

CURRICULUM VITAE

Prof. Dr. GÖKMEN TAYFUR

Dept. of Civil Engineering, Izmir Institute of Technology
Gulbahce Kampus, Urla, Izmir, 35340, Turkey
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RESEARCH INTEREST

Mathematical modeling; surface and subsurface flows; rainfall-runoff induced erosion; sediment transport; solute transport; chemical transport in surface and subsurface flows; application of artificial intelligence methods (ANN, Fuzzy Logic, GA) in water resources engineering problems; river morphology.

EDUCATION

Ph.D *Water Resources Engineering*, Dept. Civil & Environmental Engineering, University of California, Davis, USA, 1993.

M.Sc *Water Resources Engineering*, Dept. Civil & Environmental Engineering, University of California, Davis, USA, 1990.

M.Sc *Hydraulic Engineering*, Civil Engineering Faculty, Istanbul Technical University, Istanbul, Turkey, 1987 (all but thesis).

B.Sc *Civil Engineering*, Civil Engineering Faculty, Istanbul Technical University, Istanbul, Turkey, 1985.

ACADEMIC EXPERIENCE

Professor

8/2004-present Dept. Civil Engineering, Izmir Institute of Technology, Urla, Izmir, Turkey.

Visiting Professor

4/14—4/28, 2013 IRPI-CNR (IRPI-National Research Council), Perugia, Italy.

1/24—2/8, 2010 IRPI-CNR (IRPI-National Research Council), Perugia, Italy.

7/2007—6/2008 NCCHE, University of Mississippi, Oxford, MS, USA.

9/24—10/12, 2006 IRPI-CNR (IRPI-National Research Council), Perugia, Italy.

9/2004—8/2005 Dept. Civil & Environmental Engineering, Louisiana State University, Baton Rouge, LA, USA.

Associate Professor

12/98-7/2004 Dept. Civil Engineering, Izmir Institute of Technology, Urla, Izmir, Turkey.

Assistant Professor

9/95-11/98. Dept. Civil Engineering, Izmir Institute of Technology, Urla, Izmir, Turkey

Lecturer

4/95-7/95 Dept. Civil & Environmental Engineering, University of California, Davis, CA, USA. Taught “*Hydrologic Time Series Analysis*” graduate course.

Postdoctoral Researcher

3/95-8/95 *Dept. Civil & Environmental Engineering, University of California, Davis, CA, USA.*
Analyzed time series trends of hydrologic variables.

COURSES TAUGHT

CE 532 Groundwater Hydrology and Pollutant Transport
 CE 505 Open Channel Hydraulics
 CE 504 Advanced Watershed Hydrology
 CE 534 Non-Point Source Pollution
 CE 571 Artificial Intelligence Methods in Engineering
 CE 501 Advanced Analytical Methods in Engineering
 CE 502 Advanced Numerical Methods in Engineering
 ECI 276 Hydrologic Time Series Analysis
 IN 251 Fluid Mechanics

COURSES DEVELOPED

CE 571 Artificial Intelligence Methods in Engineering
 CE 534 Non-Point Source Pollution

THESIS GUIDED

9. 'GIS_based numerical modeling of dam break flooding—Case Study: Urkmez Dam, Sumeyra Gul, M.Sc. Thesis, IYTE (in progress).
8. "GIS_based numerical modeling of flooding due to dam break-Case study: Tahtali dam", Basak Dogan, M.Sc Thesis, IYTE (in progress).
7. 'Numerical solution of advection-diffusion equation by the fourth order finite difference method.' Asan Ali Akbar Fatah Bajellan M.Sc. Thesis, IYTE, 2015.
6. 'Investigating transferability of sediment transport from laboratory to field scale', Yashar Karimi, M.Sc. Thesis, Dept. Civil Engineering, Ege University, 2011.
5. "Numerical modeling of unsteady and non equilibrium sediment transport in rivers", Asli Bor, M.Sc Thesis, Dept. Civil Engineering, Izmir Institute of Technology, 2008.
4. 'ANNs for predicting seepage path in the body of an earth-filled dam'. Deniz Özsayın, M.Sc Thesis, Dept. Civil Engineering, Izmir Institute of Technology, 2006.
3. 'Boron and Selenium transport in saturated and unsaturated zones'. Emin Yureklitürk, M.Sc Thesis, Division of Environmental Engineering, Izmir Institute of Technology, 2002.
2. 'Assessment of groundwater quality in Torbali region'. Tugba Kirer, M.Sc Thesis, Division of Environmental Engineering, Izmir Institute of Technology, 2002.
1. 'Artificial neural networks model for air quality in the region of Izmir'. Savas Birgili, M.Sc Thesis, Division of Environmental Engineering, Izmir Institute of Technology, 2002.

PhD Thesis Guided

Ulke, A. “*Yapay zeka metodlari ile Gediz Nehri 'nin TSS yukunun tahmin edilmesi*”. Insaat Muhendisligi Bolumu, Dokuz Eylul Universitesi, Izmir, Turkiye.

PhD Committee Member

Bor, A. ‘Experimental and numerical investigation of scour’ Dept. Civil Engineering, Dokuz Eylul University, Izmir, Turkey.

Ayvaz, T. “*Identifying values and places of sources and sinks in a heterogeneous aquifer by genetic algorithms using limited observations.*” Dept. Civil Engineering, Pamukkale University, Denizli, Turkey.

Gurarslan, G. “*Identifying place and concentration of the contamination source in a heterogonous aquifer using artificial intelligence methods.*” Dept. Civil Engineering, Pamukkale University, Denizli, Turkey.

Dogan, Z. “*Predicting early stage cost at construction buildings by automatic learning techniques.*” Dept. Architecture, Izmir Institute of Technology, Izmir, Turkey.

RESEARECH PROJECTS

- 10 ‘Physical and numerical investigation of dam break flood waves—Application to real dams in GIS environment’ 2010—2014. 110M240 TUBITAK (Turkish Science and Research Council). *Principal Investigator*.
9. “*Investigating surface water and groundwater potential of campus of Izmir Institute of Technology*”. Izmir Institute of Technology Research Fund, Project No: 2007MUHYL01, (Principal Investigator). 2010, completed.
8. “*Experimental and theorethical investigation of unstaedy and non-equilibrium sediment transport in open channels—application of the results to Tahtali basin creeks.*” TUBITAK project No. 106M274, 2010 completed.
7. ‘*Investigation of groundwater quality in the region of Torbalı*’. Izmir Institute of Technolgy Research Fund. (*Principle Investigator*), Izmir, Turkey, 2003. (Project No: 2001MUHYL12).
6. ‘*Investigation of creek protection bends in Tahtali Watershed*’. Grand Mayoral Department Research Fund, Izmir, Turkey, 2000.
5. ‘*Investigation of water resources protection regulations in Turkey with respect to science, technic, and law*’. Grand Mayoral Department Research Fund, Izmir, Turkey, 2000.
4. ‘*Evaluation of erosion potential of bare and vegetated cut/fill slopes of decomposed granite at Buckhorn Summit*’. California Department of Transportation Research Fund, CA, USA, 1994.
2. ‘*Best management practices assessment model for agricultural non point source pollution*’. State Water Resources Control Board, California Research Fund, CA, USA, 1994.
3. ‘*Erosion control of decomposed granite at Buckhorn Summit*’. California Department of Transportation Research Fund, CA, USA, 1992.
1. ‘*Simulation of random rill network geometry on agricultural plots*’. University of Kentucky Research Fund, KY, USA, 1990.

Journal Reviewer (many, some are)

Journal of Hydraulic Engineering, ASCE
Journal of Irrigation and Drainage Engineering, ASCE
Hydrological Sciences Journal, IAHS
Journal of Hydrologic Engineering, ASCE
Journal of Contaminant Hydrology
Hydrological Processes
Water Research
Journal of Hydrology
Environmental Modeling and Software
Advances in Engineering Software
American Concrete Institute Journal
Journal of Engineering and Environment, TUBITAK
International Journal for Numerical Methods in Fluids
Mathematical and Computer Modeling
Journal of Coastal Research
Environmental Fluid Mechanics
Journal of Engineering and Management
Water Management
Environmental Monitoring and Assessment
International Journal of Sediment Research
Journal of Earth System Science
Estuarine, Coastal and Shelf Science
Journal of Materials in Civil Engineering, ASCE
Frontiers of Environmental Science & Engineering in China
Agricultural Water Management
Scientific Research and Essays
Meteorology and Atmospheric Physics
Arabian Journal of Geosciences
Journal of Hydrometeorology
Natural Hazards

Project Reviewer

Environmental Protection Agency (EPA), USA
Austrian National Science Foundation
Turkish Science Foundation (TUBITAK)

Conference Organizing Committee Member

RiverFlow 2008, Izmir, Turkey.
EWRA 2015, Istanbul, Turkey.

Conference Scientific Committee Member

- I. Ulusal Su Muhendisligi Sempozyumu, Eylul 2003, Izmir
- II. Ulusal Su Muhendisligi Sempozyumu, Eylul 2005, Izmir
- III. Ulusal Su Muhendisligi Sempozyumu, Eylul 2007, Izmir
- IV. Ulusal Su Muhendisligi Sempozyumu, 2009, Istanbul
- V. Ulusal Su Muhendisligi Sempozyumu, 2011, Istanbul
- VI. VI Hidroloji Kongresi, 2010, Denizli
- VII. VII Hidroloji Kongresi, 2013, Isparta
- VIII. VIII Hidroloji Kongresi, 2015, Urfa
- Florisa Melone Memorial Conference, October 2013, Perugia, Italy
- IV. Ulusal Baraj Guvenligi Sempozyumu, 9-11 October, 2014, Elazig, Turkey
- XI. International Congress on Advances in Civil Engineering, 21-25 October, 2014, Istanbul, Turkey
- EWRA2015 9th World Congress of EWRA, Istanbul 10-13 June, 2015.

Associate Editor

- 2011— Associate Editor, *Journal of Hydrology*
2008— Associate Editor, *Journal of Water Quality, Exposure and Health*
2013— Associate Editor, *Turkish Journal of Engineering and Environment*,

KEYNOTE PAPERS

3. Florisa Melone Memorial Conference, October 2013, Perugia, Italy. Presented a keynote paper on ‘ANN and GA applications in hydrology.’
2. International Conference on *Water and Environment*, WE-2003, Bhopal, India. 15-18 December-2003. Presented a Keynote Paper on “*Sediment Transport*”.
1. International Conference on Integrated Technologies for Environmental Monitoring and Information Production, NATO-ARW, Marmaris, Turkey, September 2001. Presented a Keynote Paper on “*Upscaling surface flow equations depending upon data availability at different scales*”.

INVITED SPEAKER

- 6 **Tayfur, G.** ‘Modelling water stress effect on soil salinity’, NATO-ARW, Sept 1-4, 2010, Cesme, Izmir, Turkey.
- 5 **Tayfur, G.** “Kineamtic wave theory for modeling transient sediment waves in alluvial channels.” Presented at a NCCHE-NSL joint seminar on August 17, 2007.
- 4 **Tayfur, G.** “Introduction to ANNs and GAs and their applications to predict flow rates in river sections”. Presented in NCCHE-NSL joint seminar in April 04, 2008.
- 3 **“Predicting and Forecasting Flow Discharge at Sites Receiving Significant Lateral Inflow by ANN”** at IRPI-CNR (IRPI-National Research Council), Perugia, Italy, Sept. 30, 2006.
- 2 **“Fuzzy Logic Algorithm and Its Application to Predict Dispersion Coefficient in Rivers”** at IRPI-CNR (IRPI-National Research Council), Perugia, Italy, Oct. 3, 2006.
- 1 **“Genetic Algorithm and Its Application to Flow Prediction”** at IRPI-CNR (IRPI-National Research Council), Perugia, Italy, Oct. 7, 2006.

MANAGERIAL POSITIONS

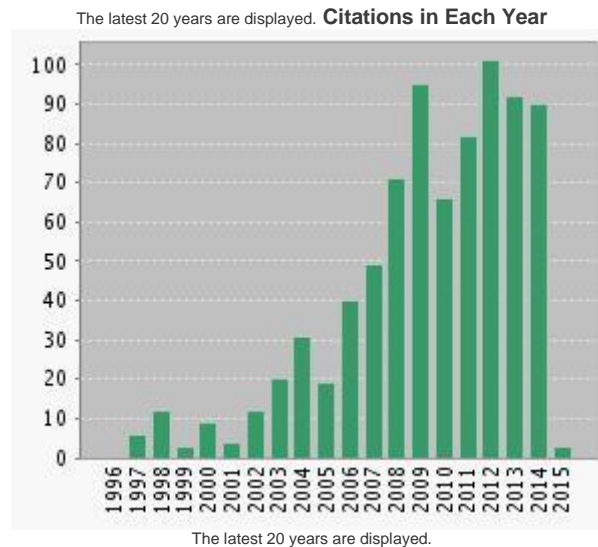
- 2013- Member of Engineering Faculty Management Committee
2010- Head of the University Ethical Committee
2008- Chairman, Civil Engineering Department
2008- Vice Dean of the Engineering Faculty
2008- Member of University Senate
2005-2007 Chairman, Dept. Civil Engineering, Izmir Institute of Technology
2007-2008 Member of University Management Committee
2006-2007 Member of Engineering Faculty Management Committee
2000-2004 Chairman, Dept. Civil Engineering, Izmir Institute of Technology
1996-1998 Chairman, Dept. Civil Engineering, Izmir Institute of Technology
1995-1998 Member of Engineering Faculty Management Committee
1995-1998 Head of the Division of Environmental Engineering, Izmir Institute of Technology

AWARDS

Graduate Study in the USA Fellowship by the Turkish Ministry of Education, 1988-1990.

Non-Resident Tuition Fellowship by the University of California, Davis, 1991-1992 Academic Year.

CITATIONS [as of January 28, 2015]



Results found: 61

Sum of the Times Cited [\[?\]](#): 808

Sum of Times Cited without self-citations [\[?\]](#): 696

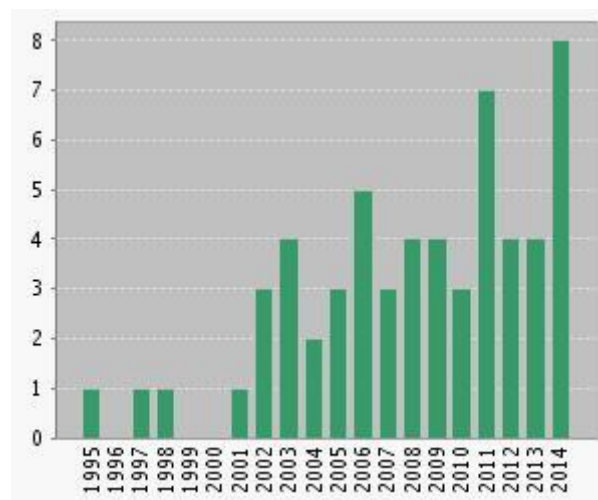
Citing Articles [\[?\]](#): [613](#)

Citing Articles without self-citations [\[?\]](#): [570](#)

Average Citations per Item [\[?\]](#): 13.25

h-index [\[?\]](#): 17

SCI Journal Papers



61. Guney, M. S.; Tayfur, G.; Bombar, G.; et al. 2014. [Distorted Physical Model to Study Sudden Partial Dam Break Flows in an Urban Area](#) JOURNAL OF HYDRAULIC ENGINEERING Volume: 140 Issue: 11 Article Number: 05014006 Published: NOV 2014
60. Pulat, Hasan Firat; Tayfur, Gokmen; Yukselen-Aksoy, Yeliz. 2014. [Developing cation exchange capacity and soil index properties relationships using a neuro-fuzzy approach.](#) BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT Volume: 73 Issue: 4 Pages: 1141-1149 Published: NOV 2014
59. Tayfur, Gokmen; Erdem, Tahir Kemal; Kirca, Onder. 2014. [Strength Prediction of High-Strength Concrete by Fuzzy Logic and Artificial Neural Networks](#) JOURNAL OF MATERIALS IN CIVIL ENGINEERING Volume: 26 Issue: 11 Article Number: 04014079 Published: NOV 2014
58. Tayfur, Gokmen; He, Zhiguo; Ran, Qihua, 2014. [Finite volume method solution of pollutant transport in catchment sheet flow](#) HYDROLOGY RESEARCH Volume: 45 Issue: 2 Pages: 182-189.
57. Tayfur, Gokmen; Karimi, Yashar, 2014. [Use of principal component analysis in conjunction with soft computing methods for investigating total sediment load transferability from laboratory to field scale](#) HYDROLOGY RESEARCH Volume: 45 Issue: 4-5 Pages: 540-550.
56. Tayfur, Gokmen; Nadiri, Ata A.; Moghaddam, Asghar A. 2014. [Supervised Intelligent Committee Machine Method for Hydraulic Conductivity Estimation](#) WATER RESOURCES MANAGEMENT Volume: 28 Issue: 4 Pages: 1173-1184.
55. Tayfur, Gokmen; Zucco, Graziano; Brocca, Luca; Moramarco, Tommaso. 2014. [Coupling soil moisture and precipitation observations for predicting hourly runoff at small catchment scale](#) JOURNAL OF HYDROLOGY Volume: 510 Pages: 363-371.
54. Bayram, Adem; Kankal, Murat; Tayfur, Gokmen; Onsoz, Hizir. 2014. [Prediction of suspended sediment concentration from water quality variables](#) NEURAL COMPUTING & APPLICATIONS Volume: 24 Issue: 5 Pages: 1079-1087.
53. Tayfur, G.; Karimi, Y.; Singh, V.P. 2013. [Principle Component Analysis in Conjunction with Data Driven Methods for Sediment Load Prediction.](#) WATER RESOURCES MANAGEMENT Volume: 27 Issue: 7 Pages: 2541-2554.
52. Tayfur, G.; Egeli, I. 2013. [Railway embankment design based on neural networks](#) GRADEVINAR Volume: 65 Issue: 4 Pages: 319-330
51. He, Z.G.; Tayfur, G.; Ran, Q.H.; 2013. [Modeling pollutant transport in overland flow over non-planar and non-homogenous infiltrating surfaces.](#) JOURNAL OF ZHEJIANG UNIVERSITY-SCIENCE A Volume: 14 Issue: 2 Pages: 110-119.
50. Egeli, I.; Tayfur, G.; Yilmaz, E.; Usun, H. 2013. [Artificial neural networks to predict design properties for cemented embankment layers of high speed train rail ways](#), CEMENT WAPNO BETON Volume: 18 Issue: 1 Pages: 10-+
49. Teomete E.; Tayfur, G.; Aktas, E., 2012. [Estimation of Mechanical Properties of Limestone Using Regression Analyses and ANN](#), CEMENT WAPNO BETON, 17 (6), 373-+
48. Tayfur, G.; Singh, V. P. 2012. [Transport capacity models for unsteady and non-equilibrium sediment transport in alluvial channels.](#) COMPUTERS AND ELECTRONICS IN AGRICULTURE Volume: 86, 26-33.
47. Kazanasmaz, Z.T.; Tayfur, G. 2012 [CLASSIFICATIONS FOR PLANIMETRIC EFFICIENCY OF NURSING UNIT FLOORS](#) METU JOURNAL OF THE FACULTY OF ARCHITECTURE Volume: 29 Issue: 1 Pages: 1-20.
46. Ozuysal, M.; Tayfur, G.; Tanyel, S. 2012. [PASSENGER FLOWS ESTIMATION OF LIGHT RAIL TRANSIT \(LRT\) SYSTEM IN IZMIR, TURKEY USING MULTIPLE](#)

45. Baba, A.; Tayfur, G. 2011. [Groundwater contamination and its effect on health in Turkey](#) *ENVIRONMENTAL MONITORING AND ASSESSMENT*, **183** (1-4), **77-94**
44. Bombar, G. Elci, S., Tayfur, G., Guney, S. And Bor, A. 2011. 'Experimental and numerical investigation of bed-load transport under unsteady flows.' *JOURNAL OF HYDRAULIC ENGINEERING*, **137** (10), 1276—1282.
43. Baba A. and Tayfur G., 2011. [Groundwater contamination and its effect on health in Turkey](#) , *ENVIRONMENTAL MONITORING AND ASSESSMENT*, **183** (1-4), **77-94** .
42. Erdem T.K; Tayfur G.; Kirca O. , 2011. ,[Experimental and modeling study of strength of high strength concrete containing binary and ternary binders](#) , *CEMENT WAPNO BETON* , **16** (4) , **224—237**.
41. Ulke A, Ozkul S, Tayfur G, 2011. 'Empirical Methods for Predicting Suspended Sediment Load in Gediz River', *TEKNIK DERGI* , **22** (2) , **5387-5407**, 2011
40. Tayfur G, Singh VP, 2011. 'Simulating Transient Sediment Waves in Aggraded Alluvial Channels by Double-Decomposition Method', *JOURNAL OF HYDROLOGIC ENGINEERING*, **16** (4), 362-370.
39. Tayfur G, Singh VP, 2011. 'Predicting Mean and Bankfull Discharge from Channel Cross-Sectional Area by Expert and Regression Methods', *WATER RESOURCES MANAGEMENT*, **25**(5), 1253-1267.
38. Tayfur G, Tanji KK, Baba A 2010. '[Two-dimensional finite elements model for selenium transport in saturated and unsaturated zones](#).' *ENVIRONMENTAL MONITORING AND ASSESSMENT* Volume: **169** Issue: **1-4** Pages: **509-518**
37. Bombar G, Guney MS, Tayfur G, et al. 2010. '[Calculation of the time-varying mean velocity by different methods and determination of the turbulence intensities](#).' *SCIENTIFIC RESEARCH AND ESSAYS* Volume: **5** Issue: **6** Pages: **572-581**
36. Tayfur G, Tanji KK, Baba A 2010. '[Two-dimensional finite elements model for boron management in agroforestry sites](#) .' *ENVIRONMENTAL MONITORING AND ASSESSMENT* Volume: **160** Issue: **1-4** Pages: **501-512**
35. Ulke A, Tayfur G, Ozkul S 2009 '[Predicting Suspended Sediment Loads and Missing Data for Gediz River, Turkey](#).' *JOURNAL OF HYDROLOGIC ENGINEERING* Volume: **14** Issue: **9** Pages: **954-965**.
34. Tayfur G, Barbeta S, Moramarco T 2009. '[Genetic Algorithm-Based Discharge Estimation at Sites Receiving Lateral Inflows](#)'. *JOURNAL OF HYDROLOGIC ENGINEERING* Volume: **14** Issue: **5** Pages: **463-474**.
33. Tayfur G 2009. '[GA-optimized model predicts dispersion coefficient in natural channels](#)' *HYDROLOGY RESEARCH* Volume: **40** Issue: **1** Pages: **65-78**
32. Tayfur G, Sevil HE, Gezgin E, and Ozdemir, S. 2009. '[Trait-based heterogeneous populations plus \(TbHP plus \) genetic algorithm](#)' *MATHEMATICAL AND COMPUTER MODELLING* Volume: **49** Issue: **3-4** Pages: **709-720**.
31. Tayfur, G. Kirer, T. and Baba, A. 2008. "Groundwater quality and hydrogeochemical properties of Torbali Region, Izmir, Turkey." *Environmental Monitoring and Assessment*, **146**(1-3), 157-169.

30. **Tayfur, G.** and Singh, V.P. 2008. “[ANN and fuzzy logic models for simulating event-based rainfall-runoff.](#)” *Closure, J. Hydraulic Engineering, ASCE*, 134(9), 1400-1401.
29. Singh, V.P. and **Tayfur, G.** 2008. “[Kinematic wave theory for transient bed sediment waves in alluvial rivers.](#)” *J. Hydrologic Engineering*, 13(5), 297-304.
28. **Tayfur, G.** and Moramarco, T. 2008. “[Predicting hourly-based flow discharge hydrographs from level data using genetic algorithms.](#)” *J. Hydrology*, 352, Issue 1-2, 77-93.
27. **Tayfur, G.** and Singh, V.P. 2007. “[Kinematic wave model for transient bed profiles in alluvial channels under nonequilibrium conditions.](#)” **WATER RESOURCES RESEARCH**, VOL. 43, W12412, doi:10.1029/2006WR005681, 2007
26. **Tayfur, G.** 2007. “[Modeling sediment transport from bare rilled hillslopes by areally averaged transport equations.](#)” *CATENA*, 70, 25-38.
25. **Tayfur, G., Moramarco, T.** and Singh, V.P. 2007. “[Predicting and Forecasting Flow Discharge at Sites Receiving Significant Lateral Inflow.](#)” *Hydrological Processes*, 21, 1848-1859.
24. **Tayfur G,** Singh VP, 2006. ‘[ANN and fuzzy logic models for simulating event-based rainfall-runoff.](#)’ **JOURNAL OF HYDRAULIC ENGINEERING**, 132 (12): 1321-1330
23. Sofuoglu SC, Sofuoglu A, Birgili S, et al., 2006. [Forecasting ambient air SO2 concentrations using artificial neural networks](#) ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY 1 (2): 127-136 2006
22. **Tayfur G,** Singh VP, 2006. [Kinematic wave model of bed profiles in alluvial channels](#) **WATER RESOURCES RESEARCH** 42 (6): Art. No. W06414 JUN 21 2006
21. **Tayfur G,** 2006. [Fuzzy, ANN, and regression models to predict longitudinal dispersion coefficient in natural streams.](#)’ NORDIC HYDROLOGY 37 (2): 143-164 2006
20. **Tayfur G,** Guldal V., 2006. [Artificial neural networks for estimating daily total suspended sediment in natural streams](#) NORDIC HYDROLOGY 37 (1): 69-79 2006
19. **Tayfur G,** Singh VP. 2005. ‘[Predicting longitudinal dispersion coefficient in natural streams by artificial neural network.](#)’ **JOURNAL OF HYDRAULIC ENGINEERING**, 131 (11): 991-1000
18. **Tayfur G,** Swiatek D, Wita A, et al. 2005. ‘[Case study: Finite element method and artificial neural network models for flow through Jeziorsko earthfill dam in Poland.](#)’ **JOURNAL OF HYDRAULIC ENGINEERING**, 131 (6): 431-440
17. Seyhan AT, **Tayfur G,** Karakurt M, et al. 2005. ‘[Artificial neural network \(ANN\) prediction of compressive strength of VARTM processed polymer composites.](#)’ COMPUTATIONAL MATERIALS SCIENCE 34 (1): 99-105
16. Akkurt S, **Tayfur G,** Can S. 2004. ‘[Fuzzy logic model for the prediction of cement compressive strength.](#)’ CEMENT AND CONCRETE RESEARCH 34 (8): 1429-1433
15. **Tayfur, G. and Singh, V.P.** 2004. ‘[Numerical model for sediment transport over nonplanar, nonhomogeneous surfaces.](#)’ **JOURNAL OF HYDROLOGIC ENGINEERING** 9 (1): 35-41
14. Tayfur, G. 2003. ‘[Upscaling surface flow equations depending upon data availability at different scales.](#)’ **INTEGRATED TECHNOLOGIES FOR ENVIRONMENTAL MONITORING AND INFORMATION PRODUCTION** Book Series: NATO Science Series IV Earth and Environmental Sciences Volume: 23 Pages: 289-300 Published: 2003

- 13 **Tayfur G**, Ozdemir S, Singh VP. 2003. '[Fuzzy logic algorithm for runoff-induced sediment transport from bare soil surfaces.](#)' **ADVANCES IN WATER RESOURCES** 26 (12): 1249-1256
- 12 Inal F, **Tayfur G**, Melton TR, et al. 2003. '[Experimental and artificial neural network modeling study on soot formation in premixed hydrocarbon flames .](#)' **FUEL** 82 (12): 1477-1490
- 11 Akkurt S, Ozdemir S, **Tayfur G**, et al. 2003. '[The use of GA-ANNs in the modelling of compressive strength of cement mortar.](#)' **CEMENT AND CONCRETE RESEARCH** 33 (7): 973-979
- 10 Akkurt S, Ozdemir S, **Tayfur G**. 2002. '[Genetic algorithm-artificial neural network model for the prediction of germanium recovery from zinc plant residues.](#)' **TRANSACTIONS OF THE INSTITUTION OF MINING AND METALLURGY SECTION C-MINERAL PROCESSING AND EXTRACTIVE METALLURGY** 111: C129-C134
- 9 **Tayfur G**. 2002. '[Artificial neural networks for sheet sediment transport.](#)' **HYDROLOGICAL SCIENCES JOURNAL**, 47 (6): 879-892
- 8 **Tayfur G**. 2002. '[Applicability of sediment transport capacity models for nonsteady state erosion from steep slopes.](#)' **JOURNAL OF HYDROLOGIC ENGINEERING** 7 (3): 252-259
- 7 **Tayfur G**. 2001. '[Modeling two-dimensional erosion process over infiltrating surfaces.](#)' **JOURNAL OF HYDROLOGIC ENGINEERING** 6 (3): 259-262
- 6 **Tayfur G**, Kavvas ML, 1998. '[Areal-averaged overland flow equations at hillslope scale.](#)' **HYDROLOGICAL SCIENCES JOURNAL**, 43 (3): 361-378
- 5 Kiely G, **Tayfur G**, Dolan C, et al. 1997. '[Physical and mathematical modelling of anaerobic digestion of organic wastes.](#)' **WATER RESEARCH** 31 (3): 534-540
- 4 **TAYFUR G**, TANJI KK, HOUSE B, et al. 1995. '[MODELING DEFICIT IRRIGATION IN ALFALFA PRODUCTION](#)' **JOURNAL OF IRRIGATION AND DRAINAGE ENGINEERING-ASCE** 121 (6): 442-451
- 3 **TAYFUR G**, KAVVAS ML, 1994. '[SPATIALLY AVERAGED CONSERVATION EQUATIONS FOR INTERACTING RILL-INTERRILL AREA OVERLAND FLOWS.](#)' **JOURNAL OF HYDRAULIC ENGINEERING-ASCE** 120 (12): 1426-1448
- 2 TAYFUR G, KAVVAS ML, GOVINDARAJU RS, STROM, D.E. 1993. '[APPLICABILITY OF ST-VENANT EQUATIONS FOR 2-DIMENSIONAL OVERLAND FLOWS OVER ROUGH INFILTRATING SURFACES.](#)' **JOURNAL OF HYDRAULIC ENGINEERING**, 119 (1): 51-63
- 1 GOVINDARAJU RS, KAVVAS ML, TAYFUR G. 1992. '[A SIMPLIFIED MODEL FOR 2-DIMENSIONAL OVERLAND FLOWS.](#)' **ADVANCES IN WATER RESOURCES** 15 (2): 133-141

Other Journal Papers

Kazanasmaz, T. and Tayfur, G. 2010. 'fuzzy logic model to classify design efficiency of nursing unit floors' **MEGARON**, 5(1), 11-22.

Book

Tayfur, G. Soft Computing in Water Resources Engineering, *WIT Press*, Southampton, United Kingdom, 2012.

Book Chapters

- 7 **Tayfur, G.** 2010. 'Numerical Modeling of Transport Processes at Hillslope Scale Accounting for Local Physical Features.' In 'Modeling hydrological effects of microtopographic features', by Wang, X. (editor), Nova Publishers, ISBN: 978-1-61668-902-5.
- 6 Helvacı C., **Tayfur, G.**, Baba A, ve Sener M 2009. 'Natural resources and environmental problems in Turkey.' In Environment and Resources, Eds Helvacı, Baba ve Tayfur, Izmir, Turkey. Pages: 39-47.
- 5 **Tayfur, G.** 2008, "Soft computing approaches in hydrology", in V.P. Singh, Hydrology and Hydraulics, Water Resources Publications, LLC, ISBN 978-188720152-0, Chapter 3, pp 153-160.
- 4 **Tayfur, G.** 2003. 'Modelling sediment transport'. In *Watershed Hydrology*, (eds) V.P.Singh and R.N. Yadava, Allied Publishers, pp. 353-375.
- 3 **Tayfur, G.** 2003. 'Upscaling surface flow equations depending upon data availability at different scales'. In *Integrated Technologies for Environmental Monitoring and Information Production*, (eds) N.B. Harmancioglu et al. Nato Science Series, IV. Earth and Environmental Sciences-Vol 23. pp: 289-300.
- 2 **Tayfur, G.** and Singh, V.P. 2003. 'Intelligence methods to predict discharge from event based rainfall-runoff'. In *Advances in Hydrology* (eds) V.P.Singh and R.N. Yadava, Allied Publishers, pp. 353-375.
- 1 **Tayfur, G.** and Singh, V.J. 2003. 'Artificial intelligence models to predict longitudinal dispersion coefficient in natural streams'. In *Environmental Pollution* (eds) V.P.Singh and R.N. Yadava, Allied Publishers, pp. 353-375.

Book Editor

3. Climate Change and Its Effects on Water Resources. Nato Science for Peace and Security Series C: Environmental Security, Vol.3. Editors: Baba, A., Tayfur, G., Gunduz, O., Howard, KWF, Friedel, MJ and Chaubel, A. 2011, 318 p, ISBN: 978-94-007-1142-6
2. "Environment and Resources" Editors: Baba, A., Helvacı, C. ve Tayfur, G. Izmir, Turkey
1. Proceedings of the International Conference on Fluvial Hydraulics, Riverflow2008, Volume 2, Editors: Altınakar, MS, Kokpınar, MA, Gogus, M, **Tayfur, G.**, Kumcu, S.Y., Yildirim, N.

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