

Afshin Davarpanah

List of Publications by Year in descending order

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Version: 2024-02-01

105
papers

2,960
citations

136950

32
h-index

189892

50
g-index

110
all docs

110
docs citations

110
times ranked

1491
citing authors

#	ARTICLE	IF	CITATIONS
1	A Technical analysis investigating energy sustainability utilizing reliable renewable energy sources to reduce CO_2 emissions in a high potential area. Renewable Energy, 2021, 164, 46-57.	8.9	262
2	Thermodynamic effects of cycling carbon dioxide injectivity in shale reservoirs. Journal of Petroleum Science and Engineering, 2020, 195, 107717.	4.2	121
3	Experimental Investigation and Mathematical Modeling of Gas Diffusivity by Carbon Dioxide and Methane Kinetic Adsorption. Industrial & Engineering Chemistry Research, 2019, 58, 12392-12400.	3.7	114
4	Integrated production logging tools approach for convenient experimental individual layer permeability measurements in a multi-layered fractured reservoir. Journal of Petroleum Exploration and Production, 2018, 8, 743-751.	2.4	102
5	Stand-alone hybrid energy systems for remote area power generation. Energy Reports, 2019, 5, 231-241.	5.1	96
6	Parametric Study of Polymer-Nanoparticles-Assisted Injectivity Performance for Axisymmetric Two-Phase Flow in EOR Processes. Nanomaterials, 2020, 10, 1818.	4.1	90
7	Analysis of hydraulic fracturing techniques: hybrid fuzzy approaches. Arabian Journal of Geosciences, 2019, 12, 1.	1.3	84
8	Use of Organic and Copper-Based Nanoparticles on the Turbulator Installment in a Shell Tube Heat Exchanger: A CFD-Based Simulation Approach by Using Nanofluids. Journal of Nanomaterials, 2021, 2021, 1-7.	2.7	82
9	A feasible visual investigation for associative foam polymer injectivity performances in the oil recovery enhancement. European Polymer Journal, 2018, 105, 405-411.	5.4	78
10	Development of sustainable energy indexes by the utilization of new indicators: A comparative study. Energy Reports, 2019, 5, 375-383.	5.1	76
11	Energy sustainability analysis based on SDGs for developing countries. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, 42, 1041-1056.	2.3	72
12	Impact of anionic and cationic surfactants interfacial tension on the oil recovery enhancement. Powder Technology, 2020, 373, 93-98.	4.2	68
13	Implications of anionic and natural surfactants to measure wettability alteration in EOR processes. Fuel, 2020, 278, 118392.	6.4	63
14	Feasible analysis of reusing flowback produced water in the operational performances of oil reservoirs. Environmental Science and Pollution Research, 2018, 25, 35387-35395.	5.3	53
15	The feasibility analysis of underground gas storage during an integration of improved condensate recovery processes. Journal of Petroleum Exploration and Production, 2019, 9, 397-408.	2.4	53
16	Mathematical modeling of injectivity damage with oil droplets in the waste produced water re-injection of the linear flow. European Physical Journal Plus, 2019, 134, 1.	2.6	49
17	Thermodynamic Optimization of a Geothermal Power Plant with a Genetic Algorithm in Two Stages. Processes, 2020, 8, 1277.	2.8	49
18	Developing various hybrid energy systems for residential application as an appropriate and reliable way to achieve Energy sustainability. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, 41, 1180-1193.	2.3	47

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19	An experimental study of acidizing operation performances on the wellbore productivity index enhancement. Journal of Petroleum Exploration and Production, 2018, 8, 1243-1253.	2.4	46
20	A simulation study to enhance the gas production rate by nitrogen replacement in the underground gas storage performance. Energy Reports, 2019, 5, 431-435.	5.1	46
21	Application of Symmetry Law in Numerical Modeling of Hydraulic Fracturing by Finite Element Method. Symmetry, 2020, 12, 1122.	2.2	45
22	Experimental evaluation of polymer-enhanced foam transportation on the foam stabilization in the porous media. International Journal of Environmental Science and Technology, 2019, 16, 8107-8116.	3.5	44
23	Experimental study of CO ₂ solubility on the oil recovery enhancement of heavy oil reservoirs. Journal of Thermal Analysis and Calorimetry, 2020, 139, 1161-1169.	3.6	44
24	Design and construction of a micro-photo bioreactor in order to dairy wastewater treatment by micro-algae: parametric study. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, 42, 611-624.	2.3	43
25	Numerical simulation and laboratory evaluation of alkali-surfactant-polymer and foam flooding. International Journal of Environmental Science and Technology, 2020, 17, 1123-1136.	3.5	40
26	Comparison of Exergy and Advanced Exergy Analysis in Three Different Organic Rankine Cycles. Processes, 2020, 8, 586.	2.8	40
27	Hybrid Thermal-Chemical Enhanced Oil Recovery Methods; An Experimental Study for Tight Reservoirs. Symmetry, 2020, 12, 947.	2.2	39
28	A parametric study to simulate the non-Newtonian turbulent flow in spiral tubes. Energy Science and Engineering, 2020, 8, 134-149.	4.0	38
29	An experimental study of alternative hot water alternating gas injection in a fractured model. Energy Exploration and Exploitation, 2019, 37, 945-959.	2.3	36
30	The feasible visual laboratory investigation of formate fluids on the rheological properties of a shale formation. International Journal of Environmental Science and Technology, 2019, 16, 4783-4792.	3.5	35
31	Energy, Exergy, Economic, and Exergoenvironmental Analyses of a Novel Hybrid System to Produce Electricity, Cooling, and Syngas. Energies, 2020, 13, 6453.	3.1	34
32	A mathematical model to evaluate the polymer flooding performances. Energy Reports, 2019, 5, 1651-1657.	5.1	33
33	A simulation study to control the oil production rate of oil-rim reservoir under different injectivity scenarios. Energy Reports, 2018, 4, 664-670.	5.1	32
34	Integrated feasibility experimental investigation of hydrodynamic, geometrical and, operational characterization of methanol conversion to formaldehyde. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, 42, 89-103.	2.3	32
35	CFD-based simulation to reduce greenhouse gas emissions from industrial plants. International Journal of Chemical Reactor Engineering, 2021, 19, 1179-1186.	1.1	32
36	CFD design and simulation of ethylene dichloride (EDC) thermal cracking reactor. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, 41, 1573-1587.	2.3	31

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37	Application of Implicit Pressure-Explicit Saturation Method to Predict Filtrated Mud Saturation Impact on the Hydrocarbon Reservoirs Formation Damage. <i>Mathematics</i> , 2020, 8, 1057.	2.2	28
38	Environmental Method for Synthesizing Amorphous Silica Oxide Nanoparticles from a Natural Material. <i>Processes</i> , 2021, 9, 334.	2.8	27
39	Study on the Removal Efficiency and Mechanism of Tetracycline in Water Using Biochar and Magnetic Biochar. <i>Coatings</i> , 2021, 11, 1354.	2.6	26
40	An overview of management, recycling, and wasting disposal in the drilling operation of oil and gas wells in Iran. <i>Cogent Environmental Science</i> , 2018, 4, 1537066.	1.6	25
41	Hybrid Application of Nanoparticles and Polymer in Enhanced Oil Recovery Processes. <i>Polymers</i> , 2021, 13, 1414.	4.5	25
42	The Role of Renewable Energy to Achieve Energy Sustainability in Iran. An Economic and Technical Analysis of the Hybrid Power System. <i>Technology and Economics of Smart Grids and Sustainable Energy</i> , 2019, 4, 1.	2.6	24
43	Using Photo-Fenton and Floatation Techniques for the Sustainable Management of Flow-Back Produced Water Reuse in Shale Reservoirs Exploration. <i>Water, Air, and Soil Pollution</i> , 2020, 231, 1.	2.4	24
44	Amphoteric and cationic surfactants for enhancing oil recovery from carbonate oil reservoirs. <i>Journal of Molecular Liquids</i> , 2021, 322, 114518.	4.9	23
45	The Economic Evaluation of Methanol and Propylene Production from Natural Gas at Petrochemical Industries in Iran. <i>Sustainability</i> , 2021, 13, 9990.	3.2	22
46	Influence of Different Rotations of Organic Formamidinium Molecule on Electronic and Optical Properties of FAPbBr ₃ Perovskite. <i>Coatings</i> , 2021, 11, 1341.	2.6	21
47	Investigation the Integration of Heliostat Solar Receiver to Gas and Combined Cycles by Energy, Exergy, and Economic Point of Views. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 5307.	2.5	20
48	Incorporation of Bi ₂ O ₃ Residuals with Metallic Bi as High Performance Electrocatalyst toward Hydrogen Evolution Reaction. <i>Catalysts</i> , 2021, 11, 1099.	3.5	20
49	Simultaneous feasible injectivity of foam and hydrolyzed polyacrylamide to optimize the oil recovery enhancement. <i>Energy Exploration and Exploitation</i> , 2019, 37, 44-59.	2.3	19
50	An experimental study to measure the required fresh water and treated water for drilling an unconventional shale reservoir. <i>International Journal of Environmental Science and Technology</i> , 2019, 16, 7727-7734.	3.5	19
51	Simultaneous evaluation of capillary pressure and wettability alteration based on the USBM and imbibition tests on carbonate minerals. <i>Journal of Petroleum Science and Engineering</i> , 2021, 200, 108285.	4.2	19
52	A parametric study to numerically analyze the formation damage effect. <i>Energy Exploration and Exploitation</i> , 2020, 38, 555-568.	2.3	18
53	A Laboratory Approach on the Hybrid-Enhanced Oil Recovery Techniques with Different Saline Brines in Sandstone Reservoirs. <i>Processes</i> , 2020, 8, 1051.	2.8	17
54	Sustainable Learning Environment by Mobile-Assisted Language Learning Methods on the Improvement of Productive and Receptive Foreign Language Skills: A Comparative Study for Asian Universities. <i>Sustainability</i> , 2021, 13, 6328.	3.2	16

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55	Natural convection of water and nano-emulsion phase change material inside a square enclosure to cool the electronic components. International Journal of Energy Research, 2022, 46, 2403-2417.	4.5	16
56	The main role of energy sustainability indicators on the water management. Modeling Earth Systems and Environment, 2020, 6, 1419-1426.	3.4	15
57	An Analytical Model to Predict the Effects of Suspended Solids in Injected Water on the Oil Displacement Efficiency during Waterflooding. Processes, 2020, 8, 659.	2.8	15
58	Stimulated-based characterization recovery enhancement feedback of oil-rim reservoirs. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 2528-2541.	2.3	14
59	The integrated feasibility analysis of water reuse management in the petroleum exploration performances of unconventional shale reservoirs. Applied Water Science, 2018, 8, 1.	5.6	14
60	Effect of formate fluids on the shale stabilization of shale layers. Energy Reports, 2019, 5, 987-992.	5.1	13
61	Conventional diverting techniques and novel fibr-assisted self-diverting system in carbonate reservoir acidizing with successful case studies. Petroleum Research, 2021, 6, 247-256.	2.7	13
62	Experimental study and field application of appropriate selective calculation methods in gas lift design. Petroleum Research, 2018, 3, 239-247.	2.7	12
63	Sensitivity analysis of reservoir and rock properties during low salinity water injection. Energy Reports, 2019, 5, 1001-1009.	5.1	12
64	Hybrid Chemical Enhanced Oil Recovery Techniques: A Simulation Study. Symmetry, 2020, 12, 1086.	2.2	12
65	Statistical Modeling for Spatial Groundwater Potential Map Based on GIS Technique. Sustainability, 2021, 13, 3788.	3.2	12
66	Experimental investigation on the application of carbon dioxide adsorption for a shale reservoir. Energy Science and Engineering, 2021, 9, 2165-2176.	4.0	12
67	Implementation of energy sustainability using hybrid power systems, a case study. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, , 1-14.	2.3	11
68	A Laboratory Approach to Measure Enhanced Gas Recovery from a Tight Gas Reservoir during Supercritical Carbon Dioxide Injection. Sustainability, 2021, 13, 11606.	3.2	11
69	A simulation study of water injection and gas injectivity scenarios in a fractured carbonate reservoir: A comparative study. Petroleum Research, 2019, 4, 250-256.	2.7	10
70	Sand production control mechanisms during oil well production and construction. Petroleum Research, 2021, 6, 361-367.	2.7	10
71	Evaluation and Classification Risks of Implementing Blockchain in the Drug Supply Chain with a New Hybrid Sorting Method. Sustainability, 2021, 13, 11466.	3.2	10
72	A Laboratory Approach to Measure Carbonate Rocks' Adsorption Density by Surfactant and Polymer. Mathematical Problems in Engineering, 2021, 2021, 1-7.	1.1	9

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73	Effect of anionic and non-anionic surfactants on the adsorption density. Petroleum Science and Technology, 2021, 39, 362-372.	1.5	8
74	A visual investigation of different pollutants on the rheological properties of sodium/potassium formate fluids. Applied Water Science, 2018, 8, 1.	5.6	7
75	Numerical modelling of hydraulic fracturing procedure in hydrocarbon reservoirs. Modeling Earth Systems and Environment, 2019, 5, 1297-1302.	3.4	6
76	Energy sustainability analyses using feasible indicators for urban areas. International Journal of Energy and Water Resources, 2019, 3, 127-140.	2.2	6
77	Application of Quantitative Computer-Based Analysis for Student's Learning Tendency on the Efficient Utilization of Mobile Phones during Lecture Hours. Sustainability, 2020, 12, 8345.	3.2	6
78	An experimental investigation to consider thermal methods efficiency on oil recovery enhancement. Heat Transfer, 2020, 49, 3066-3074.	3.0	6
79	Forecasting Daily Electricity Price by Hybrid Model of Fractional Wavelet Transform, Feature Selection, Support Vector Machine and Optimization Algorithm. Electronics (Switzerland), 2021, 10, 2214.	3.1	6
80	Integrated feasibility analysis of shale inhibition property by utilization of pore pressure transmission equipment. Petroleum Research, 2018, 3, 152-158.	2.7	5
81	The Effect of Structural Phase Transitions on Electronic and Optical Properties of CsPbI ₃ Pure Inorganic Perovskites. Coatings, 2021, 11, 1173.	2.6	5
82	Evaluation of Gas Injection in the Horizontal Wells and Optimizing Oil Recovery Factor by Eclipse Software. Journal of Chromatography & Separation Techniques, 2016, 07, .	0.2	4
83	Mathematical modeling of formation damage effect during underbalanced drilling operations. Modeling Earth Systems and Environment, 2019, 5, 1651-1661.	3.4	4
84	Modeling and Optimization of Wind Turbines in Wind Farms for Solving Multi-Objective Reactive Power Dispatch Using a New Hybrid Scheme. Energies, 2021, 14, 5919.	3.1	4
85	Sustainable wastewater management from shale oil production wells: emerging opportunities and barriers. Applied Water Science, 2022, 12, .	5.6	4
86	A New Hybrid Algorithm for Multi-Objective Reactive Power Planning via FACTS Devices and Renewable Wind Resources. Sensors, 2021, 21, 5246.	3.8	3
87	Quantitative Estimation of Ecocultural Bearing Capacity of Urban Agglomerations in Britain. Discrete Dynamics in Nature and Society, 2022, 2022, 1-10.	0.9	3
88	Effectiveness of cellulose polyanionic-based polymers on the measurement of rheological properties of water-based drilling fluids in high-pressure high-temperature fractured shale reservoirs. Applied Water Science, 2022, 12, .	5.6	3
89	Simulation of low and high salinity water injection method to determine the optimum salinity. Petroleum Research, 2019, 4, 348-353.	2.7	2
90	Implementation of a Thematic Analysis Method to Develop a Qualitative Model on the Authentic Foreign Language Learning Perspective: A Case Study in the University of Northern Cyprus. Education Sciences, 2021, 11, 544.	2.6	2

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91	Permeability Decline in Fractured Porous Media During Mineral Scaling: A Detailed Modeling Study. Natural Resources Research, 2022, 31, 601.	4.7	2
92	Statistical Analysis of Treated Flow-Back Water Measurements: An Industrial Insight for a Shale Reservoir. Geofluids, 2022, 2022, 1-5.	0.7	2
93	An analytical approach to investigate formation damage caused by underbalanced drilling performances. International Journal of Energy and Water Resources, 2019, 3, 319-327.	2.2	1
94	Current Challenges and Advancements on the Management of Water Retreatment in Different Production Operations of Shale Reservoirs. Water (Switzerland), 2021, 13, 2131.	2.7	1
95	Implementation analysis of technical-economic solar and wind energy potential for small homes: a case study.. Environmental Risk Assessment and Remediation, 2017, 01, .	0.4	1
96	Advanced Binder-Free Electrode Based on CuCo ₂ O ₄ Nanowires Coated with Polypyrrole Layer as a High-Performance Nonenzymatic Glucose Sensing Platform. Coatings, 2021, 11, 1462.	2.6	1
97	Computational fluid dynamic simulations to improve heat transfer in shell tube heat exchangers. International Journal of Chemical Reactor Engineering, 2022, 20, 749-764.	1.1	1
98	Considerable Influence of Reservoir Properties on the Production Flow Rate During Low Salinity Water Flooding. Advances in Science, Technology and Innovation, 2019, , 41-43.	0.4	0
99	Implications of Chemical-Thermal enhanced oil recovery methods in shale reservoirs. Cogent Engineering, 2021, 8, 1920564.	2.2	0
100	Special Issue “Fluid Dynamics, Multi-Phase Flow, and Thermal Recovery Methods” Processes, 2021, 9, 842.	2.8	0
101	On the application of different surfactant types to measure the carbonate’s adsorption density: a parametric study. Carbonates and Evaporites, 2021, 36, 1.	1.0	0
102	Modeling of a dry low nitrogen oxides burner using a three-dimensional computational fluid dynamics simulation. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , 095440892110355.	2.5	0
103	A Comprehensive Thermoeconomic Evaluation and Multi-Criteria Optimization of a Combined MCFC/TEG System. Sustainability, 2021, 13, 13187.	3.2	0
104	Prediction of the capillary pressure of fluid surrounding a cylinder representing an idealized rock structure in porous media. European Physical Journal Plus, 2022, 137, .	2.6	0
105	A Unified Power Quality Conditioner for Feeder Reconfiguration and Setting to Minimize the Power Loss and Improve Voltage Profile. Complexity, 2022, 2022, 1-8.	1.6	0