



Seyed Arman Hashemi Monfared Associate Professor

Faculty: Engineering

Departments: Civil Engineering

Phone: +9854 - 31132886

Email: hashemi@eng.usb.ac.ir

Address: Dept.of Civil Engineering, Faculty of Engineering,

University of Sistan and Baluchestan, Daneshgah Ave., Zahedan,

Iran.

Education

- ✓ B.Sc, Civil Engineering, Sistan and Baluchestan University 2002
- ✓ MS, Civil Engineering Water Resource Management, K. N. Toosi University of Technology 2005
- ✓ PhD, Civil Engineering Water Resource Management, K. N. Toosi University of Technology 2011

Courses

1. 0	2. 0
3. as	4. Fluid Mechanics
5. 0	6. hid
7. 0	8. 0



Journals Papers

2022

استفاده از فیلترذرهای برای تخمین دقیق شرایط مرزی بار آبی ثابت در آبخوان آزاد .1

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, a akbar pour Volume: (53) 6-1 - 6-20

2. Application of Meshless local Petrov-Galerkin approach for steady state groundwater flow modeling

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Abolfazl Akbarpour Water Supply Volume: (22) 3824 - 3841

زعفران و تغيير اقليم؛ نگاهي به تغييرات نياز آبي آن با استفاده از روش الگوريتمهاي هوشمند .3

Yasin Zamani, Seyed Arman Hashemi Monfared, Mehdi Azhdary Moghaddam, Mohsen Hamidianpour Volume: (10) 113 - 128

- 4. Effects of wetlands and wind velocity on dust propagation in arid areas: a critical case study in south-east of Iran
 - , Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared International Journal of Environmental Sciences and Technology Volume: (19) 12169 - 12180
- 5. Determining optimized depth of wells by considering climate change and water resources management (Case study: Khash watershed

Ebrahim Zeraati, Samira Zeinoddini, Bahareh Pirzadeh, Seyed Arman Hashemi Monfared Volume: (13) 160 - 174

6. Numerical simulation of groundwater in an unconfined aquifer with a novel hybrid model (case study: Birjand Aquifer, Iran)

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Abolfazl Akbarpour JOURNAL OF HYDROINFORMATICS Volume: (24) 160 - 178

2021

- 7. An integrated model for economic assessment of environmental scenarios for dust stabilization and sustainable fora-fauna ecosystem in international Hamoun wetland
 - , Javad Shahraki, Seyed Arman Hashemi Monfared

ENVIRONMENT DEVELOPMENT AND SUSTAINABILITY Volume: (23) 947 - 967

مدل سازي اثرات انتقال آب بين حوضه اي بر سطح و حجم آبخوان حوض? مبدأ انتقال با استفاده از .8 (مطالع? موردي: اثر انتقال آب رودخان? بهشت آباد بر سطح و حجم آبخوان شلمزار) WEAP نرم افزار

Shahin Salimpour naghani, Seyed Arman Hashemi Monfared, Mehdi Azhdary Moghaddam



Volume: (19) 183 - 208

9. Reliability-based design and implementation of crow search algorithm for longitudinal dispersion coefficient estimation in rivers

Alireza Ghaemi, Tahmineh Zhiyan, Bahareh Pirzadeh, Seyed Arman Hashemi Monfared, Amir Mosavi ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH Volume: (28) 35971 - 35990

10. An enhanced binary dragonfly algorithm based on a V-shaped transfer function for optimization of pump scheduling program in water supply systems (case study of Iran)

JAFAR JAFARI-ASL, Gholamreza Azizyan, Seyed Arman Hashemi Monfared, Mohsen Rashki, Antonio G. Andrad ENGINEERING FAILURE ANALYSIS Volume: (123) 105323-1 - 105323-16

- 11. Reservoir quality management with CE-QUAL-W2/ANN surrogate model and PSO algorithm (case study: Pishin Dam, Iran)
 - , , Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

Arabian Journal of Geosciences Volume: (14) 1 - 18

12. Estimation of Parameters in Groundwater Modeling by Particle Filter linked to the meshless local Petrov-Galerkin Numerical Method

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Abolfazl Akbarpour journal of hydraulic structures Volume: (7) 16 - 37

13. Evaluation of the effects of cotton cultivation on the supply and demand of water resources of the Pishin basin in the southeastern regions of Iran under climate change scenarios

Yasin Zamani, Mohsen Hamidianpour, Seyed Arman Hashemi Monfared, Mehdi Azhdary Moghaddam Volume: (9) 23 - 44

بهينه سازي با الگوريتمهاي فراكاوشي جهت تخمين ضريب پخش طولي رودخانه ها .14

Sima Ohadi, Seyed Arman Hashemi Monfared, Mohammad Givehchi

Volume: (12) 151 - 171

بهرهبرداري چندهدفه از ايستگاههاي پمپاژ متوالي در سامانههاي انتقال اب)مطالعه موردي: .15 سامانهي خط انتقال آب از سـد درودزن به شـهر شـيراز)

JAFAR JAFARI-ASL, Gholamreza Azizyan, Seyed Arman Hashemi Monfared, Mohsen Rashki

Volume: (11) 142 - 161

16. Effects of Weather Modification Operations on Water Resources of Khash Basin using Water Evaluation And Planning (WEAP) Model

samaneh poormohammadi, Mehran Fatemi, , Seyed Arman Hashemi Monfared, Mahmood Khosravi

Volume: (1) 14 - 24



2020

17. Estimation of transverse dispersion coefficient of pollutant transport in rivers using evolutionary computations

Asma Barahouei nezhad, Alireza Ghaemi, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Volume: (6) 901 - 912

18. Analysis and Calculation of the Required Tools for Water Quality Protection in order to Minimize Environmental Hazards

, Gholamreza Azizyan, Seyed Arman Hashemi Monfared

Volume: (8) 123 - 144

19. Sustainable Water Resources Management in an Arid Area Using a Coupled Optimization-Simulation Modeling

, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Ali Sardarshahraki, Maurits W. Ertsen, Edo Abrah Water Volume: (12) 885-1 - 885-26

20. Subset simulation method including fitness-based seed selection for reliability analysis Azam Abdollahi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared, Mohsen Rashki, Yong Li ENGINEERING WITH COMPUTERS Volume: () -

21. Determination of the optimal location of wells in aquifers with an accurate simulation-optimization model based on the meshless local Petrov-Galerkin

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Abolfazl Akbarpour Arabian Journal of Geosciences Volume: (13) 26-1 - 26-15

22. A timetable and spatial planning for pollutant entrance to the river

Mahdi Khorashadizade, Gholamreza Azizyan, Seyed Arman Hashemi Monfared, A. Akbarpour, A. Shabani International Journal of Environmental Sciences and Technology Volume: (17) 4171 - 4188

23. A refined subset simulation for the reliability analysis using the subset control variate

Azam Abdollahi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared, Mohsen Rashki, Yong Li STRUCTURAL SAFETY Volume: (87) 102002-1 - 102002-13

24. Analysis of assimilation capacity for conservation of water quality: controllable discharges of pollutants

, , Gholamreza Azizyan, John Paul Giesy, Seyed Arman Hashemi Monfared Arabian Journal of Geosciences Volume: (13) 1 - 13

25. A comparison of CMIP6 and CMIP5 projections for precipitation to observational data: the case of Northeastern Iran

Yasin Zamani, Seyed Arman Hashemi Monfared, Mehdi Azhdary Moqhaddam, Mohsen Hamidianpour



THEORETICAL AND APPLIED CLIMATOLOGY Volume: (142) 1613 - 1623

(مطالعه موردي: آبخوان آزاد بيرجند) MLPG محاسبه بيلان آب زيرزميني به كمك روش عددي .26

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Akbarpour Abolfazl

Volume: (14) 1460 - 1474

27. Identification of Characteristics Influencing Wave Height and Current Velocity in MIKE Model for Simulation of Wind-induced Ocean Currents and Waves in Southeast of Caspian Sea

, Seyed Arman Hashemi Monfared, Darioush Yousefi Kebria, Seyed Bani Hashemi

iranian journal of energy and environment Volume: (11) 330 - 338

2019

28. Determination the capture zone of wells by using meshless local Petrov-Galerkin numerical model in confined aguifer in unsteady state) Case study: Birjand Aguifer)

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Akbarpour Abolfazl

Volume: (6) 239 - 255

29. شبيه سازي - بهينه سازي منابع آب، با هدف حداقل سازي عدم تامين نيازها و حداقل سازي (برداشت از منابع آب هاي زيرزميني (مطالعه موردي حوضه زاهدان

Mohammad Erfanian zorofi, Seyed Arman Hashemi Monfared, Abdolreza Samimi, Bahareh Pirzadeh

Volume: (6) 593 - 609

30. The Changes in Sectors Demanding Water Resources on the Basis of Climate Change and Uncertainty

Yasin Zamani, Seyed Arman Hashemi Monfared, Mohsen Hamidianpour, Mehdi Azhdary Moghaddam

International Journal of Climate Change: Impacts and Responses Volume: (11) 15 - 31

31. Evaluating the Economic Impact of Water Resources Management Schemes in the Priority Area

Javad Shahraki, Ali Sardarshahraki, Seyed Arman Hashemi Monfared

Volume: (10) 59 - 84

32. Prediction of annual drinking water quality reduction based on Groundwater Resource Index using the artificial neural network and fuzzy clustering

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

JOURNAL OF CONTAMINANT HYDROLOGY Volume: (220) 6 - 17

33. Determination of the Optimum Angle of the Floating Solar Panels to Reduce Evaporation and Energy Production by the Ansys Fluent Model (Case study: Chahnimeh No. 4 Sistan)

Seyed Arman Hashemi Monfared, Mehdi Rezapour, , Mehdi Azhdary Moghaddam

Volume: (5) 1297 - 1307



34. Using Windbreaks for Decreasing Lakeand Reservoir Evaporation: A Case Study from Iran

Seyed Arman Hashemi Monfared, Mehdi Rezapour, Tahmineh Zhiyan

POLISH JOURNAL OF ENVIRONMENTAL STUDIES Volume: (28) 2289 - 2298

35. Water Resources Management by Simulation under Virtual Water Scenario in Agricultural Sector, Case Study: Hirmand Catchment, Iran

Ali Sardarshahraki, Javad Shahraki, Seyed Arman Hashemi Monfared

International Journal of Agricultural Management and Development Volume: (9) 25 - 35

36. An Integrated Water Resources Management Considering Agricultural Demands and the Assessment of Different Scenarios in Hirmand Catchment, Iran

Ali Sardarshahraki, Javad Shahraki, Seyed Arman Hashemi Monfared

Water Resources Volume: (46) 308 - 317

37. Comparison and Measurement of Evaporation From Water Surface of the Reservoirs in Arid Areas and Evaluation of A Glass Cover to Reduce Evaporation

Seyed Arman Hashemi Monfared, , Mehdi Azhdary Moghaddam, , Azam Abdollahi

journal of hydrosciences and environment Volume: (3) 14 - 29

38. Prediction of Groundwater Fluctuations Using Meshless Local PetrovGalerkin Numerical Method in a Field Aquifer (Birjand Aquifer)

Ali Mohtashami, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Abolfazl Akbarpour

Numerical Methods in Civil Engineering Volume: (3) 33 - 41

2018

39. Investigation of the Effect of Wind Breaks in Decreasing Reservoir Evaporation Using Fluent (Case Study: Chahnimeh No.4 of Sistan)

Seyed Arman Hashemi Monfared, , Tahmineh Zhiyan

Volume: (5) 265 - 278

40. Spatial assessment of the potential of groundwater quality using fuzzy AHP in GIS

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

Arabian Journal of Geosciences Volume: (11) 1 - 22

41. Investigating of the Existing Urban Drainage Systems for the Passage of Floods and the Possibility of Its Modification Using SWMM5 (Case Study Darab county)

Seyed Arman Hashemi Monfared, Gholamreza Azizyan, , Jalil Raisspour

Volume: (7) 219 - 236

42. Statistical Downscaling of Global Climate Model Outputs to Monthly Precipitation via Extreme Learning Machine A Case Study



, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared,

Environmental Progress and Sustainable Energy Volume: (37) 1853 - 1862

43. Large-scale association analysis of climate drought and decline in groundwater quantity using Gaussian process classification (case study 609 study area of Iran)

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

Journal of Environmental Health Science and Engineering Volume: (16) 129 - 145

44. Application of Fuzzy Technique for Order-Preference by Similarity to Ideal Solution (FTOPSIS) to Prioritize Water Resource Development Economic Scenarios in Pishin Catchment

Ali Sardarshahraki, Javad Shahraki, Seyed Arman Hashemi Monfared

International Journal of Business and Development Studies Volume: (10) 77 - 94

45. Anomaly Detection and Reliability Analysis of Groundwater by Crude Monte Carlo and Importance Sampling Approaches

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

WATER RESOURCES MANAGEMENT Volume: (32) 4447 - 4467

46. Analysis of drought recurrence conditions using first-order reliability method

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

International Journal of Environmental Sciences and Technology Volume: () -

47. An Integrated Fuzzy Multi-Criteria Decision-Making Method Combined with the WEAP Model for Prioritizing Agricultural Development, Case Study: Hirmand Catchment

Ali Sardarshahraki, Javad Shahraki, Seyed Arman Hashemi Monfared

Ecopersia Volume: (6) 205 - 214

48. Assessment of tools for protection of quality of water: Uncontrollable discharges of pollutants

, Seyed Arman Hashemi Monfared, Gholamreza Azizyan, Shane A. Snyder, John P. Giesy

ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY Volume: (161) 190 - 197

بررسي تأثير افت سطح آب زيرزميني روي فرايند فرسايش خاك و تشكيل پديده گردوغبار .49

Gholamreza Azizyan, Seyed Arman Hashemi Monfared, Amirhosein Javan mohassel,

Volume: (5) 1017 - 1035

RSA تحلیل حساسیت بارامترهای مدل دوبعدی انتقال آلودگی در آبهای کمعمق به روش .50

Mahdi Khorashadizade, Gholamreza Azizyan, Seyed Arman Hashemi Monfared, a akbarpoor

Volume: (49) 1119 - 1129



51. Water Quality Parameters Analysis in Karoon River Considering the Dust of Khoozestan

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

Volume: (9697) 15 - 22

52. Quality analysis of Chemical parameters

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

Volume: (41) 15 - 22

53. كاربردهاي الگوريتم رقابت استعماري در بهينه سازي بهره برداري از مخزن با هدف حداكثر سازي تامين نياز(مطالعه موردي سد پيشين)

Seyed Arman Hashemi Monfared, , Bahareh Pirzadeh

Volume: (12) 59 - 67

54. Generating Artificial Water Quality Data for No-Trend Parameters in Reservoirs (Chahnimeh No.1 in Sistan)

Bahareh Pirzadeh, , Seyed Arman Hashemi Monfared, Abas ali Ghaderi

Volume: (13) 226 - 232

55. PSO Algorithm

Seyed Arman Hashemi Monfared, , Bahareh Pirzadeh

Volume: (2) 59 - 67

ارزيابي پراکنش مکاني و ارتباط وقوع خشکسالي با کاهش کيفيت آبهاي زيرزميني برپايه .56 GRI شاخصهاي (مطالعه موردي 609 دشت ايران)

Saeed Azimi, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared

Volume: (8) 73 - 89

57. Water Quality Planning inRivers Assimilative Capacity and Dilution Flow

Seyed Arman Hashemi Monfared, , shane snyder, Gholamreza Azizyan, Bahareh Pirzadeh, Mehdi Azhdary Mo BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY Volume: (99) 531 - 541

58. A Hybrid Artificial Neural Network and Particle Swarm Optimization Algorithm for Statistical Downscaling of Precipitation in Arid Region

, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared,

Ecopersia Volume: (5) 1991 - 2006

59. Performance evaluation of artificial neural networks in statistical downscaling of monthly precipitation (Case study Minab watershed)

, Mehdi Azhdary Moghaddam, Seyed Arman Hashemi Monfared,

Environmental Resources Research Volume: (5) 169 - 182



2016

60. Water quality prediction in one-dimensional flow by means of new advective transport function and convergence criteria modification

Seyed Arman Hashemi Monfared, , Bahareh Pirzadeh, Mehdi Azhdary Moghaddam

Volume: (23) 147 - 162

بررسي رویکردهاي مدیریتي بهره¬برداري منابع آب منطقه سیستان با استفاده از تحلیل% .61 (FAHP) سلسله مراتبي فازي

, Javad Shahraki, Seyed Arman Hashemi Monfared

Volume: (9) 73 - 98

سیستان با استفاده از تحلیل (FAHP) بررسي رویکردهاي مدیریتي بهرهبرداري منابع آب منطقه .62 سلسله مراتبي فازي

, , Seyed Arman Hashemi Monfared

Volume: (31) -

(GLUE) تحلیل عدم قطعیت مدل انتقال آلودگی در رودخانه به روش (63.

Mahdi Khorashadizade, Seyed Arman Hashemi Monfared, a a,

Volume: (10) 284 - 293

64. Using Assimilation Capacity and Affected Distance for Water Quality Management in Onedimensional River Flow

Seyed Arman Hashemi Monfared, , Bahareh Pirzadeh,

International Journal of Earth Sciences and Engineering Volume: () -

65. Evaluation of Appropriate Advective Transport Function for One-Dimensional Pollutant Simulation in Rivers

Seyed Arman Hashemi Monfared,

International Journal of Environmental Research Volume: (10) 77 - 84

66. An Application of WEAP Model in Water Resources Management Considering the Environmental Scenarios and Economic Assessment Case Study: Hirmand Catchment

, Javad Shahraki, Seyed Arman Hashemi Monfared

Modern Applied Science Volume: (10) 49 - 56

67. Ranking and Level of Development According to the Agricultural Indices, Case Study: Sistan Region

, Javad Shahraki, Seyed Arman Hashemi Monfared

international journal of agricultural management and development Volume: (6) 93 - 100

68. Ranking and Level of Development According to the Agricultural Indices Case Study Sistan Region



, Javad Shahraki, Seyed Arman Hashemi Monfared

International Journal of Agricultural Management and Development Volume: (6) 93 - 100

69. An Application of WEAP Model in Water Resources Management Considering the Environmental Scenarios and Economic Assessment Case Study Hirmand Catchment

Ali Sardarshahraki, Javad Shahraki, Seyed Arman Hashemi Monfared

Modern Applied Science Volume: (10) 49 - 56

2015

70. Cadmium Uptake by Plant and Transport in Soil Column under Industrial Wastewater Irrigation A Case Study

Ali Mehmandust, Seyed Arman Hashemi Monfared, Mehdi Azhdary Moghaddam

International Journal of Environmental Research Volume: (9) 913 - 922

2014

71. A Three-Dimensional integrated seasonal separate advection-diffusion model ISSADM) to predict water quality patterns in the Chahnimeh reservoir

Seyed Arman Hashemi Monfared, S. A. Mirbagheri, S. A. Sadrnejad

ENVIRONMENTAL MODELING and ASSESSMENT Volume: (19) 71 - 83

72. A Three-Dimensional Integrated Seasonal Separate AdvectionDiffusion Model (ISSADM) to Predict Water Quality Patterns in the Chahnimeh Reservoir

Seyed Arman Hashemi Monfared, ,

ENVIRONMENTAL MODELING and ASSESSMENT Volume: () 71 - 83

2013

73. PHYTOPLANKTON AND ZOOPLANKTON MODELING IN THE CHAHNIMEH MAN-MADE RESERVOIR BY MEANS OF ISSADM

Seyed Arman Hashemi Monfared, ,

APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH Volume: (2) 209 - 221

2012

74. Phytoplankton and Zooplankton Modeling of Pishin Reservoir by Means of an Advection-Diffusion Drought Model

, , Seyed Arman Hashemi Monfared

International Journal of Environmental Research Volume: (1) 163 - 172

2009

75. Simulation modelling of pollutant transport from leachate in Shiraz landfill



, Seyed Arman Hashemi Monfared,

Environmental Earth Sciences Volume: () 287 - 296

76. Pesticide transport and transformation modeling in soil column and groundwater contamination prediction

, Seyed Arman Hashemi Monfared

International Journal of Environmental Sciences and Technology Volume: (2) 233 - 242

2007

استفاده از مدل شبیه ساز رسوب در تعیین عمر مفید مخزن سد اکباتان .77

, , Seyed Arman Hashemi Monfared

Volume: () 89 - 96

1. Hirmand Drought Effects on the Southern Border Security of the Country

Geopolitical Development Conference of Southeast of Iran

Ali Sardarshahraki, Javad Shahraki, Seyed Arman Hashemi Monfared

2. Hydropolytic and geo-aquatic environment of the Hirmand-Faramzeri River in the relations between Iran and Afghanistan

Geopolitical Development Conference of Southeast of Iran

Javad Shahraki, Seyed Arman Hashemi Monfared, Ali Sardarshahraki, Neda Aliahmadi

3. Water crisis and virtual water strategy.

The 3rd Scientific Congress on the Development and Promotion of Agricultural Sciences, Natural Resources and the Environment of Iran

6. Water Quality Management by Means of Assimilative Capacity Considering Allowable Concentration and Affected Distance

14th National Conference on HYDRAULIC

Seyed Arman Hashemi Monfared, , Bahareh Pirzadeh, Mehdi Azhdary Moghaddam



Research Project

2015

1. The Feasibility Study of Simultanous Useage of surface and Groundwater

Seyed Arman Hashemi Monfared, - 2015

2. Integrated management of water resources of Pishin dam under various scenarios of water development

Javad Shahraki, Ali Sardarshahraki, Seyed Arman Hashemi Monfared - 2015

2014

3. Heavy Metal Prediction in Crops and Agricultural Soil Under Industrial Sewage Irrigation Seyed Arman Hashemi Monfared, , - 2014