

# Wood,david A

## List of Publications by Year in descending order

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229  
papers

10,670  
citations

50276

46  
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37204

96  
g-index

266  
all docs

266  
docs citations

266  
times ranked

7398  
citing authors

#	ARTICLE	IF	CITATIONS
1	The application of a ThHfTa diagram to problems of tectonomagmatic classification and to establishing the nature of crustal contamination of basaltic lavas of the British Tertiary Volcanic Province. <i>Earth and Planetary Science Letters</i> , 1980, 50, 11-30.	4.4	1,791
2	A re-appraisal of the use of trace elements to classify and discriminate between magma series erupted in different tectonic settings. <i>Earth and Planetary Science Letters</i> , 1979, 45, 326-336.	4.4	695
3	Elemental and Sr isotope variations in basic lavas from Iceland and the surrounding ocean floor. <i>Contributions To Mineralogy and Petrology</i> , 1979, 70, 319-339.	3.1	464
4	Recent advances in carbon dioxide utilization. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 125, 109799.	16.4	369
5	A variably veined suboceanic upper mantle—Genetic significance for mid-ocean ridge basalts from geochemical evidence. <i>Geology</i> , 1979, 7, 499.	4.4	357
6	Gas-to-liquids (GTL): A review of an industry offering several routes for monetizing natural gas. <i>Journal of Natural Gas Science and Engineering</i> , 2012, 9, 196-208.	4.4	334
7	Geochemistry of basalts drilled in the North Atlantic by IPOD Leg 49: Implications for mantle heterogeneity. <i>Earth and Planetary Science Letters</i> , 1979, 42, 77-97.	4.4	256
8	The state of natural gas. <i>Journal of Natural Gas Science and Engineering</i> , 2009, 1, 1-13.	4.4	238
9	Elemental mobility during zeolite facies metamorphism of the Tertiary basalts of eastern Iceland. <i>Contributions To Mineralogy and Petrology</i> , 1976, 55, 241-254.	3.1	233
10	Electrical conductivity models in saturated porous media: A review. <i>Earth-Science Reviews</i> , 2017, 171, 419-433.	9.1	219
11	A realistic and integrated model for evaluating oil sands development with Steam Assisted Gravity Drainage technology in Canada. <i>Applied Energy</i> , 2018, 213, 76-91.	10.1	169
12	Effectiveness of amino acid salt solutions in capturing CO <sub>2</sub> : A review. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 98, 179-188.	16.4	167
13	Major and Trace Element Variations in the Tertiary Lavas of Eastern Iceland and their Significance with respect to the Iceland Geochemical Anomaly. <i>Journal of Petrology</i> , 1978, 19, 393-436.	2.8	161
14	A review of the current status of induced seismicity monitoring for hydraulic fracturing in unconventional tight oil and gas reservoirs. <i>Fuel</i> , 2019, 242, 195-210.	6.4	154
15	Role of subducted sediment in the genesis of ocean-island basalts: Geochemical evidence from South Atlantic Ocean islands. <i>Geology</i> , 1986, 14, 275.	4.4	143
16	Porosity controls and fractal disposition of organic-rich Permian shales using low-pressure adsorption techniques. <i>Fuel</i> , 2018, 220, 837-848.	6.4	126
17	Prediction of solubility of N-alkanes in supercritical CO <sub>2</sub> using RBF-ANN and MLP-ANN. <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 25, 108-119.	6.8	108
18	Geochemistry of ocean island basalts from the South Atlantic: Ascension, Bouvet, St. Helena, Gough and Tristan da Cunha. <i>Geological Society Special Publication</i> , 1987, 30, 253-267.	1.3	107

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19	Retrospective and future perspective of natural gas liquefaction and optimization technologies contributing to efficient LNG supply: A review. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 45, 165-188.	4.4	104
20	Supplier selection for development of petroleum industry facilities, applying multi-criteria decision making techniques including fuzzy and intuitionistic fuzzy TOPSIS with flexible entropy weighting. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 28, 594-612.	4.4	99
21	A comprehensive review of formation damage during enhanced oil recovery. <i>Journal of Petroleum Science and Engineering</i> , 2018, 167, 287-299.	4.2	95
22	The critical factors for permeability-formation factor relation in reservoir rocks: Pore-throat ratio, tortuosity and connectivity. <i>Energy</i> , 2019, 188, 116051.	8.8	92
23	Fundamental investigation of an environmentally-friendly surfactant agent for chemical enhanced oil recovery. <i>Fuel</i> , 2019, 238, 186-197.	6.4	89
24	Dynamic partial melting: its application to the petrogeneses of basalts erupted in Iceland, the Faeroe Islands, the Isle of Skye (Scotland) and the Troodos Massif (Cyprus). <i>Geochimica Et Cosmochimica Acta</i> , 1979, 43, 1031-1046.	3.9	85
25	The role of supercritical carbon dioxide for recovery of shale gas and sequestration in gas shale reservoirs. <i>Energy and Environmental Science</i> , 2021, 14, 4203-4227.	30.8	84
26	Improved predictions of wellhead choke liquid critical-flow rates: Modelling based on hybrid neural network training learning based optimization. <i>Fuel</i> , 2017, 207, 547-560.	6.4	81
27	Designing and optimizing deviated wellbore trajectories using novel particle swarm algorithms. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 21, 1184-1204.	4.4	75
28	A machine learning approach to predict drilling rate using petrophysical and mud logging data. <i>Earth Science Informatics</i> , 2019, 12, 319-339.	3.2	74
29	Coalbed methane (CBM) exploration, reservoir characterisation, production, and modelling: A collection of published research (2009-2015). <i>Journal of Natural Gas Science and Engineering</i> , 2015, 26, 1472-1484.	4.4	73
30	A review and outlook for the global LNG trade. <i>Journal of Natural Gas Science and Engineering</i> , 2012, 9, 16-27.	4.4	71
31	ANN-Based Prediction of Laboratory-Scale Performance of CO <sub>2</sub> -Foam Flooding for Improving Oil Recovery. <i>Natural Resources Research</i> , 2019, 28, 1619-1637.	4.7	71
32	A hybrid nanocomposite of poly(styrene-methyl methacrylate- acrylic acid) /clay as a novel rheology-improvement additive for drilling fluids. <i>Journal of Polymer Research</i> , 2019, 26, 1.	2.4	71
33	A review of Australia's natural gas resources and their exploitation. <i>Journal of Natural Gas Science and Engineering</i> , 2013, 10, 68-88.	4.4	70
34	Stimulation and hydraulic fracturing technology in natural gas reservoirs: Theory and case studies (2012-2015). <i>Journal of Natural Gas Science and Engineering</i> , 2015, 26, 1414-1421.	4.4	69
35	Trace element variations in Atlantic Ocean basalts and Proterozoic dykes from northwest Scotland: Their bearing upon the nature and geochemical evolution of the upper mantle. <i>Tectonophysics</i> , 1981, 75, 91-112.	2.2	67
36	CFD investigation of CO <sub>2</sub> capture by methyldiethanolamine and 2-(1-piperaziny)-ethylamine in membranes: Part B. Effect of membrane properties. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 19, 311-316.	4.4	65

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37	Predicting porosity, permeability and water saturation applying an optimized nearest-neighbour, machine-learning and data-mining network of well-log data. <i>Journal of Petroleum Science and Engineering</i> , 2020, 184, 106587.	4.2	63
38	Pore Characteristics of Distinct Thermally Mature Shales: Influence of Particle Size on Low-Pressure CO <sub>2</sub> and N <sub>2</sub> Adsorption. <i>Energy &amp; Fuels</i> , 2018, 32, 8175-8186.	5.1	62
39	Prediction of gas flow rates from gas condensate reservoirs through wellhead chokes using a firefly optimization algorithm. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 45, 256-271.	4.4	59
40	Experimental and field applications of nanotechnology for enhanced oil recovery purposes: A review. <i>Fuel</i> , 2022, 324, 124669.	6.4	59
41	Nanoparticle applications as beneficial oil and gas drilling fluid additives: A review. <i>Journal of Molecular Liquids</i> , 2022, 352, 118725.	4.9	58
42	Geomechanical modeling using the depth-of-damage approach to achieve successful underbalanced drilling in the Gulf of Suez rift basin. <i>Journal of Petroleum Science and Engineering</i> , 2021, 202, 108311.	4.2	57
43	Rheological and filtration characteristics of drilling fluids enhanced by nanoparticles with selected additives: an experimental study. <i>Advances in Geo-Energy Research</i> , 2018, 2, 228-236.	6.0	57
44	A geomechanical approach to casing collapse prediction in oil and gas wells aided by machine learning. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 107811.	4.2	54
45	Carbon Dioxide Applications for Enhanced Oil Recovery Assisted by Nanoparticles: Recent Developments. <i>ACS Omega</i> , 2022, 7, 9984-9994.	3.5	50
46	A transparent Open-Box learning network provides insight to complex systems and a performance benchmark for more-opaque machine learning algorithms. <i>Advances in Geo-Energy Research</i> , 2018, 2, 148-162.	6.0	48
47	3-D well path design using a multi objective genetic algorithm. <i>Journal of Natural Gas Science and Engineering</i> , 2015, 27, 219-235.	4.4	46
48	Predicting liquid flow-rate performance through wellhead chokes with genetic and solver optimizers: an oil field case study. <i>Journal of Petroleum Exploration and Production</i> , 2019, 9, 1355-1373.	2.4	46
49	Prediction of oil flow rate through an orifice flow meter: Artificial intelligence alternatives compared. <i>Petroleum</i> , 2020, 6, 404-414.	2.8	43
50	Hybrid machine learning algorithms to enhance lost-circulation prediction and management in the Marun oil field. <i>Journal of Petroleum Science and Engineering</i> , 2021, 198, 108125.	4.2	41
51	A review of the utilization and monetization of Nigeria's natural gas resources: Current realities. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 18, 412-432.	4.4	40
52	Characterization of organic-rich shales for petroleum exploration & exploitation: A review-Part 2: Geochemistry, thermal maturity, isotopes and biomarkers. <i>Journal of Earth Science (Wuhan, China)</i> , 2017, 28, 758-778.	3.2	39
53	Applying ultrasonic fields to separate water contained in medium-gravity crude oil emulsions and determining crude oil adhesion coefficients. <i>Ultrasonics Sonochemistry</i> , 2021, 70, 105303.	8.2	38
54	New insights to direct conversion of wet microalgae impregnated with ethanol to biodiesel exploiting extraction with supercritical carbon dioxide. <i>Fuel</i> , 2021, 285, 119199.	6.4	37

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55	Determination of bubble point pressure & oil formation volume factor of crude oils applying multiple hidden layers extreme learning machine algorithms. <i>Journal of Petroleum Science and Engineering</i> , 2021, 202, 108425.	4.2	37
56	Weight on drill bit prediction models: Sugeno-type and Mamdani-type fuzzy inference systems compared. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 36, 280-297.	4.4	36
57	Performance comparison of bubble point pressure from oil PVT data: Several neurocomputing techniques compared. <i>Experimental and Computational Multiphase Flow</i> , 2020, 2, 225-246.	3.9	36
58	Auto-characterization of naturally fractured reservoirs drilled by horizontal well using multi-output least squares support vector regression. <i>Arabian Journal of Geosciences</i> , 2021, 14, 1.	1.3	36
59	Characterization of organic-rich shales for petroleum exploration & exploitation: A review-Part 1: Bulk properties, multi-scale geometry and gas adsorption. <i>Journal of Earth Science (Wuhan, China)</i> , 2017, 28, 739-757.	3.2	35
60	Techniques used to calculate shale fractal dimensions involve uncertainties and imprecisions that require more careful consideration. <i>Advances in Geo-Energy Research</i> , 2021, 5, 153-165.	6.0	35
61	Fractal disposition, porosity characterization and relationships to thermal maturity for the Lower Permian Raniganj basin shales, India. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 59, 452-465.	4.4	34
62	A study of the precision attained by neutron activation analysis using international standard rocks GS-N and BCR-I as examples. A discussion of a geochemical model accounting for the estimated errors. <i>Journal of Radioanalytical Chemistry</i> , 1980, 55, 417-425.	0.5	33
63	A comparative study of several metaheuristic algorithms for optimizing complex 3-D well-path designs. <i>Journal of Petroleum Exploration and Production</i> , 2018, 8, 1487-1503.	2.4	32
64	Gas and oil project time-cost-quality tradeoff: Integrated stochastic and fuzzy multi-objective optimization applying a memetic, nondominated, sorting algorithm. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 45, 143-164.	4.4	31
65	A holistic review of geosystem damage during unconventional oil, gas and geothermal energy recovery. <i>Fuel</i> , 2018, 227, 99-110.	6.4	31
66	Reinforcement of oil and gas wellbore cements with a methyl methacrylate/carbon-nanotube polymer nanocomposite additive. <i>Cement and Concrete Composites</i> , 2020, 114, 103763.	10.7	30
67	Prediction of oil flow rate through orifice flow meters: Optimized machine-learning techniques. Measurement: <i>Journal of the International Measurement Confederation</i> , 2021, 174, 108943.	5.0	30
68	Investigation of CO <sub>2</sub> absorption in methyl-diethanolamine and 2-(1-piperazinyl)-ethylamine using hollow fiber membrane contactors: Part C. Effect of operating variables. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 20, 58-66.	4.4	29
69	Regeneration of the Midrex Reformer Catalysts Using Supercritical Carbon Dioxide. <i>Chemical Engineering Journal</i> , 2018, 343, 748-758.	12.7	29
70	Auto-detection interpretation model for horizontal oil wells using pressure transient responses. <i>Advances in Geo-Energy Research</i> , 2020, 4, 305-316.	6.0	28
71	Adaptive neuro-fuzzy algorithm applied to predict and control multi-phase flow rates through wellhead chokes. <i>Flow Measurement and Instrumentation</i> , 2020, 76, 101849.	2.0	27
72	Predicting Formation Pore-Pressure from Well-Log Data with Hybrid Machine-Learning Optimization Algorithms. <i>Natural Resources Research</i> , 2021, 30, 3455-3481.	4.7	27

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73	Simulated exergy and energy performance comparison of physical and chemical solvents in a sour gas treatment plant. <i>Chemical Engineering Research and Design</i> , 2018, 133, 40-54.	5.6	26
74	Hybrid cuckoo search optimization algorithms applied to complex wellbore trajectories aided by dynamic, chaos-enhanced, fat-tailed distribution sampling and metaheuristic profiling. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 34, 236-252.	4.4	25
75	Lithofacies and stratigraphy prediction methodology exploiting an optimized nearest-neighbour algorithm to mine well-log data. <i>Marine and Petroleum Geology</i> , 2019, 110, 347-367.	3.3	25
76	Experimental and Fractal Characterization of the Microstructure of Shales from Sichuan Basin, China. <i>Energy &amp; Fuels</i> , 2021, 35, 3899-3914.	5.1	25
77	Global natural gas demand to 2025: A learning scenario development model. <i>Energy</i> , 2021, 224, 120167.	8.8	25
78	Metaheuristic profiling to assess performance of hybrid evolutionary optimization algorithms applied to complex wellbore trajectories. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 33, 751-768.	4.4	24
79	Characterization of organic-rich shales for petroleum exploration & exploitation: A review-Part 3: Applied geomechanics, petrophysics and reservoir modeling. <i>Journal of Earth Science (Wuhan)</i> , 2021, 43(1), 1-14.	1.0	24
80	Shear modulus prediction of embedded pressurized salt layers and pinpointing zones at risk of casing collapse in oil and gas wells. <i>Journal of Applied Geophysics</i> , 2020, 183, 104205.	2.1	24
81	Evaluation of Shale Source Rocks and Reservoirs. <i>Petroleum Engineering</i> , 2019, , , .	1.0	23
82	Hybrid machine learning algorithms to predict condensate viscosity in the near wellbore regions of gas condensate reservoirs. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 95, 104210.	4.4	23
83	Gas adsorption and reserve estimation for conventional and unconventional gas resources. , 2022, , 345-382.		23
84	Prediction performance advantages of deep machine learning algorithms for two-phase flow rates through wellhead chokes. <i>Journal of Petroleum Exploration and Production</i> , 2021, 11, 1233-1261.	2.4	23
85	Machine learning and data-driven prediction of pore pressure from geophysical logs: A case study for the Mangahewa gas field, New Zealand. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2022, 14, 1799-1809.	8.1	23
86	Production analysis and performance forecasting for natural gas reservoirs: Theory and practice (2011-2015). <i>Journal of Natural Gas Science and Engineering</i> , 2015, 26, 1433-1438.	4.4	22
87	Iran in the emerging global natural gas market: A scenario-based competitive analysis and policy assessment. <i>Resources Policy</i> , 2020, 68, 101790.	9.6	22
88	Robust computational approach to determine the safe mud weight window using well-log data from a large gas reservoir. <i>Marine and Petroleum Geology</i> , 2022, 142, 105772.	3.3	22
89	Predicting shear wave velocity from conventional well logs with deep and hybrid machine learning algorithms. <i>Journal of Petroleum Exploration and Production</i> , 2023, 13, 19-42.	2.4	22
90	Optimized machine learning models for natural fractures prediction using conventional well logs. <i>Fuel</i> , 2022, 326, 124952.	6.4	22

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91	Influence of the Membrane Module Geometry on SO <sub>2</sub> Removal: A Numerical Study. Industrial & Engineering Chemistry Research, 2015, 54, 11619-11627.	3.7	21
92	Hybrid bat flight optimization algorithm applied to complex wellbore trajectories highlights the relative contributions of metaheuristic components. Journal of Natural Gas Science and Engineering, 2016, 32, 211-221.	4.4	21
93	Reservoir Formation Damage; Reasons and Mitigation: A Case Study of the Cambrian-Ordovician Nubian Sandstone Gas and Oil Reservoir from the Gulf of Suez Rift Basin. Arabian Journal for Science and Engineering, 2022, 47, 11279-11296.	3.0	21
94	Transparent open-box learning network provides auditable predictions for coal gross calorific value. Modeling Earth Systems and Environment, 2019, 5, 395-419.	3.4	20
95	The impacts of gas impurities on the minimum miscibility pressure of injected CO <sub>2</sub> -rich gas-crude oil systems and enhanced oil recovery potential. Petroleum Science, 2019, 16, 117-126.	4.9	20
96	Insights into the effects of matrix retention and inert carbon on the petroleum generation potential of Indian Gondwana shales. Marine and Petroleum Geology, 2018, 91, 125-138.	3.3	19
97	Thermal maturity and burial history modelling of shale is enhanced by use of Arrhenius time-temperature index and memetic optimizer. Petroleum, 2018, 4, 25-42.	2.8	19
98	Experimental investigation on the effect of diameter ratio on two-phase slug flow separation in a T-Junction. Journal of Petroleum Science and Engineering, 2018, 170, 139-150.	4.2	19
99	UTASTAR method and its application in multi-criteria warehouse location selection. Operations Management Research, 2021, 14, 202-215.	8.5	19
100	2.29 Desulfurization Materials. , 2018, , 944-979.		18
101	Simulation of CO <sub>2</sub> removal from ethane with Sulfinol-M+AMP solvent instead of DEA solvent in the South Pars phases 9 and 10 gas processing facility. Petroleum, 2019, 5, 90-101.	2.8	18
102	Transformation of associated natural gas into valuable products to avoid gas wastage in the form of flaring. Journal of Natural Gas Science and Engineering, 2021, 94, 104078.	4.4	18
103	LNG rollover challenges and their mitigation on Floating Storage and Regasification Units: New perspectives in assessing rollover consequences. Journal of Loss Prevention in the Process Industries, 2018, 54, 352-372.	3.3	17
104	Predictions of Gross Calorific Value of Indian Coals from their Moisture and Ash Content. Journal of the Geological Society of India, 2019, 93, 437-442.	1.1	17
105	A Layered Uncertainties Scenario Synthesizing (LUSS) model applied to evaluate multiple potential long-run outcomes for Iran's natural gas exports. Energy, 2019, 169, 646-659.	8.8	17
106	The impacts of silica nanoparticles coupled with low-salinity water on wettability and interfacial tension: Experiments on a carbonate core. Journal of Dispersion Science and Technology, 2020, 41, 1159-1173.	2.4	17
107	Source rock properties and pore structural framework of the gas-prone Lower Permian shales in the Jharia basin, India. Arabian Journal of Geosciences, 2020, 13, 1.	1.3	17
108	Net ecosystem carbon exchange prediction and insightful data mining with an optimized data-matching algorithm. Ecological Indicators, 2021, 124, 107426.	6.3	17

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109	Gamma-ray log derivative and volatility attributes assist facies characterization in clastic sedimentary sequences for formulaic and machine learning analysis. <i>Advances in Geo-Energy Research</i> , 2022, 6, 69-85.	6.0	17
110	Permeability prediction of heterogeneous carbonate gas condensate reservoirs applying group method of data handling. <i>Marine and Petroleum Geology</i> , 2022, 139, 105597.	3.3	17
111	High-level integrated deterministic, stochastic and fuzzy cost-duration analysis aids project planning and monitoring, focusing on uncertainties and earned value metrics. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 37, 303-326.	4.4	16
112	Brittleness index predictions from Lower Barnett Shale well-log data applying an optimized data matching algorithm at various sampling densities. <i>Geoscience Frontiers</i> , 2021, 12, 101087.	8.4	16
113	Partial melting models for the petrogenesis of Reykjanes Peninsula basalts, Iceland Implications for the use of trace elements and strontium and neodymium isotope ratios to record inhomogeneities in the upper mantle. <i>Earth and Planetary Science Letters</i> , 1981, 52, 183-190.	4.4	15
114	Transparent open-box learning network provides auditable predictions. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 136, 1395-1414.	3.6	15
115	Transparent open-box learning network and artificial neural network predictions of bubble-point pressure compared. <i>Petroleum</i> , 2020, 6, 375-384.	2.8	15
116	Mathematical model for iron corrosion that eliminates chemical potential parameters. <i>Chinese Journal of Chemical Engineering</i> , 2020, 28, 603-612.	3.5	15
117	Applying separately cost-sensitive learning and Fisher's discriminant analysis to address the class imbalance problem: A case study involving a virtual gas pipeline SCADA system. <i>International Journal of Critical Infrastructure Protection</i> , 2020, 29, 100357.	4.6	15
118	Third Generation of Biofuels Exploiting Microalgae. <i>Nanotechnology in the Life Sciences</i> , 2020, , 575-588.	0.6	15
119	Assessing Wellbore Stability With a Modified Lade Failure Criterion. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2020, 142, .	2.3	15
120	Virtual special issue: Stimulation and hydraulic fracturing technology in natural gas reservoirs: Theory and case studies (2012â€“2015). <i>Journal of Natural Gas Science and Engineering</i> , 2015, 26, 1508-1509.	4.4	14
121	A review: Optimizing performance of Floating Storage and Regasification Units (FSRU) by applying advanced LNG tank pressure management strategies. <i>International Journal of Energy Research</i> , 2018, 42, 1391-1418.	4.5	14
122	Optimizing the separation factor along a directional well trajectory to minimize collision risk. <i>Journal of Petroleum Exploration and Production</i> , 2020, 10, 2113-2125.	2.4	14
123	Microbial improved and enhanced oil recovery (MIEOR): Review of a set of technologies diversifying their applications. <i>Advances in Geo-Energy Research</i> , 2019, 3, 122-140.	6.0	14
124	Reliable predictions of oil formation volume factor based on transparent and auditable machine learning approaches. <i>Advances in Geo-Energy Research</i> , 2019, 3, 225-241.	6.0	14
125	Drilling and borehole techniques relevant to natural gas exploration and development: A collection of published research (2009â€“2015). <i>Journal of Natural Gas Science and Engineering</i> , 2015, 26, 396-408.	4.4	13
126	Kerogen conversion and thermal maturity modelling of petroleum generation: Integrated analysis applying relevant kerogen kinetics. <i>Marine and Petroleum Geology</i> , 2018, 89, 313-329.	3.3	13



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127	Hourly-averaged solar plus wind power generation for Germany 2016: Long-term prediction, short-term forecasting, data mining and outlier analysis. <i>Sustainable Cities and Society</i> , 2020, 60, 102227.	10.4	13
128	Trend decomposition aids forecasts of air particulate matter (PM2.5) assisted by machine and deep learning without recourse to exogenous data. <i>Atmospheric Pollution Research</i> , 2022, 13, 101352.	3.8	13
129	Overview of Formation Damage During Improved and Enhanced Oil Recovery. , 2018, , 1-20.		12
130	German solar power generation data mining and prediction with transparent open box learning network integrating weather, environmental and market variables. <i>Energy Conversion and Management</i> , 2019, 196, 354-369.	9.2	12
131	Prediction and data mining of burned areas of forest fires: Optimized data matching and mining algorithm provides valuable insight. <i>Artificial Intelligence in Agriculture</i> , 2021, 5, 24-42.	6.0	12
132	The application of deep learning algorithms to classify subsurface drilling lost circulation severity in large oil field datasets. <i>SN Applied Sciences</i> , 2021, 3, 1.	2.9	12
133	The natural gas sector needs to be mindful of its sustainability credentials. <i>Advances in Geo-Energy Research</i> , 2020, 4, 229-232.	6.0	12
134	Characterization and estimation of gas-bearing properties of Devonian coals using well log data from five Illizi Basin wells (Algeria). <i>Advances in Geo-Energy Research</i> , 2020, 4, 356-371.	6.0	12
135	Integration of core data, well logs and seismic attributes for identification of the low reservoir quality units with unswept gas in the carbonate rocks of the world's largest gas field. <i>Journal of Earth Science (Wuhan, China)</i> , 2017, 28, 857-866.	3.2	11
136	Sensitivity analysis and optimization capabilities of the transparent open-box learning network in predicting coal gross calorific value from underlying compositional variables. <i>Modeling Earth Systems and Environment</i> , 2019, 5, 753-766.	3.4	11
137	Estimating Organic-Rich Shale Fractal Dimensions from Gas Adsorption Isotherms: Combining Different Methods Leads to More Reliable Values and Insight. <i>Natural Resources Research</i> , 2021, 30, 3551-3574.	4.7	11
138	Risk Simulation Techniques to Aid Project Cost-Time Planning and Management. <i>Risk Management</i> , 2002, 4, 41-60.	2.3	10
139	Evolutionary memetic algorithms supported by metaheuristic profiling effectively applied to the optimization of discrete routing problems. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 35, 997-1014.	4.4	10
140	Re-establishing the merits of thermal maturity and petroleum generation multi-dimensional modeling with an Arrhenius Equation using a single activation energy. <i>Journal of Earth Science (Wuhan, China)</i> , 2017, 28, 804-834.	3.2	10
141	Weathering/Ageing of Liquefied Natural Gas Cargoes During Marine Transport and Processing on Floating Storage Units and FSRU. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2018, 140, .	2.3	10
142	Transparent machine learning provides insightful estimates of natural gas density based on pressure, temperature and compositional variables. <i>Journal of Natural Gas Geoscience</i> , 2020, 5, 33-43.	1.2	10
143	Microalgae to biodiesel - Review of recent progress. <i>Bioresource Technology Reports</i> , 2021, 14, 100665.	2.7	10
144	Deriving coal fractal dimensions from low-pressure nitrogen adsorption isotherms applying an integrated method. <i>Applied Geochemistry</i> , 2021, 131, 105042.	3.0	10

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145	Letter to the Editor: Why Consider Exploiting Stranded Gas?. <i>Petroleum Science and Technology</i> , 2007, 25, 411-413.	1.5	9
146	Reservoir microfacies analysis exploiting microscopic image processing and classification algorithms applied to carbonate and sandstone reservoirs. <i>Marine and Petroleum Geology</i> , 2020, 121, 104609.	3.3	9
147	Exponential utility functions aid upstream decision making. <i>Journal of Natural Gas Science and Engineering</i> , 2015, 27, 1482-1494.	4.4	8
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