hidroloji Kongresi*, 22-24 Eylül, Pamukkale Üniversitesi, Denizli, 674-685.

Unal, B., Cobaner, M., Kisi, O. 2010. Yapay Sinir Ağları ile Evapotranspirasyon Miktarının Tahmini, *VI. Ulusal Hidroloji Kongresi*, 22-24 Eylül, Pamukkale Üniversitesi, Denizli, 229-242.

Kişi, Ö., 2009. Seviye-akış ilişkilerinin dinamik regresyon ve anahtar eğrileri ile belirlenmesi, *4. Ulusal Su Mühendisligi Sempozyumu*, 06-10 Temmuz, İstanbul, 439-447.

Çobaner, M., Ünal, B., Kişi, Ö., 2009. Dalgacık dönüşümü tekniği ile Çatalan Barajı'na giren aylık akımların tahmini, *4. Ulusal Su Mühendisligi Sempozyumu*, 06-10 Temmuz, İstanbul, 421-428.

Kisi, O.,Yuksel, I., Dogan, E., 2008. Estimating Suspended Sediment Load of Natural Rivers Using Different ANN Techniques, *8th International Congress on Advances in Civil Engineering*, 15-17 September, Eastern Mediterranean University, North Cyprus, 541-549.

Yuksel, I., Kisi, O., Kaygusuz, K., Sandalci, M., Dogan, E., 2008. Water Resources Management for Small Hydropower in Turkey, *8th International Congress on Advances in Civil Engineering*, 15-17 September, Eastern Mediterranean University, North Cyprus, 521-532.

Partal, T., Kişi, Ö., 2008. Bulanık Yapay Sinir Ağı Ve Dalgacık Analizi İle Yağış Tahmini, Bilimde Modern Yöntemler Sempozyumu (BMYS'2008), 15-17 Ekim, Osmangazi Üniversitesi, Eskişehir, 301-310.

Aytek, A., Kişi, Ö., 2008. Nehirlerdeki Askı Malzemesi Modellenmesine Genetik Programlama İle Yeni Bir Yaklaşım, Bilimde Modern Yöntemler Sempozyumu (BMYS'2008), 15-17 Ekim, Osmangazi Üniversitesi, Eskişehir, 387-395.

Haktanir, T., Çobaner, M., Öztürk, Ö., Kişi, Ö., Ardıçlıoğlu, M.,Uğurlu, A., 2008. Trabzon civarında 2 istasyonda kaydedilmiş yıllık anlık maksimum akım serilerine ve 1 istasyonda 14

ardışık standart süreli yıllık yağmur pikleri serilerine tekerrür analizleri, *Taşkın, Heyelan ve Dere Yataklarının Korunması Konferansı*, 07-08 Ağustos, Trabzon, 61-72.

Haktanir, T., Çobaner, M., Öztürk, Ö., Kişi, Ö., Ardıçlıoğlu, M., Uğurlu, A., 2008. Van Gölü havzasında beş akarsuyun yıllık taşkın pikleri ve dört istasyonun yıllık yağmur pikleri tekerrür analizleri, *Van Gölü Hidrolojisi ve Kirliliği Konferansı*, 21-22 Ağustos, Van, 29-41.

Kisi, O., Haktanir, T., Ardiclioglu, M., Ozturk, O, Yalcin, E., Uludag, S., 2007. Doğal akarsularda taşınan katı madde miktarının anahtar eğrileri ile modellenmesi, *III. Ulusal Su Mühendisligi Sempozyumu*, 10-14 Eylül, Gümüldür, İzmir, 499-509.

Kisi, O., Nas, N., 2007. Estimation of suspended sediment in rivers using artificial intelligence methods, *Fifth Hydrology Congress*, Middle East Technical University, 5-7 Eylül, Ankara, 299-308.

Cinakli, S., Boyukata, M., Kisi, O., Belchior, J.C., 2007. Artificial neural networks applications for prediction of magnetoresistance of $Ni_{81}Fe_{19}$ film, *24th International Physics Congress*, 28-31 August, Malatya, Turkey, p.406.

Kisi, O., Ozturk, O., 2007. Forecasting River Flows and Estimating Missing Data Using Soft Computing Techniques, *International Congress on River Basin Management*, 22-24 March, Antalya, Turkey, p.655.

Kisi, O. 2006. Modeling Evaporation Using Multi-layer Perceptron and Radial Basis Neural Networks, *Seventh International Congress on Advances in Civil Engineering*, Yildiz Technical University, 11-13 October, Istanbul, p.341.

Aydin, K., Kisi, O. 2006. Estimate of Daily Evaporation through Sugeno Fuzzy System, *Seventh International Congress on Advances in Civil Engineering*, Yildiz Technical University, 11-13 October, Istanbul, p.334.

Unal, B., Cobaner, M., Kisi, O. 2006. Estimation of river sediment load using Sugeno Fuzzy Logic, *Seventh International Congress on Advances in Civil Engineering*, Yildiz Technical University, 11-13 October, Istanbul, p.332.

Kisi, O., 2006. Wind speed estimation using Takagi-Sugeno-Kank fuzzy logic approach, Sixth National Renewable Energy Symposium, 25-27 May, Isparta,Turkey, 765-774.

Kisi, O., 2005. Modelling evaporation by artificial neural networks using meteorological data, Symposium on Modern Methods in Science (BMYS'2005), 16-18 November, Kocaeli, Turkey, 790-797.

Kisi, O., 2005. Determination of stage-discharge relationship of Kızılırmak River by multi-layer neural networks, Symposium on Water Resources Engineering II, 11-24 October, Izmir, Turkey, 725-735.

Kisi, O., Cengiz, M. T., Unes, F., 2004. Artificial neural networks for lake level modelling, Conference on Water Observation and Information System for Decision Support (BALWOIS), 25-29 May, Ohrid, Macedonia, p.270.

Kisi, O., 2004. Prediction of Filyos Stream's flows using neural networks and regression techniques, Fourth Hydrology Congress, 23-25 June, Istanbul, Turkey, 347-353.

Kisi, O., 2004. Wind speed estimation by the artificial neural networks using meteorological data, Fifth National Renewable Energy Symposium, 26-28 May, Istanbul, Turkey, 45-52.

Kisi, O., Partal T., 2003. Wind velocity forecasting using artificial neural networks and auto regressive models, Symposium on Atmosphere Science III, Istanbul Technical University (ITU), Istanbul, Turkey, 166-172.

Kisi, O, 2002. River sediment yield modeling using artificial neural networks, *ASCE's First Virtual World Congress for Civil Engineering*, June-September, Web-site: http://www.ceworld. org/ceworld/Presentations/WaterandEnvironment/Kisi.cfm.

Toprak, Z. F., Kisi, O., Aytek, A., Savcı, M. E., 2002. The determination of the monthly crop water requirement by fuzzy logic approach, *Fifth International Congress on Advances in Civil Engineering*, Istanbul Technical University, 25-27 September, Istanbul, Turkey, 1203-1212.

Kisi, O., Aytek, A., Toprak, Z. F., 2002. River suspended sediment forecasting using artificial neural networks, *Fifth International Congress on Advances in Civil Engineering*, Istanbul Technical University, 25-27 September, Istanbul, Turkey, 1271-1280.

Kisi, O., 2002. The prediction of hourly mean wind velocities with artificial neural networks, *Fourth National Renewable Energy Symposium, (UTES'2002)*, October, Istanbul, Turkey, 429-436.

Kisi, O., Aydın, S., 2001. Modeling of GoksudereRiver flow by using artificial neural networks, *International Symposium on Water Resources and Environmental Impact Assessment*, July, Istanbul, Turkey, 377-388.

Kisi, O., 2001. An application about streamflow forecasting, S*ymposium on Modern methods in Engineering (MMYS'2001)*, September, Istanbul, Turkey, 137-144.

Kisi, O., Unes, F., Cengiz, M. T., 2001. Flood frequency analysis of Antalya extreme precipitations, *First Water Congress*, Ocak, Istanbul, Turkey, 197-206.

Kara, H. B., Kaya, Z., Kisi, O., 1999. An investigation of Aşağı Beyçayır(Sarız-Kayseri) landslide, *Landslide Symposium*, May, Adana, Turkey.

Kara, H. B., Ardiclıoglu, M., Kisi, O., Aktas, O., 1998. Slope stability analysis in soil filled dams; case: Bahçelik Dam, *The Seminars of Soil Mechanics Problems in Water Structures*, Turkey Water Works (DSİ), TAAK, September, Balıkesir, Turkey, 117-129.

Projects

Determination of discharge-stage relationship and estimation of streamflow by using artificial neural networks, *Erciyes University (EU)*, Project Code: MFA-04-04, 2004-2006.

Long and short-term streamflow prediction and missing data infilling using soft computing techniques, *Erciyes University (EU)*, Project Code: FBA-06-26, 2006-2008.

River sediment load modelling using fuzzy-neuro approach, *The Scientific and Technical Research Council of Turkey*, Project Code: 106Y191, 2006-2008.

Development of a computer package program for the frequency analysis and depth-duration-recurrence relations of 14 sequential-duration recorded annual rainfall peaks series from 5 minutes to 24 hours, *The Scientific and Technical Research Council of Turkey*, Project Code: 106Y192, 2006-2008.

Estimating suspended sediment load in natural rivers using artificial intelligence methods, *Erciyes University (EU)*, Project Code: FBT-07-30, 2007-2008.

Determination of river stage-discharge relationship using multi-layer neural networks, *Erciyes University (EU)*, Project Code: FBT-07-31, 2007-2008.

Modeling lake level fluctuation using artificial neural networks combined with wavelet, *Erciyes University (EU)*, Project Code: FBT-1042, 2009-2010.

Wavelet neural networks for estimating short-term and long-term streamflows, *Erciyes University (EU)*, Project Code: FBT-1040, 2009-2010.

PROFESSIONAL ACTIVITIES

<u>Editorial Board:</u>

Associate Editor of Journal of Hydrologic Engineering (ASCE), (2015-   ).

In Editorial Board for Hydrology Research, (2019-   ).

In Editorial Board for Sustainability, (2020-   ).

In Editorial Board for Hydrological Sciences Journal, (2021-   ).

In Editorial Board for KSCE Journal of Civil Engineering, (2023-   ).

Guest Editor for Special Issue on Hydrological Hazards in a Changing Environment-Early Warning, Forecasting, and Impact Assessment (Advances in Meteorology), 2015.

Guest Editor for Special Issue on Machine Learning with Metaheuristic Algorithms for Sustainable Water Resources Management (Sustainability), 2021.

Guest Editor for Special Issue on Sustainable Management of Water and Environment with the Aid of Advanced Computing Methods (Sustainability), 2022.

Associate Editor of Arabian Journal of Geosciences (AJGS), (2017-).

Associate Editor of ISH Journal of Hydraulic Engineering, (2015-).

In Editorial Board for Irrigation & Drainage Systems Engineering (2014-).

In Editorial Board for Austin Journal of Irrigation, (2015-).

Editorial Board of Larhyss Journal, (2018-).

In Editorial Board for Journal of Water and Land Development, (2022-).

Reviewer for SCI(E) indexed journals:

Reviewer for Hydrology Research, on June, 2023.

Reviewer for Journal of Irrigation and Drainage Engineering (ASCE), on May, 2023.

Reviewer for Expert Systems With Applications, on March, 2023.

Reviewer for Remote Sensing, on March, 2023.

Reviewer for Water Research, on February, 2023.

Reviewer for Computers and Electronics in Agriculture, on February, 2023.

Reviewer for Hydrological Sciences Journal (IAHS), on January, 2023.

Reviewer for Remote Sensing, on January, 2023.

Reviewer for Agricultural Water Management, on December, 2022.

Reviewer for Science of the Total Environment, on November, 2022.

Reviewer for Journal of Hydrologic Engineering (ASCE), on September, 2022.

Reviewer for Energy Reports, on September, 2022.

Reviewer for Acta Geophysica, on August, 2022.

Reviewer for Journal of Hydrology, on June, 2022.

Reviewer for Hydrology Research, on June, 2022.

Reviewer for Water Research, on June, 2022.

Reviewer for Ecological Informatics, on June, 2022.

Reviewer for Ecological Informatics, on May, 2022.

Reviewer for Journal of Hydrology, on May, 2022.

Reviewer for Hydrological Sciences Journal (IAHS), on May, 2022.

Reviewer for Pure and Applied Geophysics, on March, 2022.

Reviewer for Journal of Hydrology, on March, 2022.

Reviewer for Natural Hazards, on March, 2022.

Reviewer for Hydrological Sciences Journal (IAHS), on February, 2022.

Reviewer for Natural Hazards, on February, 2022.

Reviewer for Stochastic Environmental Research and Risk Assessment, on January, 2022.

Reviewer for Ocean Engineering, on December, 2021.

Reviewer for Journal of Hydrology, on December, 2021.

Reviewer for Water Research, on November, 2021.

Reviewer for Computers and Electronics in Agriculture, on November, 2021.

Reviewer for Hydrology Research, on October, 2021.

Reviewer for Environmental Technology & Innovation, on October, 2021.

Reviewer for Computers and Electronics in Agriculture, on September, 2021.

Reviewer for Hydrological Sciences Journal (IAHS), on September, 2021.

Reviewer for Energy Reports, on September, 2021.

Reviewer for Agricultural Water Management, on September, 2021.

Reviewer for Environmental Monitoring and Assessment, on September, 2021.

Reviewer for Water, on August, 2021.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on August, 2021.

Reviewer for Agricultural Water Management, on July, 2021.

Reviewer for Journal of Hydrology, on July, 2021.

Reviewer for Hydrological Sciences Journal (IAHS), on July, 2021.

Reviewer for Journal of Hydroinformatics, on June, 2021.

Reviewer for Water Resources Management, on June, 2021.

Reviewer for Hydrological Sciences Journal (IAHS), on May, 2021.

Reviewer for Science of the Total Environment, on May, 2021.

Reviewer for Stochastic Environmental Research and Risk Assessment, on May, 2021.

Reviewer for Natural Hazards, on May, 2021.

Reviewer for Journal of Hydrology, on May, 2021.

Reviewer for Journal of Hydrologic Engineering (ASCE), on May, 2021.

Reviewer for Hydrology Research, on April, 2021.

Reviewer for Theoretical and Applied Climatology, on April, 2021.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on April, 2021.

Reviewer for Hydrological Sciences Journal (IAHS), on April, 2021.

Reviewer for Hydrology Research, on April, 2021.

Reviewer for Journal of Hydrology, on April, 2021.

Reviewer for Journal of Contaminant Hydrology, on April, 2021.

Reviewer for Arabian Journal of Geosciences (AJGS), on March, 2021.

Reviewer for Science of the Total Environment, on February, 2021.

Reviewer for Hydrological Sciences Journal (IAHS), on February, 2021.

Reviewer for Computers and Concrete, on January, 2021.

Reviewer for Journal of Hydrology, on January, 2021.

Reviewer for Hydrological Sciences Journal (IAHS), on December, 2020.

Reviewer for PLOS ONE, on November, 2020.

Reviewer for Hydrology Research, on August, 2020.

Reviewer for Water, on August, 2020.

Reviewer for Water and Environment Journal, on August, 2020.

Reviewer for Engineering Structures, on July, 2020.

Reviewer for Natural Hazards, on July, 2020.

Reviewer for Journal of Hydrology, on July, 2020.

Reviewer for Water and Environment Journal, on July, 2020.

Reviewer for Computers and Electronics in Agriculture, on July, 2020.

Reviewer for Arabian Journal of Geosciences (AJGS), on July, 2020.

Reviewer for Pure and Applied Geophysics, on June, 2020.

Reviewer for Environmental Pollution, on May, 2020.

Reviewer for Water and Environment Journal, on May, 2020.

Reviewer for Science of the Total Environment, on May, 2020.

Reviewer for Hydrological Sciences Journal (IAHS), on April, 2020.

Reviewer for Environmental Pollution, on April, 2020.

Reviewer for Journal of Hydrology, on March, 2020.

Reviewer for Natural Hazards,on February, 2020.

Reviewer for Water and Environment Journal, on February, 2020.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on February, 2020.

Reviewer for Hydrological Sciences Journal (IAHS), on January, 2020.

Reviewer for Hydrology Research, on December, 2019.

Reviewer for Journal of Water and Climate Change, on December, 2019.

Reviewer for Renewable Energy, on December, 2019.

Reviewer for Journal of Hydrology, on December, 2019.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on November, 2019.

Reviewer for Hydrology Research, on November, 2019.

Reviewer for Hydrology Research, on July, 2019.

Reviewer for Computers and Electronics in Agriculture, on July, 2019.

Reviewer for Sustainability, on June, 2019.

Reviewer for Hydrological Sciences Journal (IAHS), on June, 2019.

Reviewer for Environmental Monitoring and Assessment, on May, 2019.

Reviewer for Hydrological Sciences Journal (IAHS), on May, 2019.

Reviewer for Journal of Hydrology, on May, 2019.

Reviewer for Journal of Hydrology, on May, 2019.

Reviewer for Hydrology Research, on January, 2019.

Reviewer for Journal of Hydroinformatics, on January, 2019.

Reviewer for Water Research, on December, 2018.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on November, 2018.

Reviewer for Journal of Hydrology, on October, 2018.

Reviewer for Water and Environment Journal, on October, 2018.

Reviewer for Journal of Hydrology, on September, 2018.

Reviewer for Journal of Hydrology, on September, 2018.

Reviewer for Water Resources Management, on September, 2018.

Reviewer for Hydrology Research, on August, 2018.

Reviewer for Hydrological Processes, on August, 2018.

Reviewer for Computers and Electronics in Agriculture, on August, 2018.

Reviewer for Polish Journal of Environmental Studies, on June, 2018.

Reviewer for Hydrology Research, on June, 2018.

Reviewer for Journal of Hydrology, on May, 2018.

Reviewer for Computers and Electronics in Agriculture, on May, 2018.

Reviewer for Journal of Hydrology, on April, 2018.

Reviewer for Advances in Water Resources, on April, 2018.

Reviewer for Renewable Energy, on March, 2018.

Reviewer for Energy, on March, 2018.

Reviewer for Journal of Hydrology, on March, 2018.

Reviewer for Water Resources Management, on February, 2018.

Reviewer for Journal of Environmental Informatics, on February, 2018.

Reviewer for Hydrology Research, on January, 2018.

Reviewer for Journal of Hydroinformatics, on January, 2018.

Reviewer for Engineering Geology, on January, 2018.

Reviewer for Journal of African Earth Sciences, on December, 2017.

Reviewer for Engineering Failure Analysis, on December, 2017.

Reviewer for Hydrology Research, on December, 2017.

Reviewer for Scientia Iranica, on November, 2017.

Reviewer for Computers and Electronics in Agriculture, on November, 2017.

Reviewer for Computers and Electronics in Agriculture, on November, 2017.

Reviewer for Computers and Electronics in Agriculture, on September, 2017.

Reviewer for Applied Soft Computing, on July, 2017.

Reviewer for Journal of Hydrology, on June, 2017.

Reviewer for Hydrological Sciences Journal (IAHS), on June, 2017.

Reviewer for Engineering with Computers, on May, 2017.

Reviewer for Applied Mathematical Modelling, on April, 2017.

Reviewer for Hydrology Research, on April, 2017.

Reviewer for IEEE Transactions on Reliability, on March, 2017.

Reviewer for Hydrological Sciences Journal (IAHS), on March, 2017.

Reviewer for Neural Computing & Applications, on March, 2017.

Reviewer for Computers and Concrete, on February, 2017.

Reviewer for Hydrology Research, on January, 2017.

Reviewer for Civil Engineering Infrastructures Journal, on January, 2017.

Reviewer for Hydrological Sciences Journal (IAHS), on December, 2016.

Reviewer for Journal of Hydrology, on December, 2016.

Reviewer for Natural Hazards, on November, 2016.

Reviewer for Hydrology Research, on November, 2016.

Reviewer for Water Resources Management, on October, 2016.

Reviewer for Journal of Hydrology, on October, 2016.

Reviewer for Hydrology Research, on October, 2016.

Reviewer for Journal of Hydrology, on August, 2016.

Reviewer for Journal of Hydrologic Engineering (ASCE), on August, 2016.

Reviewer for Computers and Electronics in Agriculture, on July, 2016.

Reviewer for Hydrology Research, on June, 2016.

Reviewer for Hydrology Research, on June, 2016.

Reviewer for Natural Hazards,on May, 2016.

Reviewer for Stochastic Environmental Research and Risk Assessment, on May, 2016.

Reviewer for Journal of Hydrology, on April, 2016.

Reviewer for Journal of Engineering Research of Kuwait University, on April, 2016.

Reviewer for Journal of the Faculty of Engineering and Architecture of Gazi University, on March, 2016.

Reviewer for Water Resources Management, on February, 2016.

Reviewer for Neural Computing & Applications, on February, 2016.

Reviewer for Journal of Hydrology, on January, 2016.

Reviewer for Agricultural Water Management, on January, 2016.

Reviewer for Meteorological Applications, on December, 2015.

Reviewer for Journal of Mountain Science, on December, 2015.

Reviewer for Computers and Electronics in Agriculture, on December, 2015.

Reviewer for Neural Computing & Applications, on December, 2015.

Reviewer for Hydrological Sciences Journal (IAHS), on December, 2015.

Reviewer for Measurement, on October, 2015.

Reviewer for Journal of Irrıgation and Drainage Engineering (ASCE), on October, 2015.

Reviewer for Journal of Coastal Conservation, on October, 2015.

Reviewer for Journal of Hydrology, on September, 2015.

Reviewer for Journal of Hydrologic Engineering (ASCE), on August, 2015

Reviewer for Theoretical and Applied Climatology, onAugust, 2015.

Reviewer for Solar Energy, on July, 2015.

Reviewer for Theoretical and Applied Climatology, on July, 2015.

Reviewer for Computers and Concrete, on May, 2015.

Reviewer for Journal of Hydrology, on May, 2015.

Reviewer for Hydrological Sciences Journal (IAHS), on April, 2015.

Reviewer for Hydrology Research, on April, 2015.

Reviewer for Journal of Hydrology, on April, 2015.

Reviewer Journal of Hydro-environment Research, on March, 2015.

Reviewer for Journal of Hydroinformatics, on February, 2015.

Reviewer for Theoretical and Applied Climatology, on February, 2015.

Reviewer for Journal of Hydrology, on February, 2015.

Reviewer for International Journal of Sustainable Society, on February, 2015

Reviewer for Journal of Hydrology, on February, 2015

Reviewer for Journal of Hydroinformatics, on January, 2015.

Reviewer for Applied Soft Computing, on January, 2015.

Reviewer for Theoretical and Applied Climatology, on January, 2015.

Reviewer for Irrigation Science, on January, 2015.

Reviewer for Meteorology and Atmospheric Physics, on December, 2014.

Reviewer for Journal of Hydrologic Engineering (ASCE), on December, 2014.

Reviewer for Journal of Hydrologic Engineering (ASCE), on November, 2014.

Reviewer for Journal of Hydrologic Engineering (ASCE), on October, 2014.

Reviewer for Neural Computing & Applications, on October, 2014.

Reviewer for Theoretical and Applied Climatology, on September, 2014.

Reviewer for Surveys in Geophysics, on September, 2014.

Reviewer for Hydrology Research, on September, 2014.

Reviewer for Journal of Computing in Civil Engineering (ASCE), on September, 2014.

Reviewer for Journal of Agricultural Science and Technology, on August, 2014.

Reviewer for Journal of Hydrology, on August, 2014.

Reviewer for Environmental Engineering and Management Journal, on July, 2014.

Reviewer for Journal of Hydrologic Engineering (ASCE), on July, 2014.

Reviewer for Hydrological Sciences Journal (IAHS), on July, 2014.

Reviewer for Journal of the American Water Resources Association, on June, 2014.

Reviewer for Journal of Hydrology and Hydromechanics, on May, 2014.

Reviewer for Neural Computing & Applications, on April, 2014.

Reviewer for Environmental Modelling & Software, on April, 2014.

Reviewer for Journal of Hydrologic Engineering (ASCE), on March, 2014.

Reviewer for Journal of Hydrologic Engineering (ASCE), on March, 2014.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on March, 2014.

Reviewer for Hydrological Sciences Journal (IAHS), on March, 2014.

Reviewer for Journal of Hydrology, on February, 2014.

Reviewer for Journal of Hydrology, on December, 2013.

Reviewer for Journal_of_Agricultural Science, on December, 2013

Reviewer for Journal of Hydroinformatics, on December, 2013.

Reviewer for Water Resources Management, on December, 2013.

Reviewer for Desalination and Water Treatment, on December, 2013.

Reviewer for Journal of Hydrologic Engineering (ASCE), on December, 2013.

Reviewer for Journal of Climatology, on November, 2013.

Reviewer for Journal of Hydrology, on November, 2013.

Reviewer for Energy, on November, 2013.

Reviewer for Theoretical and Applied Climatology, on October, 2013.

Reviewer for Journal of Hydrology, on September, 2013.

Reviewer for Journal of Hydrologic Engineering (ASCE), on August, 2013.

Reviewer for Journal of Hydrology, on July, 2013.

Reviewer for Journal of Hydroinformatics, on July, 2013.

Reviewer for Water Resources Management, on June, 2013.

Reviewer for Theoretical and Applied Climatology, on June, 2013.

Reviewer for Journal of Hydroinformatics, on April, 2013.

Reviewer for Journal of Computing in Civil Engineering (ASCE), on April, 2013.

Reviewer for Neural Computing & Applications, on April, 2013.

Reviewer for Water Resources Management, on March, 2013.

Reviewer for Soft Computing, on March, 2013.

Reviewer for Theoretical and Applied Climatology, on February, 2013.

Reviewer for Water Resources Management, on February, 2013.

Reviewer for J. of the American Water Resources Association, on February, 2013.

Reviewer for Water Resources Management, on January, 2013.

Reviewer for Hydrology Research, on December, 2012.

Reviewer for Water Resources Management, on October, 2012.

Reviewer for Water Resources Management, on October, 2012.

Reviewer for Journal of Environmental Management, on October, 2012.

Reviewer for Fire Safety Journal, on October, 2012.

Reviewer for Environmetrics, on September, 2012.

Reviewer for Journal of Hydroinformatics, on September, 2012.

Reviewer for Theoretical and Applied Climatology, on September, 2012.

Reviewer forNeural Computing & Applications, on September, 2012.

Reviewer for Journal of Hydroinformatics, on August, 2012.

Reviewer for Water Resources Management, on August, 2012.

Reviewer for Journal of Hydrology,on August, 2012.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on June, 2012.

Reviewer for Water Resources Management, on June, 2012.

Reviewer for Journal of Hydroinformatics, on June, 2012.

Reviewer forJournal of Urban and Environmental Engineering,on June, 2012.

Reviewer forNeural Computing & Applications, on June, 2012.

Reviewer forEarth Science Informatics, on May, 2012

Reviewer for Hydrology Research,on May, 2012.

Reviewer for International Journal of Global Warming, on April, 2012.

Reviewer for Journal of Irrıgation and Drainage Engineering (ASCE), on April, 2012.

Reviewer for Kuwait J. of Sci. and Engineering, on April, 2012.

Reviewer for Hydrological Processes, on April, 2012.

Reviewer for Journal of Hydrology,on April, 2012.

Reviewer for Environmental Earth Sciences,on March, 2012.

Reviewer for Journal of the Geological Society of India, on March, 2012.

Reviewer for Engineering Applications of Computational Fluid Mechanics, on March, 2012.

Reviewer for Water Resources Management, on February, 2012.

Reviewer for TEKNIK DERGI (IMO), on January, 2012.

Reviewer for Water Science and Technology, on January, 2012.

Reviewer for Hydrological Sciences Journal (IAHS), on January, 2012.

Reviewer for Journal of Hydroinformatics, on December, 2011.

Reviewer for Computers & Geosciences, on December, 2011.

Reviewer for Water Resources Research, on December, 2011.

Reviewer for Stochastic Environmental Research and Risk Assessment, on November, 2011

Reviewer for Journal of Hydroinformatics, on November, 2011.

Reviewer for Journal of Hydrology,on November, 2011.

Reviewer forComputers and Electronics in Agricultureon November, 2011.

Reviewer for Journal of Hydroinformatics, on November, 2011.

Reviewer for Irrigation Science, on October, 2011.

Reviewer for Hydrological Processes, on September, 2011.

Reviewer for Expert System, on August, 2011.

Reviewer for Applied Soft Computing, on August, 2011.

Reviewer for Canadian Journal of Civil Engineering, on August, 2011.

Reviewer for Journal of Hydrology,on August, 2011.

Reviewer for Journal of Hydrologic Engineering (ASCE), on July, 2011.

Reviewer for Journal of Hydroinformatics, on June, 2011.

Reviewer for Journal of Climatology, on June, 2011.

Reviewer for International J. of Natural Resources and Marine Sciences, on May, 2011.

Reviewer for Journal of Earth System Science, on April, 2011.

Reviewer for Hydrological Sciences Journal (IAHS), on April, 2011.

Reviewer for ASCE J. of Energy Engineering, on April, 2011.

Reviewer for Hydrological Processes, on March, 2011.

Reviewer for Water Science and Technology, on March, 2011.

Reviewer Journal of Hydro-environment Research, on March, 2011.

Reviewer for Journal of Hydraulic Engineering (ASCE), on February, 2011.

Reviewer for Hydrological Processes, on February, 2011.

Reviewer for Journal of Hydroinformatics, on February, 2011.

Reviewer for Hydrological Sciences Journal (IAHS), on January, 2011.

Reviewer for Water Resources Management, on January, 2011.

Reviewer for Hydrological Processes, on January, 2011.

Reviewer for Ocean Engineering on December, 2010.

Reviewer for Int. J. of River Basin Management on December, 2010.

Reviewer for Hydrological Processes, on November, 2010.

Reviewer for Journal of Hydrology,on November, 2010.

Reviewer for Scientific Research and Essays, on November, 2010.

Reviewer forExpert Systems, on November, 2010.

Reviewer for Journal of Hydroinformatics, on November, 2010.

Reviewer for Journal of Irrigation Science, on November, 2010.

Reviewer for Journal of Irrigation Science, on November, 2010.

Reviewer for Water Resources Management, on October, 2010.

Reviewer for Int. J. of River Basin Management on October, 2010.

Reviewer for Flow Measurement and Instrumentation, on October, 2010.

Reviewer for Journal of Earth System Science, on October, 2010.

Reviewer for Water SA, on October, 2010.

Reviewer for Advances in Engineering Software, on September, 2010.

Reviewer for Scientific Research and Essays, on September, 2010.

Reviewer for Environmental Fluid Mechanics, on September, 2010.

Reviewer for Advances in Engineering Software, on September, 2010.

Reviewer for Journal of Hydrologic Engineering (ASCE), on August, 2010.

Reviewer for Journal of Hydrology,on August, 2010.

Reviewer for Advances in Engineering Software, on August, 2010.

Reviewer for Water Resources Research, on July, 2010.

Reviewer for Advances in Engineering Software, on July, 2010.

Reviewer for Environmental Engineering Science, on June, 2010.

Reviewer for Advances in Engineering Software, on June, 2010.

Reviewer for Scientia Agricola, on June, 2010.

Reviewer for Water Resources Management, on June, 2010.

Reviewer for Journal of Hydrology,on May, 2010.

Reviewer for Journal of Irrıgation and Drainage Engineering (ASCE), on May, 2010.

Reviewer for Environmental Fluid Mechanics, on April, 2010.

Reviewer for Journal of Irrigation Science, on April, 2010.

Reviewer for Advances in Engineering Software, on April, 2010.

Reviewer for Journal of Hydroinformatics, on April, 2010.

Reviewer for International Journal of the Physical Sciences, on April, 2010.

Reviewer for Hydrological Processes, on March, 2010.

Reviewer for Applied Soft Computing, on March, 2010.

Reviewer for KSCE Journal of Civil Engineering, on March, 2010.

Reviewer for Water Resources Research, on February, 2010.

Reviewer for Journal of Irrigation Science, on February, 2010.

Reviewer for Journal of Hydroinformatics, on January, 2010.

Reviewer for Agricultural Water Management, on January, 2010.

Reviewer for Journal of Irrigation Science, on January, 2010.

Reviewer for Nondestructive Testing and Evaluation, on December, 2009.

Reviewer for Water Resources Management, on December, 2009.

Reviewer for Water Resources Research, on December, 2009.

Reviewer forComputers and Electronics in Agricultureon November, 2009.

Reviewer forCLEAN – Soil, Air, Water, on November, 2009.

Reviewer for Advances in Engineering Software, on October, 2009.

Reviewer for Gazi University Isı Bilimi ve Tekniği Dergisi, on September, 2009.

Reviewer for Advances in Engineering Software, on September, 2009.

Reviewer for Advances in Engineering Software, on September, 2009.

Reviewer for Advances in Engineering Software, on August, 2009.

Reviewer for Advances in Engineering Software, on August, 2009.

Reviewer for Journal of Hydroinformatics, on August, 2009.

Reviewer for Water Resources Management, on July, 2009.

Reviewer for Journal of Hydrologic Engineering (ASCE), on July, 2009.

Reviewer for Journal of Irrigation and Drainage Engineering (ASCE), on July, 2009.

Reviewer for Journal of Hydroinformatics, on May, 2009.

Reviewer for Water Resources Management, on May, 2009.

Reviewer for Environmental Modelling & Software, on May, 2009.

Reviewer for Journal of Hydrologic Engineering (ASCE), on March, 2009.

Reviewer for Geo-Marine Letters, on March, 2009.

Reviewer for Hydrological Processes, on March, 2009.

Reviewer for Advances in Engineering Software, on February, 2009.

Reviewer for Advances in Engineering Software, on February, 2009.

Reviewer for Hydrological Processes, on January, 2009.

Reviewer for River Research and Applications, on December, 2008.

Reviewer for Kuwait J. of Sci. and Engineering, on December, 2008.

Reviewer for Journal of Hydrology Research, on December, 2008.

Reviewer for Journal of Irrigation Science, on December, 2008.

Reviewer for Indian Journal of Engineering & Materials Sciences, on November, 2008.

Reviewer for Water Resources Research, on November, 2008.

Reviewer forCLEAN – Soil, Air, Water, on November, 2008.

Reviewer for Water Resources Management, on October, 2008.

Reviewer for Water and Environment Journal, on October, 2008.

Reviewer for Environmental Fluid Mechanics, on October, 2008.

Reviewer for Hydrological Processes, on September, 2008.

Reviewer for Journal of Irrigation Science, on August, 2008.

Reviewer for Journal of Hydrologic Engineering (ASCE), on August, 2008.

Reviewer for Advances in Engineering Software, on July, 2008.

Reviewer for Advances in Engineering Software, on July, 2008.

Reviewer for Journal of Irrıgation and Drainage Engineering (ASCE), on June, 2008.

Reviewer for Canadian J. of Civil Eng, on June, 2008.

Reviewer for Advances in Engineering Software, on June, 2008.

Reviewer for Hydrological Processes, on June, 2008.

Reviewer for Water Resources Research, on May, 2008.

Reviewer for Hydrological Sciences Journal (IAHS), on May, 2008.

Reviewer for Stochastic Environmental Research and Risk Assessment, on April, 2008.

Reviewer for CMES, Computer Modeling in Engineering & Sciences, on April, 2008.

Reviewer for Advances in Engineering Software, on April, 2008.

Reviewer for Advances in Engineering Software, on March, 2008.

Reviewer for Journal of Hydrologic Engineering (ASCE), on February, 2008.

Reviewer for Journal of Urban and Environmental Engineering, on January, 2008.

Reviewer for Soft Computing, on January, 2008.

Reviewer for Applied Mathematical Modelling, on December, 2007.

Reviewer for Journal of Hydrology, on December, 2007.

Reviewer for Journal of Hydrologic Engineering (ASCE), on December, 2007.

Reviewer for Hydrological Sciences Journal (IAHS), on Nowember, 2007.

Reviewer for Hydrological Processes, on September, 2007.

Reviewer for Water and Environment Journal, on September, 2007.

Reviewer for Computers & Fluids, on September, 2007.

Reviewer for Journal of Environmental Management, on September, 2007.

Reviewer for Journal of Hydrology, on August, 2007.

Reviewer for Hydrological Sciences Journal (IAHS), on June, 2007.

Reviewer for Water Resources Research, on June, 2007.

Reviewer for CATENA, on April, 2007.

Reviewer for Hydrological Sciences Journal (IAHS), on March, 2007.

Reviewer for Hydrological Sciences Journal (IAHS), on January, 2007.

Reviewer for Journal of Environmental Management, on December, 2006.

Reviewer for Journal of Coastal Research, on September, 2006.

Reviewer for Hydrological Sciences Journal (IAHS), on August, 2006.

Reviewer for Hydrological Processes, on May, 2006.

Reviewer for Hydrological Sciences Journal (IAHS), on April, 2006.

Reviewer for Water Resources Research, on April, 2006.

Reviewer for Environmental Fluid Mechanics, on February, 2006.

Reviewer for Neurocomputing, Elsevier, on December, 2005.

Reviewer for Hydrological Sciences Journal (IAHS), on June, 2005

Reviewer for Hydrological Sciences Journal (IAHS), on December, 2004.

Reviewer for Journal of Irrıgation and Drainage Engineering (ASCE), on July, 2004.

Reviewer for Hydrological Sciences Journal (IAHS), on April, 2004.

Reviewer for Hydrological Sciences Journal (IAHS), on August, 2003.

Reviewer for University of Nis Faculty of Civil Engineering and Achitecture, Serbia (monograph evaluation), on October, 2008.

Expert for the evaluation of Ph.D. Thesis:

Expert for the evaluation of Ph.D. Thesis of Vivien Lai Mei Yen, a candidate for the award of Ph.D. Degree", on Engineering, Universiti Tunku Abdul Rahman, on March, 2023.

Expert for the evaluation of Ph.D. Thesis of Nishant Kumar, a candidate for the award of Ph.D. Degree", Electrical and Instrumentation Engineering Department, Thapar Institute of Engineering & Technology, on September, 2021.

Expert for the evaluation of Ph.D. Thesis of Pavitra Kumar, a candidate for the award of Ph.D. Degree", Faculty of Engineering, University of Malaya, on March, 2021.

Expert for the evaluation of Ph.D. Thesis of Zacarias Gulliver Acevedo, a candidate for the award of Ph.D. Degree in " Fluvial Dynamics and Hydrology Research Group, Department of Agronomy", University of Cordoba, on December, 2020.

Expert for the evaluation of Ph.D. Thesis of Mozafar Ansari, a candidate for the award of Ph.D. Degree in "Water Resources Engineering", University of Malaya, on September, 2020.

Expert for the evaluation of Ph.D. Thesis of Taher J. M. Abunama, a candidate for the award of Ph.D. Degree in "Hydrology", Savitribaiphule University of Malaya, on March, 2019.

Expert for the evaluation of Ph.D. Thesis of Maryam Hamouleh Kheirollahpour, a candidate for the award of Ph.D. Degree", Institute for Advanced Studies, University of Malaya, on November, 2018.

Expert for the evaluation of Ph.D. Thesis of Kh. Mahfuz Ud Darain, a candidate for the award of Ph.D. Degree", Faculty of Engineering, University of Malaya, on October, 2016.

Expert for the evaluation of Ph.D. Thesis of Pradnya R. Dixit, a candidate for the award of Ph.D. Degree in " Hydrology", Savitribaiphule Pune University, on September, 2016.

Expert for the evaluation of Ph.D. Thesis of Patil Amit Prakash, a candidate for the award of Ph.D. Degree in "Hydrology", National Institute of Technology Karnataka, on July 2016.

Expert for the evaluation of Ph.D. Thesis of Nandita Singh, a candidate for the award of Ph.D. Degree in " Department of Earth Sciences", Indian Institute of Technology, on March 2014.

Expert for the evaluation of Ph.D. Thesis of Anil Kumar Kar, a candidate for the award of Ph.D. Degree in "Civil and Environmental Technology", Indian Institute of Technology, on September 2011.

Expert for the evaluation of Ph.D. Thesis of Anil Kumar Lohani, a candidate for the award of Ph.D. Degree in " Hydrology", Indian Institute of Technology, on March, 2008.

Thesis supervision:

MSc

Mariam Idowu, "Investigating the relationships between streamflow and climatic variables in northern Germany and developing prediction model by improved machine learning methods using ground- and satellite-based data", Lübeck University of Appliad Science, 2023 (ongoing).

Edris Jahanpanah, "Estimation of discharge with free overfall in rectangular channel using artificial intelligence models", University of Kurdistan, (ongoing).

Vahdettin Demir, "Flood hazard mapping by using geographic information system and hydraulic model: Mert River, Samsun, Turkey", Canik Basari University, 2015.

Halil İbrahim Fedakar, "River suspended sediment concentration modelling using fuzzy genetic approach", Erciyes University, 2012.

Ersin Yaşlı, "Wavelet neural networks for estimating short-term and long-term streamflows", Erciyes University, 2010.

Yasin Kılıç, "Modeling evapotranspirasyonun using artificial neural networks and comparison with empirical methods", Erciyes University, 2010.

Mehmet Güneş, "Modeling lake level fluctuations of Sultan Sazligi using wavelet neural networks", Erciyes University, 2010.

Fatih Cevat, "Determination of river stage-discharge relationship using artificial intelligence methods", Erciyes University, 2009.

Necmiye Nas, "River sediment load modelling using artificial intelligence techniques", Erciyes University, 2008.

Selcan Afşar, "Pan evaporation estimation using artificial neural networks and fuzzy logic approaches", Erciyes University, 2008.

PhD

Mohammad Ehteram, "Applying evolutionary algorithms in operation of reservoirs", Semnan University, (ongoing).

Levent Latifoglu, "Hydrologic forecasting using Hilbert Huang transform", Erciyes University, 2017.

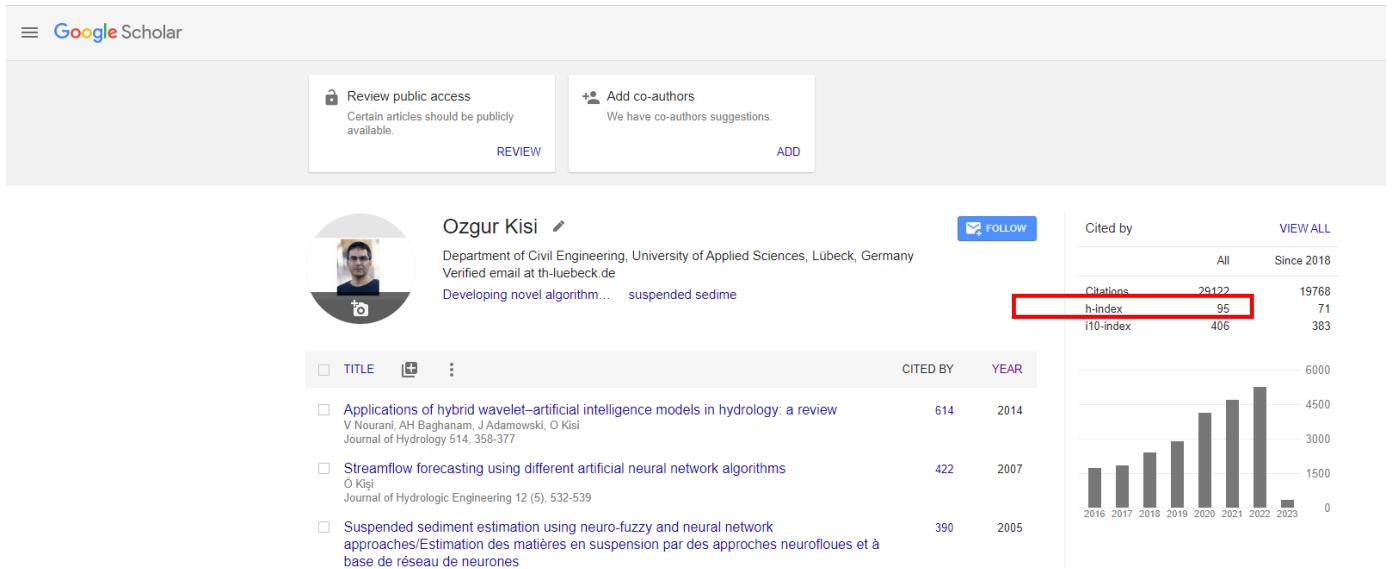Murat Ay, "Modeling water quality parameters using artificial intelligence techniques, 2014.

Ömer Bilhan, "Prediction of lateral outflow over triangular labyrinth side weirs using soft computing approaches", Firat University, 2011.

Citation statistics:

According to the Web of Scince (h-index: 73)
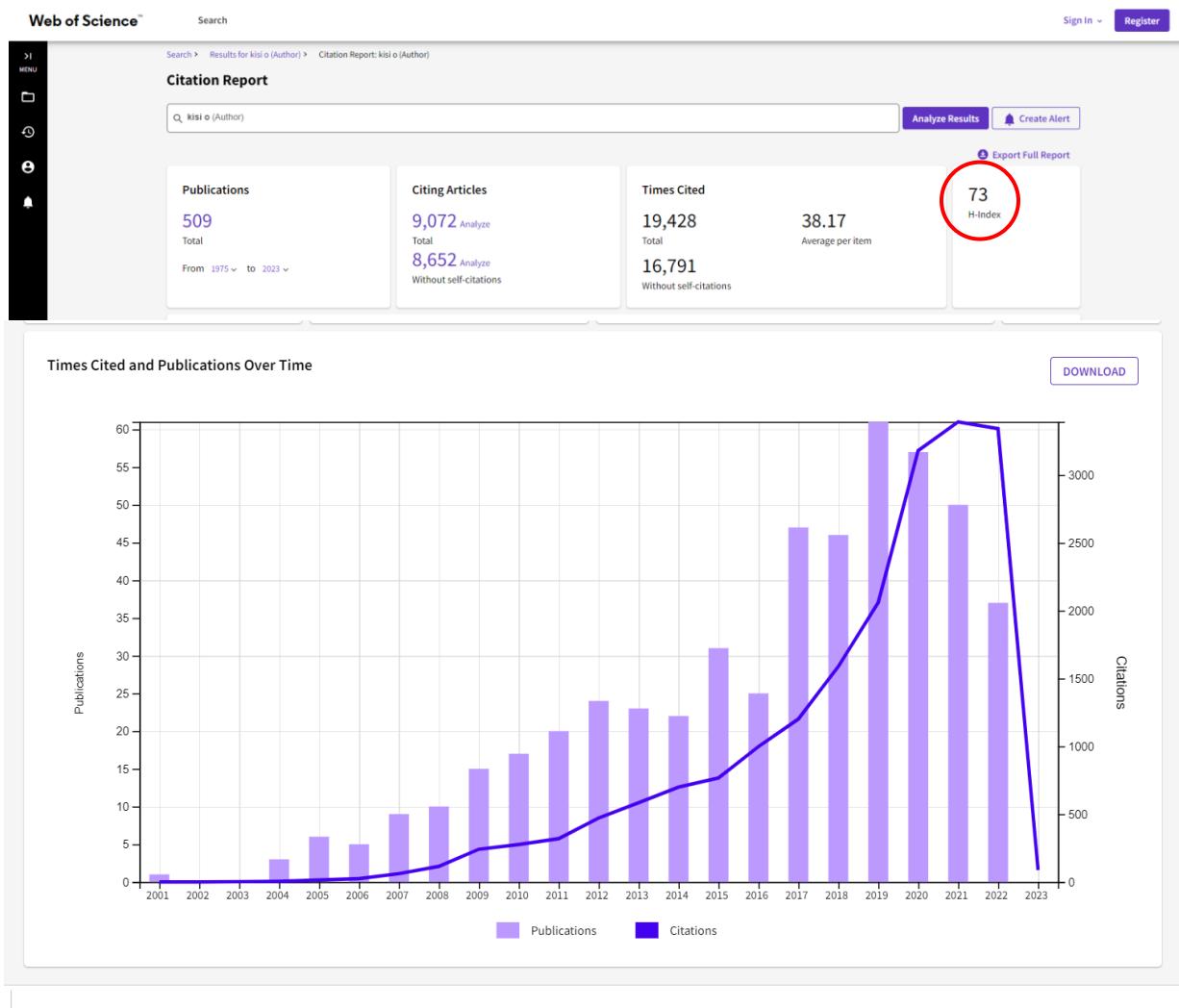
According to the Google Scholar (h-index: 95)

AWARDS

- 2006 Tison Award (given by the International Association of Hydrological Sciences (IAHS), URL: http://iahs.info/About-IAHS/Competition--Events/Tison-Award/Tison-Award-winners/OKisi.do)

- 2006 Popular Science Award (given by the Popular Science Journal)

- Scientific Encouragement Award (Erciyes University President), 2006.

- Scientific Publication Honour Award for 2006 (Erciyes University Engineering Faculty)

- Distinguished Young Scientist Award, (FABED, Fevzi Akkaya Foundation for Scientific Research, URL: https://www.fabed.com/sonuclar.php?p=2007_basari), 2007.

- Scientific Publication HonourAward for 2007 (Erciyes University Engineering Faculty)

- Scientific Publication Honour Award for 2008 (Erciyes University Engineering Faculty)

- Scientific Publication Honour Award for 2010 (Erciyes University Engineering Faculty)

- Scientific Publication Honour Award for 2011 (Erciyes University Engineering Faculty)

- Scientific Publication Honour Award for 2014 (Basari University)

- Scientific Publication Honour Award for 2015 (BasariUniversity).

- In 2019, 7th rank in the field of Environmental Engineering in the world according to the database developed by the researchers from Stanford University (https://drive.google.com/file/d/1bUJrvurVVBbxSl9eFZRSHFif7tt30-5U/view).

- Best Reviewer Award given by Hydrological Sciences Journal, 2020.

- In 2020, 8th and 9th ranks in the fields of Environmental Engineering and Meteorology & Atmospheric Sciences in the world according to the updated database developed by the same researchers from Stanford University (https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3).

- Distinguished Scientist Award (golden medal), Ilia State University, 2021.

- He was selected as the highly cited researcher by the Clarivate in 2021 (https://recognition.webofscience.com/awards/highly-cited/2021/?utm_campaign=EM1_Highly_Cited_Researchers_SAR_Global_2021_Recipients_EN&utm_medium=email&utm_source=Eloqua).

- In 2021, 5th and 6th ranks in the fields of Environmental Engineering and Meteorology & Atmospheric Sciences in the world according to the updated database developed by the same researchers from Stanford University (https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4).

- 2023 Best Discussion Award (EWRI-ASCE).

LANGUAGE

Turkish, native language
English
Georgian (beginner level)

COMPUTER EXPERIENCE

Operating systems:	Windows.
Software:	MS Excel, MS Word, MS Power Point, Matlab.
Programming languages:	MATLAB (good).

PROFESSIONAL MEMBERSHIPS

Principal member of Turkish Academy of Science (selected in 2012)
American Society of Civil Engineers
IAHS (International Association of Hydrological Sciences)
IAMG (International Association for Mathematical Geosciences)
Fuzzy Logic and Technology Club in ITU.

HOBBIES

Gymnastics
WingTsun (kung fu)
Swimming
Chess
Draughts

REFERENCES

Vijay Singh, Distinguished Professor and Regents Professor, Caroline & William N. Lehrer Distinguished Chair in Water Engineering, Email: vsingh@tamu.edu

Latif Kalin, Professor, School of Forestry & Wildlife Sciences, Associate Director, Center for Environmental Studies at the Urban-Rural Interface, Auburn University, Auburn, USA. kalinla@auburn.edu

Sungwon Kim, Professor, Department of Railroad and Civil Engineering, Dongyang University, Yeongju, 750-711, Republic of Korea. 82-54-630-1241. swkim1968@dyu.ac.kr

Andrea Petroselli, Associate Professor of Hydrology and Hydraulics, Rector Delegate for Sustainability Department of Economy, Engineering, Society and Business (DEIM), Tuscia University, Viterbo, Italy. Tel: +39 0761 357348 (direct), fax: +39 0761 357250, e-mail: petro@unitus.it

Tefaruk Haktanir, Professor, Department of Civil Engineering, Hydraulics Division, Erciyes University, Kayseri, Turkey. + 90-352 437 4937 / 32325. thaktan@erciyes.edu.tr

Ravinesh Deo, Senior Lecturer, School of Agricultural, Computational and Environmental Sciences, University of Southern Queensland, Australia. +61 7 3470 4430 / 4430. Ravinesh.Deo@usq.edu.au

Celso A. G. Santos, Professor, Department of Civil and Environmental Engineering, Federal University of Paraíba, Brazil. +55-83 32167684 / 27. celso@ct.ufpb.br