

## Doç.Dr. ALİ ERCAN

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: AAI-2418-2021

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### Eğitim Bilgileri

Doktora, University of California, Davis, Civil and Environmental Engineering, Amerika Birleşik Devletleri 2004 - 2007

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Türkiye 1997 - 2002

### Araştırma Alanları

Hidrolik, Yüzey Suları Mühendisliği, Hidroloji, Su Kaynaklarının Planlanması, Tasarımı ve Yönetimi, Açık Kanal Hidroliği, Hidromekanik, Yeraltı Suları Mühendisliği

### Akademik Unvanlar / Görevler

Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2022 - Devam Ediyor

### Verdiği Dersler

Introduction To Groundwater Modeling, Lisans, 2022 - 2023

Hidromekanik, Lisans, 2022 - 2023

Probabilistic Systems Analysis for Civil Engineers , Lisans, 2017 - 2018

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Use of one-dimensional CNN for input data size reduction in LSTM for improved computational efficiency and accuracy in hourly rainfall-runoff modeling**  
Ishida K., Ercan A., Nagasato T., Kiyama M., Amagasaki M.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, cilt.359, ss.1-13, 2024 (SCI-Expanded)
- II. **Multidimensional Governing Equations of Matrix Flow Component of Subsurface Stormflow as Function of Bedrock Surface Geometry**  
Kavvas M. L., Tu T., ERCAN A., Chen Z.  
Water Resources Research, cilt.58, sa.12, 2022 (SCI-Expanded)

- III. **Generalizations of incompressible and compressible Navier–Stokes equations to fractional time and multi-fractional space**  
Kavvas M. L., Ercan A.  
Scientific Reports, cilt.12, sa.1, 2022 (SCI-Expanded)
- IV. **Capabilities of deep learning models on learning physical relationships: Case of rainfall-runoff modeling with LSTM**  
Yokoo K., Ishida K., Ercan A., Tu T., Nagasato T., Kiyama M., Amagasaki M.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.802, 2022 (SCI-Expanded)
- V. **Multi-time-scale input approaches for hourly-scale rainfall-runoff modeling based on recurrent neural networks**  
Ishida K., Kiyama M., Ercan A., Amagasaki M., Tu T.  
JOURNAL OF HYDROINFORMATICS, cilt.23, sa.6, ss.1312-1324, 2021 (SCI-Expanded)
- VI. **Hybrid precipitation downscaling over coastal watersheds in Japan using WRF and CNN**  
Tu T., Ishida K., Ercan A., Kiyama M., Amagasaki M., Zhao T.  
JOURNAL OF HYDROLOGY-REGIONAL STUDIES, cilt.37, 2021 (SCI-Expanded)
- VII. **Space and Time Fractional Governing Equations of Unsteady Overland Flow**  
Kavvas M. L., Ercan A., Tu T.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.26, sa.7, 2021 (SCI-Expanded)
- VIII. **Numerical Evaluation of Fractional Vertical Soil Water Flow Equations**  
Ercan A., Kavvas M. L.  
WATER, cilt.13, sa.4, 2021 (SCI-Expanded)
- IX. **Development of high-resolution 72 h precipitation and hillslope flood maps over a tropical transboundary region by physically based numerical atmospheric-hydrologic modeling**  
Trinh T., Ho C., Do N., Ercan A., Kawas M. L.  
JOURNAL OF WATER AND CLIMATE CHANGE, cilt.11, ss.387-406, 2020 (SCI-Expanded)
- X. **Coupling hydroclimate-hydraulic-sedimentation models to estimate flood inundation and sediment transport during extreme flood events under a changing climate**  
Tu T., Ercan A., Carr K. J., Kavvas M. L., Trinh T., Ishida K., Nosacka J., Brown K.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.740, 2020 (SCI-Expanded)
- XI. **Modeling One-Dimensional Nonreactive Solute Transport in Open Channel Flows Under Uncertain Flow and Solute Loading Conditions**  
Tu T., Ercan A., Levent Kavvas M.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.25, sa.8, 2020 (SCI-Expanded)
- XII. **Assessment of atmospheric conditions over the Hong Thai Binh river watershed by means of dynamically downscaled ERA-20C reanalysis data**  
Ho C., Nguyen A., Ercan A., Kawas M. L., Nguyen V., Nguyen T.  
JOURNAL OF WATER AND CLIMATE CHANGE, cilt.11, sa.2, ss.540-555, 2020 (SCI-Expanded)
- XIII. **Hourly-scale coastal sea level modeling in a changing climate using long short-term memory neural network**  
Ishida K., Tsujimoto G., Ercan A., Tu T., Kiyama M., Amagasaki M.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.720, 2020 (SCI-Expanded)
- XIV. **Self-similarity in fate and transport of contaminants in groundwater**  
Ercan A.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.706, 2020 (SCI-Expanded)
- XV. **Trend analysis of watershed-scale annual and seasonal precipitation in Northern California based on dynamically downscaled future climate projections**  
Ishida K., Ercan A., Trinh T., Jang S., Kavvas M. L., Ohara N., Chen Z. Q., Kure S., Dib A.  
JOURNAL OF WATER AND CLIMATE CHANGE, cilt.11, sa.1, ss.86-105, 2020 (SCI-Expanded)
- XVI. **Probabilistic solution to two-dimensional stochastic solute transport model by the Fokker-Planck equation approach**  
Tu T., Ercan A., Kavvas M. L.

JOURNAL OF HYDROLOGY, cilt.580, 2020 (SCI-Expanded)

- XVII. **Fractional governing equations of transient groundwater flow in unconfined aquifers with multi-fractional dimensions in fractional time**  
Kavvas M. L., Tu T., Ercan A., Polsinelli J.  
EARTH SYSTEM DYNAMICS, cilt.11, sa.1, ss.1-12, 2020 (SCI-Expanded)
- XVIII. **Impacts of climate change on snow accumulation and melting processes over mountainous regions in Northern California during the 21st century**  
Ishida K., Ohara N., Ercan A., Jang S., Trinh T., Kavvas M. L., Carr K., Anderson M. L.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.685, ss.104-115, 2019 (SCI-Expanded)
- XIX. **Impacts of Climate Change on the Hydro-Climate of Peninsular Malaysia**  
Amin I. M. Z. b. M., Ercan A., Ishida K., Kavvas M. L., Chen Z. Q., Jang S.  
WATER, cilt.11, sa.9, 2019 (SCI-Expanded)
- XX. **One-dimensional solute transport in open channel flow from a stochastic systematic perspective**  
Tu T., Ercan A., Kavvas M. L.  
STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, cilt.33, sa.7, ss.1403-1418, 2019 (SCI-Expanded)
- XXI. **Reconstruction and evaluation of changes in hydrologic conditions over a transboundary region by a regional climate model coupled with a physically-based hydrology model: Application to Thao river watershed**  
Ho C., Trinh T., Nguyen A., Nguyen Q., Ercan A., Kavvas M. L.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.668, ss.768-779, 2019 (SCI-Expanded)
- XXII. **Analysis of future climate change impacts on snow distribution over mountainous watersheds in Northern California by means of a physically-based snow distribution model**  
Ishida K., Ercan A., Trinh T., Kavvas M. L., Ohara N., Carr K., Anderson M. L.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.645, ss.1065-1082, 2018 (SCI-Expanded)
- XXIII. **Integrating global land-cover and soil datasets to update saturated hydraulic conductivity parameterization in hydrologic modeling**  
Trinh T., Kavvas M. L., Ishida K., Ercan A., Chen Z. Q., Anderson M. L., Ho C., Nguyen T.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.631-632, ss.279-288, 2018 (SCI-Expanded)
- XXIV. **Time-space fractional governing equations of transient groundwater flow in confined aquifers: Numerical investigation**  
Tu T., Ercan A., Kavvas M. L.  
HYDROLOGICAL PROCESSES, cilt.32, sa.10, ss.1406-1419, 2018 (SCI-Expanded)
- XXV. **Evaluating the Applicability of a Two-dimensional Flow Model of a Highly Heterogeneous Domain to Flow and Environmental Management**  
Carr K. J., Tu T., Ercan A., Kavvas M. L.  
JOURNAL OF THE AMERICAN WATER RESOURCES ASSOCIATION, cilt.54, sa.1, ss.184-197, 2018 (SCI-Expanded)
- XXVI. **Assessment of the effects of multiple extreme floods on flow and transport processes under competing flood protection and environmental management strategies**  
Tu T., Carr K. J., Ercan A., Trinh T., Kavvas M. L., Nosacka J.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.607, ss.613-622, 2017 (SCI-Expanded)
- XXVII. **Fractal scaling analysis of groundwater dynamics in confined aquifers**  
Tu T., Ercan A., Kavvas M. L.  
EARTH SYSTEM DYNAMICS, cilt.8, sa.4, ss.931-949, 2017 (SCI-Expanded)
- XXVIII. **Fractional governing equations of transient groundwater flow in confined aquifers with multi-fractional dimensions in fractional time**  
Kavvas M. L., Tu T., Ercan A., Polsinelli J.  
EARTH SYSTEM DYNAMICS, cilt.8, sa.4, ss.921-929, 2017 (SCI-Expanded)
- XXIX. **Closure to "Time-Space Fractional Governing Equations of Unsteady Open Channel Flow" by M. L. Kavvas and A. Ercan**  
Kavvas M. L., Ercan A.

- JOURNAL OF HYDROLOGIC ENGINEERING, cilt.22, sa.9, 2017 (SCI-Expanded)
- XXX. **Trend analysis of watershed-scale precipitation over Northern California by means of dynamically-downscaled CMIP5 future climate projections**  
Ishida K., Gorguner M., Ercan A., Trinh T., Kavvas M. L.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.592, ss.12-24, 2017 (SCI-Expanded)
- XXXI. **Time-space fractional governing equations of one-dimensional unsteady open channel flow process: Numerical solution and exploration**  
Ercan A., Kavvas M. L.  
HYDROLOGICAL PROCESSES, cilt.31, sa.16, ss.2961-2971, 2017 (SCI-Expanded)
- XXXII. **Scaling Relations and Self-Similarity of 3-Dimensional Reynolds-Averaged Navier-Stokes Equations**  
Ercan A., Kavvas M. L.  
SCIENTIFIC REPORTS, cilt.7, 2017 (SCI-Expanded)
- XXXIII. **Assessment of 21st century drought conditions at Shasta Dam based on dynamically projected water supply conditions by a regional climate model coupled with a physically-based hydrology model**  
Trinh T., Ishida K., Kavvas M. L., Ercan A., Carr K.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.586, ss.197-205, 2017 (SCI-Expanded)
- XXXIV. **HYDRAULICS NEAR UNSCREENED DIVERSION PIPES IN OPEN CHANNELS: LARGE FLUME EXPERIMENTS**  
Ercan A., Kavvas M. L., Carr K., Hockett Z., Bandeh H., Mussen T. D., Cocherell D., Poletto J. B., Cech J. J., Fanguie N. A.  
JOURNAL OF THE AMERICAN WATER RESOURCES ASSOCIATION, cilt.53, sa.2, ss.431-441, 2017 (SCI-Expanded)
- XXXV. **Governing equations of transient soil water flow and soil water flux in multi-dimensional fractional anisotropic media and fractional time**  
Kavvas M. L., Ercan A., Polsinelli J.  
HYDROLOGY AND EARTH SYSTEM SCIENCES, cilt.21, sa.3, ss.1547-1557, 2017 (SCI-Expanded)
- XXXVI. **Time-Space Fractional Governing Equations of Unsteady Open Channel Flow**  
Kavvas M. L., Ercan A.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.22, sa.2, 2017 (SCI-Expanded)
- XXXVII. **Future climate change impact assessment of watershed scale hydrologic processes in Peninsular Malaysia by a regional climate model coupled with a physically-based hydrology model**  
Amin M. Z. M., Shaaban A. J., Ercan A., Ishida K., Kavvas M. L., Chen Z. Q., Jang S.  
SCIENCE OF THE TOTAL ENVIRONMENT, cilt.575, ss.12-22, 2017 (SCI-Expanded)
- XXXVIII. **Investigation of the groundwater modelling component of the Integrated Water Flow Model (IWFM)**  
Ercan A., Dogrul E. C., Kadir T. N.  
HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, cilt.61, sa.16, ss.2834-2848, 2016 (SCI-Expanded)
- XXXIX. **Self-similarity in incompressible Navier-Stokes equations**  
Ercan A., Kavvas M. L.  
CHAOS, cilt.25, sa.12, 2015 (SCI-Expanded)
- XL. **Fish-protection devices at unscreened water diversions can reduce entrainment: evidence from behavioural laboratory investigations**  
Poletto J. B., Cocherell D. E., Mussen T. D., Ercan A., Bandeh H., Kavvas M. L., Cech J. J., Fanguie N. A.  
CONSERVATION PHYSIOLOGY, cilt.3, 2015 (SCI-Expanded)
- XLI. **Fractional Governing Equations of Diffusion Wave and Kinematic Wave Open-Channel Flow in Fractional Time-Space. I. Development of the Equations**  
Kavvas M. L., Ercan A.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.20, sa.9, 2015 (SCI-Expanded)
- XLII. **Fractional Governing Equations of Diffusion Wave and Kinematic Wave Open-Channel Flow in Fractional Time-Space. II. Numerical Simulations**  
Ercan A., Kavvas M. L.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.20, sa.9, 2015 (SCI-Expanded)
- XLIII. **Scaling and self-similarity in two-dimensional hydrodynamics**

Ercan A., Kavvas M. L.

CHAOS, cilt.25, sa.7, 2015 (SCI-Expanded)

- XLIV. **Scaling and Self-Similarity of One-Dimensional Unsteady Suspended Sediment Transport with Emphasis on Unscaled Sediment Material Properties**  
Carr K. J., Ercan A., Kavvas M. L.  
JOURNAL OF HYDRAULIC ENGINEERING, cilt.141, sa.5, 2015 (SCI-Expanded)
- XLV. **Fractional Ensemble Average Governing Equations of Transport by Time-Space Nonstationary Stochastic Fractional Advective Velocity and Fractional Dispersion. I: Theory**  
Kavvas M. L., Kim S., Ercan A.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.20, sa.2, 2015 (SCI-Expanded)
- XLVI. **Fractional Ensemble Average Governing Equations of Transport by Time-Space Nonstationary Stochastic Fractional Advective Velocity and Fractional Dispersion. II: Numerical Investigation**  
Kim S., Kavvas M. L., Ercan A.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.20, sa.2, 2015 (SCI-Expanded)
- XLVII. **Modified Water Diversion Structures Can Behaviorally Deter Juvenile Chinook Salmon from Entrainment**  
Mussen T. D., Cocherell D. E., Patton O., Jauregui D., Ercan A., Bandeh H., Meier D., Thomas S., Kavvas M. L., Cech J. J., et al.  
TRANSACTIONS OF THE AMERICAN FISHERIES SOCIETY, cilt.144, sa.5, ss.1070-1080, 2015 (SCI-Expanded)
- XLVIII. **Can behavioral fish-guidance devices protect juvenile Chinook salmon (*Oncorhynchus tshawytscha*) from entrainment into unscreened water-diversion pipes?**  
Mussen T. D., Patton O., Cocherell D., Ercan A., Bandeh H., Kavvas M. L., Cech J. J., Fanguie N. A.  
CANADIAN JOURNAL OF FISHERIES AND AQUATIC SCIENCES, cilt.71, sa.8, ss.1209-1219, 2014 (SCI-Expanded)
- XLIX. **Scaling and self-similarity in one-dimensional unsteady open channel flow**  
Ercan A., Kavvas M. L., Haltas I.  
HYDROLOGICAL PROCESSES, cilt.28, sa.5, ss.2721-2737, 2014 (SCI-Expanded)
- L. **Unscreened Water-Diversion Pipes Pose an Entrainment Risk to the Threatened Green Sturgeon, *Acipenser medirostris***  
Mussen T. D., Cocherell D., Poletto J. B., Reardon J. S., Hockett Z., Ercan A., Bandeh H., Kavvas M. L., Cech J. J., Fanguie N. A.  
PLOS ONE, cilt.9, sa.1, 2014 (SCI-Expanded)
- LI. **Efficacy of a sensory deterrent and pipe modifications in decreasing entrainment of juvenile green sturgeon (*Acipenser medirostris*) at unscreened water diversions**  
Poletto J. B., Cocherell D. E., Mussen T. D., Ercan A., Bandeh H., kavvas M. L., Cech J. J., Fanguie N. A.  
CONSERVATION PHYSIOLOGY, cilt.2, sa.1, 2014 (SCI-Expanded)
- LII. **Assessing Juvenile Chinook Salmon Behavior and Entrainment Risk near Unscreened Water Diversions: Large Flume Simulations**  
Mussen T. D., Cocherell D., Hockett Z., Ercan A., Bandeh H., Kavvas M. L., Cech J. J., Fanguie N. A.  
TRANSACTIONS OF THE AMERICAN FISHERIES SOCIETY, cilt.142, sa.1, ss.130-142, 2013 (SCI-Expanded)
- LIII. **The impact of climate change on sea level rise at Peninsular Malaysia and Sabah-Sarawak**  
Ercan A., Bin Mohamad M. F., Kavvas M. L.  
HYDROLOGICAL PROCESSES, cilt.27, sa.3, ss.367-377, 2013 (SCI-Expanded)
- LIV. **Ensemble Modeling of Hydrologic and Hydraulic Processes at One Shot: Application to Kinematic Open-Channel Flow under Uncertain Channel Properties and Uncertain Lateral Flow Conditions by the Stochastic Method of Characteristics**  
Ercan A., Kavvas M. L.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.17, sa.3, ss.414-423, 2012 (SCI-Expanded)
- LV. **Ensemble Modeling of Hydrologic and Hydraulic Processes at One Shot: Application to Kinematic Open-Channel Flow under Uncertain Channel Properties by the Stochastic Method of Characteristics**  
Ercan A., Kavvas M. L.  
JOURNAL OF HYDROLOGIC ENGINEERING, cilt.17, sa.1, ss.168-181, 2012 (SCI-Expanded)

- LVI. **Prediction of Bank Erosion in a Reach of the Sacramento River and its Mitigation with Groynes**  
Ercan A., Younis B. A.  
WATER RESOURCES MANAGEMENT, cilt.23, sa.15, ss.3121-3147, 2009 (SCI-Expanded)
- LVII. **Uncertainties in the prediction of flow in a long reach of the Sacramento River**  
Ercan A., Younis B. A.  
WATER AND ENVIRONMENT JOURNAL, cilt.23, sa.4, ss.272-285, 2009 (SCI-Expanded)

### **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Estimating the probability density function of nonlinearstochastic processes by use of asymptotic expansions in theKubo number**  
Ravaud M. M., Kavvas M. L., ERCAN A.  
NONLINEAR STUDIES, cilt.27, sa.1, ss.1-22, 2020 (Scopus)
- II. **BİR BOYUTLU TAŞINIM SÜREÇLERİNDE ÖLÇEKLEME ANALİZİ VE KENDİNE BENZEŞİM**  
ERCAN A.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, cilt.23, sa.1, ss.235-246, 2018 (Hakemli Dergi)
- III. **Current issues in and an emerging method for flood frequency analysis under changing climate**  
Kavvas M. L., Ishida K., Trinh T., Ercan A., Darama Y., Carr K. J.  
HYDROLOGICAL RESEARCH LETTERS, cilt.11, sa.1, ss.1-5, 2017 (ESCI)

### **Kitap & Kitap Bölümleri**

- I. **Long-range Dependence and Sea Level Forecasting**  
ERCAN A., Kavvas M. L., Abbassov R. K.  
Springer International Publishing, 2013

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Comparison of three recurrent neural networks for rainfall-runoff modelling at a snow-dominated watershed**  
Yokoo K., Ishida K., Nagasato T., Ercan A., Tu T.  
2021 International Conference on Geological Engineering and Geosciences, ICGoES 2021, Yogyakarta, Virtual, Endonezya, 16 - 18 Mart 2021, cilt.851
- II. **Dynamically Downscaled Precipitation over Northern California Based on CMIP5 Future Climate Projections**  
Ishida K., Kavvas M., Gorguner M., Trinh T., Ercan A.  
17th World Environmental and Water Resources Congress 2017, California, Amerika Birleşik Devletleri, 21 - 25 Mayıs 2017, ss.374-383
- III. **Assessment Study of 21st Century Drought Conditions at Shasta Dam Based on Dynamically Projected Water Supply and Water Demand**  
Trinh T., Ishida K., Kavvas M., Ercan A., Carr K.  
17th World Environmental and Water Resources Congress 2017, California, Amerika Birleşik Devletleri, 21 - 25 Mayıs 2017, ss.421-426
- IV. **Two-Dimensional Sediment Transport Modeling under Extreme Flood at Lower Cache Creek, California**  
Tu T., Carr K. J., Ercan A., Trinh T., Kavvas M. L., Brown K., Nosacka J.  
17th World Environmental and Water Resources Congress 2017, California, Amerika Birleşik Devletleri, 21 - 25 Mayıs 2017, ss.83-88

- V. **Investigations of Self-Similarity and Scale Invariance of One-Dimensional Unsteady Bedload Transport**  
Carr K., Ercan A., Kavvas M.  
16th World Environmental and Water Resources Congress 2016: Hydraulics and Waterways and Hydro-Climate/Climate Change, Florida, Amerika Birleşik Devletleri, 22 - 26 Mayıs 2016, ss.481-487
- VI. **Atmospheric Model Component of an Atmospheric-Hydrological Model-Based Real-Time Flood Forecasting System for the Kizilirmak River Basin in Turkey**  
Ishida K., Ercan A., Chen R., Ohara N., Kavvas M., Dağdeviren M., Selek B.  
16th World Environmental and Water Resources Congress 2016: Hydraulics and Waterways and Hydro-Climate/Climate Change, Florida, Amerika Birleşik Devletleri, 22 - 26 Mayıs 2016, ss.618-625
- VII. **Hydrologic Model Component of an Atmospheric-Hydrologic Model-Based Real-Time Flood Forecasting System for the Kizilirmak River Basin in Turkey**  
Ercan A., Chen Z. Q. R., Ishida K., Ohara N., Kavvas M. L., Dağdeviren M., Selek B.  
16th World Environmental and Water Resources Congress 2016: Hydraulics and Waterways and Hydro-Climate/Climate Change, Florida, Amerika Birleşik Devletleri, 22 - 26 Mayıs 2016, ss.529-534
- VIII. **Fractional Random Walk and Fractional Differential Equation Models of Transport by Time-Space Nonstationary Stochastic Fractional Flow**  
Kavvas M., Kim S., Ercan A.  
16th World Environmental and Water Resources Congress 2016: Hydraulics and Waterways and Hydro-Climate/Climate Change, Florida, Amerika Birleşik Devletleri, 22 - 26 Mayıs 2016, ss.535-544
- IX. **Two-dimensional sediment transport modeling in Cache Creek Settling Basin, California**  
Tu T., Carr K. J., Ercan A., Kavvas M. L., Nosacka J.  
World Environmental and Water Resources Congress 2015: Floods, Droughts, and Ecosystems, Texas, Amerika Birleşik Devletleri, 17 - 21 Mayıs 2015, ss.1851-1858
- X. **Historical climatic and hydrologic modeling over a watershed at Peninsular Malaysia**  
Amin M., Shaaban A., Kavvas M., Chen Z., Jang S., Ercan A., Ishida K.  
World Environmental and Water Resources Congress 2015: Floods, Droughts, and Ecosystems, Texas, Amerika Birleşik Devletleri, 17 - 21 Mayıs 2015, ss.1019-1025
- XI. **Two-dimensional unsteady flow modeling of flood inundation in a leveed basin**  
Carr K., Tu T., Ercan A., Kavvas M., Nosacka J.  
World Environmental and Water Resources Congress 2015: Floods, Droughts, and Ecosystems, Texas, Amerika Birleşik Devletleri, 17 - 21 Mayıs 2015, ss.1597-1606
- XII. **Scaling and Self-Similarity of One-Dimensional Suspended Sediment Transport Equations**  
Carr K., Ercan A., Kavvas M.  
World Environmental and Water Resources Congress 2014: Water Without Borders, Oregon, Amerika Birleşik Devletleri, 1 - 05 Haziran 2014, ss.1199-1206
- XIII. **Self-similarity in one-dimensional unsteady open channel flow through rectangular channels of varying width**  
Ercan A., Kavvas M., Haltas I.  
World Environmental and Water Resources Congress 2013: Showcasing the Future, Cincinnati, OH, Amerika Birleşik Devletleri, 19 - 23 Mayıs 2013, ss.1234-1239
- XIV. **Ensemble modeling of kinematic open channel flow under uncertain channel properties**  
Ercan A., Kavvas M.  
World Environmental and Water Resources Congress 2012: Crossing Boundaries, Albuquerque, NM, Amerika Birleşik Devletleri, 20 - 24 Mayıs 2012, ss.1830-1836
- XV. **Sea level changes along the peninsular Malaysia and Sabah and Sarawak coastlines for the 21st century**  
Ercan A., Kavvas M. L., Mohamad M. F.  
World Environmental and Water Resources Congress 2011: Bearing Knowledge for Sustainability, Palm Springs, CA, Amerika Birleşik Devletleri, 22 - 26 Mayıs 2011, ss.1292-1297
- XVI. **Hydraulic and sediment transport modeling for Cache Creek Settling Basin, Woodland California**

Carr K., Ercan A., Kavvas M.

World Environmental and Water Resources Congress 2010: Challenges of Change, Providence, RI, Amerika Birleşik Devletleri, 16 - 20 Mayıs 2010, ss.1634-1642

**XVII. Prediction of flow and bank erosion in the Sacramento River**

Ercan A., Younis B. A.

World Environmental and Water Resources Congress 2006: Examining the Confluence of Environmental and Water Concerns, Omaha, NE, Amerika Birleşik Devletleri, 21 - 25 Mayıs 2006

### **Bilimsel Dergilerdeki Faaliyetler**

SCIENTIFIC REPORTS, Editörler Kurulu Üyesi, 2023 - Devam Ediyor

THE SCIENCE OF THE TOTAL ENVIRONMENT AN INTERNATIONAL JOURNAL FOR SCIENTIFIC RESEARCH INTO THE ENVIRONMENT AND ITS RELATIONSHIP WITH MAN, Editörler Kurulu Üyesi, 2021 - Devam Ediyor

JOURNAL OF HYDROLOGIC ENGINEERING, Editörler Kurulu Üyesi, 2019 - Devam Ediyor

### **Bilimsel Kuruluşlardaki Üyelikler / Görevler**

American Society of Civil Engineers, Asosiye Üye, 2019 - Devam Ediyor , Amerika Birleşik Devletleri

Environmental and Water Resources Institute's Hydroclimate Technical Committee, Üye, 2017 - Devam Ediyor , Amerika Birleşik Devletleri