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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: P-6893-2014

ScopusID: 14061907000

Yoksis Researcher ID: 225508

Education Information

Doctorate, Pennsylvania State University, College of Earth and Mineral Sciences, Department of Petroleum and Natural Gas Engineering, United States Of America 2005 - 2008

Postgraduate, West Virginia University, College of Engineering and Mineral Resources, Department of Petroleum and Natural Gas Engineering, United States Of America 2003 - 2005

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Petroleum And Natural Gas Engineering, Turkey 1999 - 2003

Foreign Languages

English, C1 Advanced

Research Areas

Engineering and Technology

Academic Titles / Tasks

Associate Professor, Istanbul Technical University, Maden, Petrol Ve Doğalgaz Mühendisliği, 2020 - Continues

Associate Professor, Middle East Technical University, Faculty Of Engineering, Department Of Petroleum And Natural Gas Engineering, 2018 - 2020

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Department Of Petroleum And Natural Gas Engineering, 2013 - 2018

Lecturer PhD, Middle East Technical University, Faculty Of Engineering, Department Of Petroleum And Natural Gas Engineering, 2012 - 2013

Academic and Administrative Experience

Program Koordinatörü, Middle East Technical University, Faculty Of Engineering, Department Of Petroleum And Natural

Advising Theses

Kök M. V., Artun F. E., Development of a screening model for the cyclic steam injection (CSI) process, Postgraduate, G.YALGIN(Student), 2018

Durgut İ., Artun F. E., Development of a screening model for polymer flooding in multi-layer reservoirs, Postgraduate, N.ZAREPAKZAD(Student), 2018

Jury Memberships

Award, SPE International Formation Evaluation Award Committee Chairperson, 2019, Society of Petroleum Engineers (SPE), October, 2019

Award, SPE International Formation Evaluation Award Committee Member, 2016-2019, Society of Petroleum Engineers (SPE), October, 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Understanding the Controlling Factors for CO₂ Sequestration in Depleted Shale Reservoirs Using Data Analytics and Machine Learning**
Baabbad H. K. H., Artun F. E., Kulga B.
ACS OMEGA, vol.7, no.24, pp.20845-20859, 2022 (SCI-Expanded)
- II. **Machine-Learning Approach for Forecasting Steam-Assisted Gravity-Drainage Performance in the Presence of Noncondensable Gases**
Canbolat S., Artun F. E.
ACS OMEGA, vol.7, pp.21119-21130, 2022 (SCI-Expanded)
- III. **Analytical modeling of flow regimes during cyclic CO₂ injection in hydraulically fractured tight reservoirs for enhanced oil recovery**
Mugisha J., Al-Rbeawi S., Artun F. E.
JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, vol.201, 2021 (SCI-Expanded)
- IV. **A comparative analysis and rapid performance prediction of polymer flooding process by coupling reservoir simulation with neural networks**
Zarepakzad N., Artun F. E., DURGUT İ.
INTERNATIONAL JOURNAL OF OIL GAS AND COAL TECHNOLOGY, vol.27, no.3, pp.227-246, 2021 (SCI-Expanded)
- V. **Performance assessment and forecasting of cyclic gas injection into a hydraulically fractured well using data analytics and machine learning**
Artun E.
Journal of Petroleum Science and Engineering, vol.195, 2020 (SCI-Expanded)
- VI. **Selection of candidate wells for re-fracturing in tight gas sand reservoirs using fuzzy inference**
Artun E., Kulga B.
PETROLEUM EXPLORATION AND DEVELOPMENT, vol.47, no.2, pp.413-420, 2020 (SCI-Expanded)
- VII. **Improving Oil-Rate Estimate in Capacitance/Resistance Modeling Using the Y-Function Method for Reservoirs Under Waterflood**
Temizel C., Artun F. E., Yang Z.
SPE RESERVOIR EVALUATION & ENGINEERING, vol.22, no.3, pp.1161-1171, 2019 (SCI-Expanded)
- VIII. **Fishbone type horizontal wellbore completion: A study for pressure behavior, flow regimes, and productivity index**
Al-Rbeawi S., Artun F. E.

JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, vol.176, pp.172-202, 2019 (SCI-Expanded)

- IX. **Characterization of tight-gas sand reservoirs from horizontal-well performance data using an inverse neural network**
Kulga B., Artun F. E., Ertekin T.
JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING, vol.59, pp.35-46, 2018 (SCI-Expanded)
- X. **Characterizing interwell connectivity in waterflooded reservoirs using data-driven and reduced-physics models: a comparative study**
Artun F. E.
NEURAL COMPUTING & APPLICATIONS, vol.28, no.7, pp.1729-1743, 2017 (SCI-Expanded)
- XI. **Development of a data-driven forecasting tool for hydraulically fractured, horizontal wells in tight-gas sands**
Kulga B., Artun F. E., Ertekin T.
COMPUTERS & GEOSCIENCES, vol.103, pp.99-110, 2017 (SCI-Expanded)
- XII. **Modeling, analysis, and screening of cyclic pressure pulsing with nitrogen in hydraulically fractured wells**
Artun F. E., Khoei A. A., Kose K.
PETROLEUM SCIENCE, vol.13, no.3, pp.532-549, 2016 (SCI-Expanded)
- XIII. **A pattern-based approach to waterflood performance prediction using knowledge management tools and classical reservoir engineering forecasting methods**
Artun F. E., Vanderhaeghen M., Murray P.
INTERNATIONAL JOURNAL OF OIL GAS AND COAL TECHNOLOGY, vol.13, no.1, pp.19-40, 2016 (SCI-Expanded)
- XIV. **Designing cyclic pressure pulsing in naturally fractured reservoirs using an inverse looking recurrent neural network**
Artun F. E., Ertekin T., Watson R., Miller B.
COMPUTERS & GEOSCIENCES, vol.38, no.1, pp.68-79, 2012 (SCI-Expanded)
- XV. **Development of universal proxy models for screening and optimization of cyclic pressure pulsing in naturally fractured reservoirs**
Artun F. E., Ertekin T., Watson R., Al-Wadhahi M.
JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING, vol.3, no.6, pp.667-686, 2011 (SCI-Expanded)
- XVI. **Performance and Economic Evaluation of Cyclic-Pressure Pulsing in Naturally Fractured Reservoirs**
Artun F. E., Ertekin T., Watson R., Al-Wadhahit M., Miller B.
JOURNAL OF CANADIAN PETROLEUM TECHNOLOGY, vol.50, pp.24-36, 2011 (SCI-Expanded)
- XVII. **Intelligent seismic inversion workflow for high-resolution reservoir characterization**
Artun F. E., Mohaghegh S.
COMPUTERS & GEOSCIENCES, vol.37, no.2, pp.143-157, 2011 (SCI-Expanded)
- XVIII. **Performance Evaluation of Cyclic Pressure Pulsing in a Depleted, Naturally Fractured Reservoir with Stripper-Well Production**
Artun F. E., Ertekin T., Watson R., Miller B.
PETROLEUM SCIENCE AND TECHNOLOGY, vol.29, no.9, pp.953-965, 2011 (SCI-Expanded)
- XIX. **Development and testing of proxy models for screening cyclic pressure pulsing process in a depleted, naturally fractured reservoir**
Artun F. E., Ertekin T., Watson R., Miller B.
JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, vol.73, pp.73-85, 2010 (SCI-Expanded)
- XX. **A Parametric Study on the Benefits of Drilling Horizontal and Multilateral Wells in Coalbed Methane Reservoirs**
Maricic N., Mohaghegh S. D., Artun F. E.
SPE RESERVOIR EVALUATION & ENGINEERING, vol.11, no.6, pp.976-983, 2008 (SCI-Expanded)

Articles Published in Other Journals

- I. **Probabilistic assessment of geothermal resources and their development in Dikili-İzmir region**
Turan A., Artun F. E., Saner S.
SN Applied Sciences, vol.3, no.6, 2021 (ESCI)
- II. **Assessment of Carbon Footprint of a Campus with Sustainability Initiatives**
Artun E.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.34, no.3, pp.652-663, 2021 (ESCI)

Books & Book Chapters

- I. **Oilfield data mining**
Mohaghegh S., Artun F. E.
in: Exploration and Production of Petroleum and Natural Gas, M.R. Riazi, Editor, ASTM : American Society for Testing and Materials , Pennsylvania, pp.177-196, 2016

Refereed Congress / Symposium Publications in Proceedings

- I. **Analytical Modeling of Flow Regimes During Cyclic CO₂ Injection in Hydraulically Fractured Tight Reservoirs for EOR**
MUGISHA J., AL RBEAWI S., ARTUN F. E.
82nd EAGE Annual Conference Exhibition, 8 - 11 December 2020
- II. **Comparison of machine learning algorithms for the development of a forecasting tool for cyclic gas injection in hydraulically-Fractured wells**
Seilkhanov A., Otyunshin D., Novopokrovskiy G., Artun E.
SPE Annual Caspian Technical Conference 2020, CTC 2020, Virtual, Online, 21 - 22 October 2020
- III. **Candidate well selection for re-fracturing in tight-gas sand reservoirs using artificial intelligence**
ARTUN F. E., KULGA İ. B.
AAPG/SPE Eastern Section Joint Meeting, Pittsburgh, United States Of America, 7 - 11 October 2018
- IV. **Development of a data-driven operational design tool for CO₂ sequestration in shale gas reservoirs**
KULGA İ. B., ARTUN F. E., Ertekin T.
AAPG/SPE Eastern Section Joint Meeting, Pittsburgh, United States Of America, 7 - 11 October 2018
- V. **Design and Development of Data-Driven Screening Tools for Enhanced Oil Recovery Processes**
Yalgın G., Zarepakzad N., ARTUN F. E., DURGUT İ., KÖK M. V.
SPE Western Regional Meeting, 22 - 26 April 2018
- VI. **Probabilistic assessment of tight-gas sands using a data-driven modeling approach**
ARTUN F. E., KULGA İ. B., Ertekin T.
AAPG Eastern Section Meeting, Morgan Town, United States Of America, 24 - 27 October 2017
- VII. **Time-dependent performance evaluation of cyclic injection of gas mixtures into hydraulically-fractured wells in Appalachian sandstones**
ARTUN F. E.
AAPG Eastern Section Meeting, 24 - 27 September 2017
- VIII. **Cyclic pressure pulsing A promising method to improve recovery from hydraulically fractured stripper wells of Appalachian Basin**
ARTUN F. E., Irgav O., Khairzhanov N.
AAPG Eastern Section Meeting, Lexington, Kentucky, United States Of America, 25 - 27 September 2016
- IX. **Characterizing Reservoir Connectivity and Forecasting Waterflood Performance Using Data Driven and Reduced Physics Models**
ARTUN F. E.
SPE Western Regional Meeting, Anchorage, Alaska, United States Of America, 23 - 26 May 2016
- X. **Intersecting fracture geometries in control of geothermal spring occurrences in circumferences of**

the madra mountain, aegean region of Turkey

Turan A., Saner S., Artun E.

Geothermal Resources Council 2016 Annual Meeting - Geothermal Energy Here and Now: Sustainable, Clean, Flexible, GRC 2016, California, United States Of America, 23 - 26 October 2016, vol.40, pp.611-619

- XI. **Modeling and analysis of cyclic pressure pulsing in hydraulically fractured wells**
ARTUN F. E., Aghazadeh Khoei A., Kose K.
20th International Petroleum and Natural Gas Congress and Exhibition of Turkey (IPETGAS), Ankara, Turkey, 27 - 29 May 2015
- XII. **A Pattern Based Approach to Waterflood Performance Prediction Using Knowledge Management Tools and Classical Reservoir Engineering Forecasting Methods**
ARTUN F. E., Vanderhaeghen M., Murray P.
SPE Western North American and Rocky Mountain Joint Meeting, Denver, Colorado, United States Of America, 14 - 16 April 2014
- XIII. **A case study for understanding waterflood performance using analytical tools**
Fernandes B., Cabral Y., ARTUN F. E.
19th International Petroleum and Natural Gas Congress and Exhibition of Turkey (IPETGAS), Ankara, Turkey, 15 - 17 May 2013
- XIV. **Performance and Economic Evaluation of Cyclic Pressure Pulsing in Naturally Fractured Reservoirs**
ARTUN F. E., Ertekin T., Watson R., AlWadhahi M., Miller B.
SPE EOR Conference at Oil & Gas West Asia, Muscat, UMMAN, 11 - 13 April 2010
- XV. **Development of Universal Proxy Models for Screening and Optimization of Cyclic Pressure Pulsing in Naturally Fractured Reservoirs**
ARTUN F. E., Ertekin T., Watson R., AlWadhahi M.
International Petroleum Technology Conference, Doha, Qatar, 7 - 09 December 2009
- XVI. **Optimized Design of Cyclic Pressure Pulsing in a Depleted Naturally Fractured Reservoir**
ARTUN F. E., Ertekin T., Watson R., Miller B.
SPE Eastern Regional/AAPG Eastern Section Joint Meeting, Pittsburgh, Pennsylvania, USA, United States Of America, 11 - 15 October 2008
- XVII. **A Parametric Study on the Benefits of Drilling Horizontal and Multilateral Wells in Coalbed Methane Reservoirs**
Maricic N., Mohaghegh S., ARTUN F. E.
SPE Annual Technical Conference and Exhibition, Dallas, Texas, United States Of America, 9 - 12 October 2005
- XVIII. **Intelligent seismic inversion From surface seismic to well logs via VSP**
ARTUN F. E., Mohaghegh S., Toro J., Wilson T., Sanchez A.
AAPG Eastern Section Meeting, Morgantown, WV, United States Of America, 18 - 20 September 2005
- XIX. **Reservoir Characterization Using Intelligent Seismic Inversion**
ARTUN F. E., Mohaghegh S., Toro J., Wilson T., Sanchez A.
SPE Eastern Regional Meeting, Morgantown, West Virginia, United States Of America, 14 - 16 September 2005

Activities in Scientific Journals

Journal of Natural Gas Science and Engineering, Assistant Editor/Section Editor, 2015 - Continues

International Journal of Oil Gas and Coal Technology, Publication Committee Member, 2012 - 2020

Metrics

Publication: 44

Citation (WoS): 148

Citation (Scopus): 252

H-Index (WoS): 8

H-Index (Scopus): 10

Non Academic Experience

Quantum Reservoir Impact

Quantum Reservoir Impact

Chevron Energy Technology Company

Chevron Energy Technology Company

EQT Corporation