

Impact of Shale Gas Development on Regional Water Quality

Science

340, 1235009

DOI: [10.1126/science.1235009](https://doi.org/10.1126/science.1235009)

Citation Report

#	ARTICLE	IF	CITATIONS
1	An Evaluation of Water Quality in Private Drinking Water Wells Near Natural Gas Extraction Sites in the Barnett Shale Formation. <i>Environmental Science & Technology</i> , 2013, 47, 10032-10040.	4.6	205
2	Desalination and Reuse of High-Salinity Shale Gas Produced Water: Drivers, Technologies, and Future Directions. <i>Environmental Science & Technology</i> , 2013, 47, 9569-9583.	4.6	655
3	Surface Water Withdrawals for Marcellus Shale Gas Development: Performance of Alternative Regulatory Approaches in the Upper Ohio River Basin. <i>Environmental Science & Technology</i> , 2013, 47, 12669-12678.	4.6	27
4	Suggested Reporting Parameters for Investigations of Wastewater from Unconventional Shale Gas Extraction. <i>Environmental Science & Technology</i> , 2013, 47, 13220-13221.	4.6	24
5	Project Asks What's in the Water After Fracking at Depth. <i>Eos</i> , 2013, 94, 409-411.	0.1	1
6	Measurements of methane emissions at natural gas production sites in the United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 17768-17773.	3.3	455
7	Use of Abandoned Mine Drainage for the Development of Unconventional Gas Resources. <i>Disruptive Science and Technology</i> , 2013, 1, 169-176.	1.0	27
8	Gas production in the Barnett Shale obeys a simple scaling theory. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19731-19736.	3.3	315
9	Forecasting long-term gas production from shale. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19660-19661.	3.3	75
10	Groundwater Considerations of Shale Gas Developments Using Hydraulic Fracturing: Examples, Additional Study and Social Responsibility. , 2013, , .		1
11	Water Resources and Unconventional Fossil Fuel Development: Linking Physical Impacts to Social Costs. <i>SSRN Electronic Journal</i> , 0, , .	0.4	8
12	Compound-Specific Stable Isotope Analysis of Natural and Produced Hydrocarbon Gases Surrounding Oil and Gas Operations. <i>Comprehensive Analytical Chemistry</i> , 2013, , 347-372.	0.7	3
13	Shale Gas, Wind and Water: Assessing the Potential Cumulative Impacts of Energy Development on Ecosystem Services within the Marcellus Play. <i>PLoS ONE</i> , 2014, 9, e89210.	1.1	46
14	From Boom to Bust? A Critical Look at US Shale Gas Projections. <i>SSRN Electronic Journal</i> , 0, , .	0.4	7
15	Best Management Practices for Access Roads for Shale Energy Development with Consideration to Surface Waterbodies. , 2014, , .		0
16	Assessment and risk analysis of casing and cement impairment in oil and gas wells in Pennsylvania, 2000â€“2012. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10955-10960.	3.3	209
17	The integrity of oil and gas wells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10902-10903.	3.3	125
18	Origin, distribution and hydrogeochemical controls on methane occurrences in shallow aquifers, southwestern Ontario, Canada. <i>Applied Geochemistry</i> , 2014, 50, 37-52.	1.4	60

#	ARTICLE	IF	CITATIONS
19	Environmental Health Research Recommendations from the Inter-Environmental Health Sciences Core Center Working Group on Unconventional Natural Gas Drilling Operations. Environmental Health Perspectives, 2014, 122, 1155-1159.	2.8	19
20	Assessment of disposable groundwater resources for hydraulic fracturing of gas shales in the Lublin Basin (eastern Poland). Gospodarka Surowcami Mineralnymi / Mineral Resources Management, 2014, 30, 79-96.	0.2	2
21	Environmental Public Health Dimensions of Shale and Tight Gas Development. Environmental Health Perspectives, 2014, 122, 787-795.	2.8	127
22	Stochastic Risk and Uncertainty Analysis for Shale Gas Extraction in the Karoo Basin of South Africa. Abstract and Applied Analysis, 2014, 2014, 1-10.	0.3	2
23	Hydraulic fracturing and its peculiarities. Asia Pacific Journal on Computational Engineering, 2014, 1, .	2.2	26
24	Optimization of water management in shale gas production process. , 2014, , .		2
25	Information Collection, Access, and Dissemination to Support Evidence-Based Shale Gas Policies. Energy Technology, 2014, 2, 977-987.	1.8	13
26	Hydraulic Fracturing: A Critical Physical Geography Review. Geography Compass, 2014, 8, 739-754.	1.5	45
27	A simple model of gas production from hydrofractured horizontal wells in shales. AAPG Bulletin, 2014, 98, 2507-2529.	0.7	61
28	Hydraulic "Fracking": Are surface water impacts an ecological concern?. Environmental Toxicology and Chemistry, 2014, 33, 1679-1689.	2.2	80
29	Atmospheric Emissions and Air Quality Impacts from Natural Gas Production and Use. Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 55-75.	3.3	39
30	Intermolecular Casimir-Polder forces in water and near surfaces. Physical Review E, 2014, 90, 032122.	0.8	9
31	Environmental Effects and Its Assessment for Shale Gas Large-Scale Development of China. , 2014, , .		0
32	Multi Field Simulation of Fracture. Advances in Applied Mechanics, 2014, , 367-519.	1.4	20
33	Methane emissions from natural gas production and use: reconciling bottom-up and top-down measurements. Current Opinion in Chemical Engineering, 2014, 5, 78-83.	3.8	65
34	Hydraulic Fracturing: Paving the Way for a Sustainable Future?. Journal of Environmental and Public Health, 2014, 2014, 1-10.	0.4	13
35	The US and China need to turn ongoing bilateral dialogue into immediate joint mitigation. International Journal of Sustainable Development and World Ecology, 0, , 1-5.	3.2	2
36	Water science on the molecular scale: new insights into the characteristics of water. National Science Review, 2014, 1, 179-181.	4.6	6

#	ARTICLE	IF	CITATIONS
37	Physical, chemical, and biological characteristics of compounds used in hydraulic fracturing. Journal of Hazardous Materials, 2014, 275, 37-54.	6.5	290
38	A Framework to Predict the Impacts of Shale Gas Infrastructures on the Forest Fragmentation of an Agroforest Region. Environmental Management, 2014, 53, 1023-1033.	1.2	27
39	Making critical connections through interdisciplinary analysis: exploring the impacts of Marcellus shale development. Journal of Environmental Studies and Sciences, 2014, 4, 1-6.	0.9	10
40	Regional Variation in Water-Related Impacts of Shale Gas Development and Implications for Emerging International Plays. Environmental Science & Technology, 2014, 48, 8298-8306.	4.6	111
41	Natural gas from shale formation – The evolution, evidences and challenges of shale gas revolution in United States. Renewable and Sustainable Energy Reviews, 2014, 30, 1-28.	8.2	590
42	New Tracers Identify Hydraulic Fracturing Fluids and Accidental Releases from Oil and Gas Operations. Environmental Science & Technology, 2014, 48, 12552-12560.	4.6	136
43	Air quality concerns of unconventional oil and natural gas production. Environmental Sciences: Processes and Impacts, 2014, 16, 954-969.	1.7	106
44	What's the "fracking"™ problem? One word can™t say it all. The Extractive Industries and Society, 2014, 1, 130-136.	0.7	103
45	Distance: A critical aspect for environmental impact assessment of hydraulic fracturing. The Extractive Industries and Society, 2014, 1, 124-126.	0.7	40
46	Biotic impacts of energy development from shale: research priorities and knowledge gaps. Frontiers in Ecology and the Environment, 2014, 12, 330-338.	1.9	79
47	Inertio-elastic focusing of bioparticles in microchannels at high throughput. Nature Communications, 2014, 5, 4120.	5.8	173
48	Kinetics and Equilibrium of Barium and Strontium Sulfate Formation in Marcellus Shale Flowback Water. Journal of Environmental Engineering, ASCE, 2014, 140, .	0.7	46
49	Potential Public Health Hazards, Exposures and Health Effects from Unconventional Natural Gas Development. Environmental Science & Technology, 2014, 48, 8307-8320.	4.6	395
50	Use of stable isotopes to identify sources of methane in Appalachian Basin shallow groundwaters: a review. Environmental Sciences: Processes and Impacts, 2014, 16, 2080.	1.7	6
51	Numerical assessment of potential impacts of hydraulically fractured <sc>B</sc>owland <sc>S</sc>hale on overlying aquifers. Water Resources Research, 2014, 50, 6236-6259.	1.7	32
52	Hydraulic Fracturing Additives and the Delayed Onset of Hydrogen Sulfide in Shale Gas. Energy & Fuels, 2014, 28, 4993-5001.	2.5	30
53	The Capacity of States to Govern Shale Gas Development Risks. Environmental Science & Technology, 2014, 48, 8376-8387.	4.6	29
54	Enhanced Formation of Disinfection Byproducts in Shale Gas Wastewater-Impacted Drinking Water Supplies. Environmental Science & Technology, 2014, 48, 11161-11169.	4.6	157

#	ARTICLE	IF	CITATIONS
55	Response to Comment on "An Evaluation of Water Quality in Private Drinking Water Wells Near Natural Gas Extraction Sites in the Barnett Shale Formation", Environmental Science & Technology, 2014, 48, 3597-3599.	4.6	13
56	Unconventional Hydrocarbon Resources: Prospects and Problems. Elements, 2014, 10, 257-264.	0.5	80
57	On the cost of electrodialysis for the desalination of high salinity feeds. Applied Energy, 2014, 136, 649-661.	5.1	143
58	Multi-model weighted predictions for CH ₄ and H ₂ S solubilities in freshwater and saline formation waters relevant to unconventional oil and gas extraction. International Journal of Coal Geology, 2014, 131, 177-185.	1.9	5
59	Comment on "An Evaluation of Water Quality in Private Drinking Water Wells Near Natural Gas Extraction Sites in the Barnett Shale Formation", Environmental Science & Technology, 2014, 48, 3595-3596.	4.6	18
60	Fracking and Pollution: Can China Rescue Its Environment In Time?. Environmental Science & Technology, 2014, 48, 891-892.	4.6	25
61	Technology Development and Learning: Coal Gasification in China and the United States. Electricity Journal, 2014, 27, 69-85.	1.3	7
62	Assessing dissolved methane patterns in central New York groundwater. Journal of Hydrology: Regional Studies, 2014, 1, 57-73.	1.0	29
63	The Environmental Costs and Benefits of Fracking. Annual Review of Environment and Resources, 2014, 39, 327-362.	5.6	350
64	Co-precipitation of Radium with Barium and Strontium Sulfate and Its Impact on the Fate of Radium during Treatment of Produced Water from Unconventional Gas Extraction. Environmental Science & Technology, 2014, 48, 4596-4603.	4.6	148
65	Omniphobic Membrane for Robust Membrane Distillation. Environmental Science and Technology Letters, 2014, 1, 443-447.	3.9	288
66	Analysis of Hydraulic Fracturing Flowback and Produced Waters Using Accurate Mass: Identification of Ethoxylated Surfactants. Analytical Chemistry, 2014, 86, 9653-9661.	3.2	135
67	Strontium Isotopes Test Long-Term Zonal Isolation of Injected and Marcellus Formation Water after Hydraulic Fracturing. Environmental Science & Technology, 2014, 48, 9867-9873.	4.6	35
68	Risks and Risk Governance in Unconventional Shale Gas Development. Environmental Science & Technology, 2014, 48, 8289-8297.	4.6	147
69	Mineralogy and trace element geochemistry of gas shales in the United States: Environmental implications. International Journal of Coal Geology, 2014, 126, 32-44.	1.9	109
70	Evolving shale gas management: water resource risks, impacts, and lessons learned. Environmental Sciences: Processes and Impacts, 2014, 16, 1400-1412.	1.7	69
71	An approach for assessing engineering risk from shale gas wells in the United States. International Journal of Coal Geology, 2014, 126, 4-19.	1.9	113
72	Using Discriminant Analysis to Determine Sources of Salinity in Shallow Groundwater Prior to Hydraulic Fracturing. Environmental Science & Technology, 2014, 48, 9061-9069.	4.6	40

#	ARTICLE	IF	CITATIONS
73	A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States. <i>Environmental Science & Technology</i> , 2014, 48, 8334-8348.	4.6	1,217
74	Ecological Risks of Shale Oil and Gas Development to Wildlife, Aquatic Resources and their Habitats. <i>Environmental Science & Technology</i> , 2014, 48, 11034-11047.	4.6	157
75	Source and Fate of Hydraulic Fracturing Water in the Barnett Shale: A Historical Perspective. <i>Environmental Science & Technology</i> , 2014, 48, 2464-2471.	4.6	188
76	A Route Towards Sustainability Through Engineered Polymeric Interfaces. <i>Advanced Materials Interfaces</i> , 2014, 1, 1400117.	1.9	37
77	Barriers to the development of China's shale gas industry. <i>Journal of Cleaner Production</i> , 2014, 84, 818-823.	4.6	46
78	Water resource impacts during unconventional shale gas development: The Pennsylvania experience. <i>International Journal of Coal Geology</i> , 2014, 126, 140-156.	1.9	241
79	The strontium isotopic evolution of Marcellus Formation produced waters, southwestern Pennsylvania. <i>International Journal of Coal Geology</i> , 2014, 126, 57-63.	1.9	80
80	Major challenges for developing unconventional gas in Brazil – Will water resources impede the development of the Country's industry?. <i>Resources Policy</i> , 2014, 41, 60-71.	4.2	12
81	Microfiltration in recycling of Marcellus Shale flowback water: Solids removal and potential fouling of polymeric microfiltration membranes. <i>Journal of Membrane Science</i> , 2014, 462, 88-95.	4.1	57
82	Special Issue on Environmental Impacts of Shale Gas Development. <i>Journal of Environmental Engineering, ASCE</i> , 2014, 140, .	0.7	1
83	Oil and gas wells and their integrity: Implications for shale and unconventional resource exploitation. <i>Marine and Petroleum Geology</i> , 2014, 56, 239-254.	1.5	335
84	Seepage pathway assessment for natural gas to shallow groundwater during well stimulation, in production, and after abandonment. <i>Environmental Geosciences</i> , 2014, 21, 107-126.	0.6	129
85	Management of Marcellus Shale Produced Water in Pennsylvania: A Review of Current Strategies and Perspectives. <i>Energy Technology</i> , 2014, 2, 968-976.	1.8	25
86	Water: Regulatory and Community Impacts. , 2014, , .		0
87	A review of water and greenhouse gas impacts of unconventional natural gas development in the United States. <i>MRS Energy & Sustainability</i> , 2015, 2, 1.	1.3	8
88	Adventures in groundwater monitoring: Why has it been so difficult to obtain groundwater data near shale gas wells?. <i>Environmental Geosciences</i> , 2015, 22, 139-148.	0.6	17
89	Two-phase fluid flow in geometric packing. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20150111.	1.6	1
90	Hydraulic fracturing water use variability in the United States and potential environmental implications. <i>Water Resources Research</i> , 2015, 51, 5839-5845.	1.7	169

#	ARTICLE	IF	CITATIONS
91	Numerical simulation of the environmental impact of hydraulic fracturing of tight/shale gas reservoirs on near-surface groundwater: Background, base cases, shallow reservoirs, short-term gas, and water transport. <i>Water Resources Research</i> , 2015, 51, 2543-2573.	1.7	96
92	A Community Divided: Hydraulic Fracturing in Rural Appalachia. <i>Journal of Appalachian Studies</i> , 2015, 21, 207-228.	0.1	20
93	Numerical approach to frictional fingers. <i>Physical Review E</i> , 2015, 92, 032203.	0.8	9
94	The evolution of Devonian hydrocarbon gases in shallow aquifers of the northern Appalachian Basin: Insights from integrating noble gas and hydrocarbon geochemistry. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 170, 321-355.	1.6	103
95	Numerical investigation of methane and formation fluid leakage along the casing of a decommissioned shale gas well. <i>Water Resources Research</i> , 2015, 51, 4592-4622.	1.7	49
97	Impact of Flowback Water on Activated Sludge Biocenosis During Municipal Wastewater Treatment. <i>Ecological Chemistry and Engineering S</i> , 2015, 22, 611-624.	0.3	1
98	Assessing Connectivity Between an Overlying Aquifer and a Coal Seam Gas Resource Using Methane Isotopes, Dissolved Organic Carbon and Tritium. <i>Scientific Reports</i> , 2015, 5, 15996.	1.6	26
99	Effect of advective flow in fractures and matrix diffusion on natural gas production. <i>Water Resources Research</i> , 2015, 51, 8646-8657.	1.7	85
100	A new nanocomposite forward osmosis membrane custom-designed for treating shale gas wastewater. <i>Scientific Reports</i> , 2015, 5, 14530.	1.6	47
101	Evidence from two shale regions that a riparian songbird accumulates metals associated with hydraulic fracturing. <i>Ecosphere</i> , 2015, 6, art144.	1.0	31
102	Groundwater methane in a potential coal seam gas extraction region. <i>Journal of Hydrology: Regional Studies</i> , 2015, 4, 452-471.	1.0	16
103	Spatial and temporal trends in freshwater appropriation for natural gas development in Pennsylvania's Marcellus Shale Play. <i>Geophysical Research Letters</i> , 2015, 42, 6348-6356.	1.5	21
104	Hydraulic fracturing fluid migration in the subsurface: A review and expanded modeling results. <i>Water Resources Research</i> , 2015, 51, 7159-7188.	1.7	121
105	Exploration Potential of Coalbed Methane in Karaganda Field. <i>Modern Applied Science</i> , 2015, 9, .	0.4	6
106	Experiential and Social Learning in Firms: The Case of Hydraulic Fracturing in the Bakken Shale. <i>SSRN Electronic Journal</i> , 0, , .	0.4	41
107	Understanding the Radioactive Ingrowth and Decay of Naturally Occurring Radioactive Materials in the Environment: An Analysis of Produced Fluids from the Marcellus Shale. <i>Environmental Health Perspectives</i> , 2015, 123, 689-696.	2.8	53
108	Chemical Analysis of Wastewater from Unconventional Drilling Operations. <i>Water (Switzerland)</i> , 2015, 7, 1568-1579.	1.2	73
109	Industrial Fermentation of <i>Auxenochlorella protothecoides</i> for Production of Biodiesel and Its Application in Vehicle Diesel Engines. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 164.	2.0	12

#	ARTICLE	IF	CITATIONS
110	Landscape Disturbance from Unconventional and Conventional Oil and Gas Development in the Marcellus Shale Region of Pennsylvania, USA. <i>Environments - MDPI</i> , 2015, 2, 200-220.	1.5	25
111	Perinatal Outcomes and Unconventional Natural Gas Operations in Southwest Pennsylvania. <i>PLoS ONE</i> , 2015, 10, e0126425.	1.1	126
112	Rapid Analysis of Eukaryotic Bioluminescence to Assess Potential Groundwater Contamination Events. <i>Journal of Chemistry</i> , 2015, 2015, 1-6.	0.9	7
113	What's Normal for Fracking? Estimating Total Radioactivity of Produced Fluids. <i>Environmental Health Perspectives</i> , 2015, 123, A186.	2.8	6
115	Current perspectives on unconventional shale gas extraction in the Appalachian Basin. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2015, 50, 434-446.	0.9	24
116	Aerobic biodegradation of organic compounds in hydraulic fracturing fluids. <i>Biodegradation</i> , 2015, 26, 271-287.	1.5	83
117	Environmental impacts of hydraulic fracturing in shale gas development in the United States. <i>Petroleum Exploration and Development</i> , 2015, 42, 876-883.	3.0	94
118	Current perspective on produced water management challenges during hydraulic fracturing for oil and gas recovery. <i>Environmental Chemistry</i> , 2015, 12, 261.	0.7	28
119	Water Requirements for Shale Gas Fracking in Fuling, Chongqing, Southwest China. <i>Energy Procedia</i> , 2015, 76, 106-112.	1.8	25
120	Molecular dynamics simulations of the enhanced recovery of confined methane with carbon dioxide. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 31887-31893.	1.3	123
121	Resistivity Arrays as an Early Warning System for Monitoring Runoff Holding Ponds. <i>Journal of Environmental and Engineering Geophysics</i> , 2015, 20, 319-335.	1.0	6
122	Naturally-Occurring Radioactive Materials (NORM) Associated with Unconventional Drilling for Shale Gas. <i>ACS Symposium Series</i> , 2015, , 89-128.	0.5	8
123	Analysis of Ions in Hydraulic Fracturing Wastewaters Using Ion Chromatography. <i>ACS Symposium Series</i> , 2015, , 135-150.	0.5	0
124	Temporal and Thermal Changes in Density and Viscosity of Marcellus Shale Produced Waters. <i>Journal of Environmental Engineering, ASCE</i> , 2015, 141, 06015006.	0.7	4
125	Metal content in the waters of the upper Sanna River catchment (SE Poland): condition associated with drilling of a shale gas exploration wellbore. <i>Environmental Earth Sciences</i> , 2015, 74, 6681-6691.	1.3	2
126	Identification and quantification of regional brine and road salt sources in watersheds along the New York/Pennsylvania border, USA. <i>Applied Geochemistry</i> , 2015, 60, 37-50.	1.4	23
127	Communities in the middle: Interactions between drivers of change and place-based characteristics in rural forest-based communities. <i>Journal of Rural Studies</i> , 2015, 42, 79-90.	2.1	23
128	Fate of Radium in Marcellus Shale Flowback Water Impoundments and Assessment of Associated Health Risks. <i>Environmental Science & Technology</i> , 2015, 49, 9347-9354.	4.6	39

#	ARTICLE	IF	CITATIONS
129	Membrane processes and renewable energies. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 43, 1343-1398.	8.2	77
130	News & Views. <i>Ground Water</i> , 2015, 53, 19-28.	0.7	8
131	Chemical constituents and analytical approaches for hydraulic fracturing waters. <i>Trends in Environmental Analytical Chemistry</i> , 2015, 5, 18-25.	5.3	141
132	Optimal design and operations of supply chain networks for water management in shale gas production: MILFP model and algorithms for the water-energy nexus. <i>AIChE Journal</i> , 2015, 61, 1184-1208.	1.8	117
133	Analysis of Radium-226 in High Salinity Wastewater from Unconventional Gas Extraction by Inductively Coupled Plasma-Mass Spectrometry. <i>Environmental Science & Technology</i> , 2015, 49, 2969-2976.	4.6	44
134	A Multiyear Assessment of Air Quality Benefits from China's Emerging Shale Gas Revolution: Urumqi as a Case Study. <i>Environmental Science & Technology</i> , 2015, 49, 2066-2072.	4.6	36
135	Deep Injection of Waste Water in the Western Canada Sedimentary Basin. <i>Ground Water</i> , 2015, 53, 187-194.	0.7	36
136	China's unconventional oil: A review of its resources and outlook for long-term production. <i>Energy</i> , 2015, 82, 31-42.	4.5	94
137	The Role of Water in Unconventional in Situ Energy Resource Extraction Technologies. , 2015, , 183-215.		4
138	Life Cycle Greenhouse Gas Emissions From U.S. Liquefied Natural Gas Exports: Implications for End Uses. <i>Environmental Science & Technology</i> , 2015, 49, 3237-3245.	4.6	69
139	Iodide, Bromide, and Ammonium in Hydraulic Fracturing and Oil and Gas Wastewaters: Environmental Implications. <i>Environmental Science & Technology</i> , 2015, 49, 1955-1963.	4.6	215
140	Monitoring radionuclides in subsurface drinking water sources near unconventional drilling operations: a pilot study. <i>Journal of Environmental Radioactivity</i> , 2015, 142, 24-28.	0.9	11
141	Water Management in Unconventional Oil and Gas Development—The Issues and Their Optimization. , 2015, , 217-241.		1
142	The effect of long-term regional pumping on hydrochemistry and dissolved gas content in an undeveloped shale-gas-bearing aquifer in southwestern Ontario, Canada. <i>Hydrogeology Journal</i> , 2015, 23, 719-739.	0.9	20
143	Water Quality and Quantity Impacts of Hydraulic Fracturing. <i>Current Sustainable/Renewable Energy Reports</i> , 2015, 2, 17-24.	1.2	28
144	Identification of local groundwater pollution in northeastern Pennsylvania: Marcellus flowback or not?. <i>Environmental Earth Sciences</i> , 2015, 73, 8097-8109.	1.3	11
145	A Framework for Identifying Organic Compounds of Concern in Hydraulic Fracturing Fluids Based on Their Mobility and Persistence in Groundwater. <i>Environmental Science and Technology Letters</i> , 2015, 2, 158-164.	3.9	75
146	Density of river otters (<i>Lontra canadensis</i>) in relation to energy development in the Green River Basin, Wyoming. <i>Science of the Total Environment</i> , 2015, 532, 780-790.	3.9	17

#	ARTICLE	IF	CITATIONS
147	Fingerprinting Marcellus Shale waste products from Pb isotope and trace metal perspectives. Applied Geochemistry, 2015, 60, 104-115.	1.4	23
148	Subcontinuum mass transport of condensed hydrocarbons in nanoporous media. Nature Communications, 2015, 6, 6949.	5.8	239
149	Stream primary producers relate positively to watershed natural gas measures in north-central Arkansas streams. Science of the Total Environment, 2015, 529, 54-64.	3.9	11
150	Detection of water contamination from hydraulic fracturing wastewater: a $\hat{1}/4$ PAD for bromide analysis in natural waters. Analyst, The, 2015, 140, 5501-5507.	1.7	36
151	Characterization and Analysis of Liquid Waste from Marcellus Shale Gas Development. Environmental Science & Technology, 2015, 49, 9557-9565.	4.6	97
152	A first principles study of CO ₂ adsorption on $\hat{1}\pm$ -SiO ₂ (001) surfaces. Physical Chemistry Chemical Physics, 2015, 17, 20125-20133.	1.3	17
153	Pre-drilling water-quality data of groundwater prior to shale gas drilling in the Appalachian Basin: Analysis of the Chesapeake Energy Corporation dataset. Applied Geochemistry, 2015, 63, 37-57.	1.4	46
154	The Depths of Hydraulic Fracturing and Accompanying Water Use Across the United States. Environmental Science & Technology, 2015, 49, 8969-8976.	4.6	65
155	Evolution of water chemistry during Marcellus Shale gas development: A case study in West Virginia. Chemosphere, 2015, 134, 224-231.	4.2	83
156	Preliminary Evaluation of Shale Gas Reservoirs: Appraisal of Different Well-Pad Designs via Performance Metrics. Industrial & Engineering Chemistry Research, 2015, 54, 10334-10349.	1.8	15
157	A Comprehensive Analysis of Groundwater Quality in The Barnett Shale Region. Environmental Science & Technology, 2015, 49, 8254-8262.	4.6	104
158	Unconventional Fossil Fuel Reservoirs and Water Resources. , 2015, , 557-570.		1
159	Impact of Water Chemistry on Element Mobilization from Eagle Ford Shale. Environmental Engineering Science, 2015, 32, 310-320.	0.8	46
160	Marcellus and mercury: Assessing potential impacts of unconventional natural gas extraction on aquatic ecosystems in northwestern Pennsylvania. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2015, 50, 482-500.	0.9	27
161	Proximity to Natural Gas Wells and Reported Health Status: Results of a Household Survey in Washington County, Pennsylvania. Environmental Health Perspectives, 2015, 123, 21-26.	2.8	141
162	Assessment of the Acute and Chronic Health Hazards of Hydraulic Fracturing Fluids. Journal of Occupational and Environmental Hygiene, 2015, 12, 611-624.	0.4	25
163	Shale gas operator violations in the Marcellus and what they tell us about water resource risks. Energy Policy, 2015, 82, 1-11.	4.2	34
164	Sustainability, shale gas, and energy transition in China: Assessing barriers and prioritizing strategic measures. Energy, 2015, 84, 551-562.	4.5	96

#	ARTICLE	IF	CITATIONS
165	Impact of Shale Gas Development on Water Resources: A Case Study in Northern Poland. <i>Environmental Management</i> , 2015, 55, 1285-1299.	1.2	54
166	Establishing baseline water quality for household wells within the Marcellus Shale gas region, Susquehanna County, Pennsylvania, U.S.A.. <i>Applied Geochemistry</i> , 2015, 60, 14-28.	1.4	11
167	Nanomaterials for Lighting and Solar Energy Conversion. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2015, , 373-414.	0.2	0
168	A model describing flowback chemistry changes with time after Marcellus Shale hydraulic fracturing. <i>AAPG Bulletin</i> , 2015, 99, 143-154.	0.7	57
169	Public opinion on energy development: The interplay of issue framing, top-of-mind associations, and political ideology. <i>Energy Policy</i> , 2015, 81, 131-140.	4.2	121
170	Trace metal distribution and mobility in drill cuttings and produced waters from Marcellus Shale gas extraction: Uranium, arsenic, barium. <i>Applied Geochemistry</i> , 2015, 60, 89-103.	1.4	86
171	Evaluation of socioeconomic impacts on and risks for shale gas exploration in China. <i>Energy Strategy Reviews</i> , 2015, 6, 30-38.	3.3	16
172	Evaluating a groundwater supply contamination incident attributed to Marcellus Shale gas development. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6325-6330.	3.3	236
173	Methane Baseline Concentrations and Sources in Shallow Aquifers from the Shale Gas-Prone Region of the St. Lawrence Lowlands (Quebec, Canada). <i>Environmental Science & Technology</i> , 2015, 49, 4765-4771.	4.6	76
174	Research highlights: under-recognized precursors and sources for disinfection byproduct formation. <i>Environmental Science: Water Research and Technology</i> , 2015, 1, 405-407.	1.2	2
175	Analysis of hydraulic fracturing additives by LC/Q-TOF-MS. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 6417-6428.	1.9	61
176	A shaky business: Natural gas extraction, earthquakes and house prices. <i>European Economic Review</i> , 2015, 80, 120-139.	1.2	35
177	Elevated levels of diesel range organic compounds in groundwater near Marcellus gas operations are derived from surface activities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13184-13189.	3.3	130
178	Determination of Rare Earth Elements in Hypersaline Solutions Using Low-Volume, Liquid-Liquid Extraction. <i>Environmental Science & Technology</i> , 2015, 49, 9423-9430.	4.6	9
179	Permitting program with best management practices for shale gas wells to safeguard public health. <i>Journal of Environmental Management</i> , 2015, 163, 174-183.	3.8	8
180	Stream Measurements Locate Thermogenic Methane Fluxes in Groundwater Discharge in an Area of Shale-Gas Development. <i>Environmental Science & Technology</i> , 2015, 49, 4057-4065.	4.6	45
181	Prospects for bioenergy use in Ghana using Long-range Energy Alternatives Planning model. <i>Energy</i> , 2015, 93, 672-682.	4.5	45
182	Effect of Chain Length and Pore Accessibility on Alkane Adsorption in Kerogen. <i>Energy & Fuels</i> , 2015, 29, 7889-7896.	2.5	65

#	ARTICLE	IF	CITATIONS
183	Critical Review: Uncharted Waters? The Future of the Electricity-Water Nexus. <i>Environmental Science & Technology</i> , 2015, 49, 51-66.	4.6	108
184	Environmental health impacts of unconventional natural gas development: A review of the current strength of evidence. <i>Science of the Total Environment</i> , 2015, 505, 1127-1141.	3.9	170
185	Biocides in Hydraulic Fracturing Fluids: A Critical Review of Their Usage, Mobility, Degradation, and Toxicity. <i>Environmental Science & Technology</i> , 2015, 49, 16-32.	4.6	317
186	Real-time surrogate analysis for potential oil and gas contamination of drinking water resources. <i>Applied Water Science</i> , 2015, 5, 283-289.	2.8	6
187	Temporal variability of methane in domestic groundwater wells, northeastern Pennsylvania. <i>Environmental Geosciences</i> , 2016, 23, 49-80.	0.6	17
188	Recent Trends in the World Gas Market: Economical, Geopolitical and Environmental Aspects. <i>Sustainability</i> , 2016, 8, 154.	1.6	29
189	Redox controls on methane formation, migration and fate in shallow aquifers. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 2759-2777.	1.9	40
190	Polish experience in the area of management of the waste generated during the exploration for hydrocarbons from unconventional accumulations. <i>E3S Web of Conferences</i> , 2016, 10, 00076.	0.2	3
191	A Model for Shale Gas Wastewater Management. <i>SSRN Electronic Journal</i> , 0, , .	0.4	3
192	Oil and Gas Production Wastewater: Soil Contamination and Pollution Prevention. <i>Applied and Environmental Soil Science</i> , 2016, 2016, 1-24.	0.8	118
193	Hazard Ranking Methodology for Assessing Health Impacts of Unconventional Natural Gas Development and Production: The Maryland Case Study. <i>PLoS ONE</i> , 2016, 11, e0145368.	1.1	14
194	Welfare and Distributional Implications of Shale Gas. <i>Brookings Papers on Economic Activity</i> , 2016, 2015, 71-139.	0.8	30
195	Scenario Analysis of the Impact on Drinking Water Intakes from Bromide in the Discharge of Treated Oil and Gas Wastewater. <i>Journal of Environmental Engineering, ASCE</i> , 2016, 142, .	0.7	11
196	Impact of Antiscalants on the Fate of Barite in the Unconventional Gas Wells. <i>Environmental Engineering Science</i> , 2016, 33, 745-752.	0.8	20
197	A Continued Assessment of the Risk of Migration of Hydrocarbons or Fracturing Fluids into Fresh Water Aquifers in the Piceance, Raton, and San Juan Basins of Colorado. , 2016, , .		2
198	Dissolved methane in shallow groundwater of the Appalachian Basin: Results from the Chesapeake Energy predrilling geochemical database. <i>Environmental Geosciences</i> , 2016, 23, 1-47.	0.6	15
199	Redox Conditions Alter Biodegradation Rates and Microbial Community Dynamics of Hydraulic Fracturing Fluid Organic Additives in Soil-Groundwater Microcosms. <i>Environmental Engineering Science</i> , 2016, 33, 827-838.	0.8	28
200	How long do natural waters "remember" release incidents of Marcellus Shale waters: a first order approximation using reactive transport modeling. <i>Geochemical Transactions</i> , 2016, 17, .	1.8	6

#	ARTICLE	IF	CITATIONS
201	Mixing in a three-phase system: Enhanced production of oil in wet reservoirs by CO ₂ injection. Geophysical Research Letters, 2016, 43, 196-205.	1.5	38
202	Environmental health risk perception of hydraulic fracturing in the US. Cogent Environmental Science, 2016, 2, 1209994.	1.6	5
203	An Assessment of the Probability of Subsurface Contamination of Aquifers from Oil and Gas Wells in the Wattenberg Field, Modified for Water Well Location. , 2016, , .		4
204	Evaluation of Environmental Hazard During Shale Gas Exploration Process in Poland in the Years 2012-2014. Ecological Chemistry and Engineering S, 2016, 23, 571-581.	0.3	2
205	Methane occurrence is associated with sodium-rich valley waters in domestic wells overlying the Marcellus shale in New York State. Water Resources Research, 2016, 52, 206-226.	1.7	22
206	Shale Gas and the Replacement of Coal-Fired Power Plants. IEEE Latin America Transactions, 2016, 14, 3721-3730.	1.2	2
207	Composite Membrane with Underwater-Oleophobic Surface for Anti-Oil-Fouling Membrane Distillation. Environmental Science & Technology, 2016, 50, 3866-3874.	4.6	190
208	Reducing pollution at five critical points of shale gas production: Strategies and institutional responses. Energy Policy, 2016, 94, 40-46.	4.2	5
209	Correlates of perceived safe uses of hydraulic fracturing wastewater: Data from the Marcellus Shale. The Extractive Industries and Society, 2016, 3, 727-735.	0.7	13
210	Fouling of microfiltration membranes by flowback and produced waters from the Marcellus shale gas play. Water Research, 2016, 99, 162-170.	5.3	76
211	Quantitative Survey and Structural Classification of Hydraulic Fracturing Chemicals Reported in Unconventional Gas Production. Environmental Science & Technology, 2016, 50, 3290-3314.	4.6	154
212	Characterizing hydraulic fracturing fluid greenness: application of a hazard-based index approach. Clean Technologies and Environmental Policy, 2016, 18, 647-668.	2.1	13
213	Fugitive emissions of methane from abandoned, decommissioned oil and gas wells. Science of the Total Environment, 2016, 547, 461-469.	3.9	91
214	Application of microfiltration for the treatment of Marcellus Shale flowback water: Influence of floc breakage on membrane fouling. Journal of Membrane Science, 2016, 510, 348-354.	4.1	35
215	Effect of pretreatment on fouling propensity of shale gas wastewater in membrane distillation process. Desalination and Water Treatment, 2016, 57, 24566-24573.	1.0	11
216	Forest cover changes due to hydrocarbon extraction disturbance in central Pennsylvania (2004-2010). Journal of Maps, 2016, 12, 131-138.	1.0	0
217	Brine Spills Associated with Unconventional Oil Development in North Dakota. Environmental Science & Technology, 2016, 50, 5389-5397.	4.6	204
218	Reduction of the shadow spacer effect using reverse electrodeionization and its applications in water recycling for hydraulic fracturing operations. Separation and Purification Technology, 2016, 162, 84-90.	3.9	19

#	ARTICLE	IF	CITATIONS
219	Quantification of Organic Porosity and Water Accessibility in Marcellus Shale Using Neutron Scattering. <i>Energy & Fuels</i> , 2016, 30, 4438-4449.	2.5	96
220	Temporal variation in groundwater quality in the Permian Basin of Texas, a region of increasing unconventional oil and gas development. <i>Science of the Total Environment</i> , 2016, 562, 906-913.	3.9	80
221	Spills of Hydraulic Fracturing Chemicals on Agricultural Topsoil: Biodegradation, Sorption, and Co-contaminant Interactions. <i>Environmental Science & Technology</i> , 2016, 50, 6071-6078.	4.6	86
222	New horizon in energy: Shale gas. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 35, 637-645.	2.1	70
223	Assessing dermal exposure risk to workers from flowback water during shale gas hydraulic fracturing activity. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 34, 969-978.	2.1	17
224	Fracking in Africa. , 2016, , 199-227.		0
225	Prospects for shale gas production in China: Implications for water demand. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 66, 742-750.	8.2	75
226	Metal Associations in Marcellus Shale and Fate of Synthetic Hydraulic Fracturing Fluids Reacted at High Pressure and Temperature. <i>Environmental Engineering Science</i> , 2016, 33, 753-765.	0.8	32
227	US presidential candidates'™ views on unconventional gas and oil: Who has it right?. <i>Energy Research and Social Science</i> , 2016, 20, 128-130.	3.0	6
228	Statistical analysis of compliance violations for natural gas wells in Pennsylvania. <i>Energy Policy</i> , 2016, 97, 421-428.	4.2	7
229	Understanding shallow and deep flow for assessing the risk of hydrocarbon development to groundwater quality. <i>Marine and Petroleum Geology</i> , 2016, 78, 728-737.	1.5	9
230	Probabilistic assessment of shale gas production and water demand at Xiuwu Basin in China. <i>Applied Energy</i> , 2016, 180, 185-195.	5.1	33
231	Salinity Gradients for Sustainable Energy: Primer, Progress, and Prospects. <i>Environmental Science & Technology</i> , 2016, 50, 12072-12094.	4.6	261
232	Investigation of formation heat treatment to enhance the multiscale gas transport ability of shale. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 35, 265-275.	2.1	50
233	A statistical assessment of pesticide pollution in surface waters using environmental monitoring data: Chlorpyrifos in Central Valley, California. <i>Science of the Total Environment</i> , 2016, 571, 332-341.	3.9	23
234	Water acquisition and use during unconventional oil and gas development and the existing data challenges: Weld and Garfield counties, CO. <i>Journal of Environmental Management</i> , 2016, 181, 36-47.	3.8	15
235	Metatranscriptome analysis of active microbial communities in produced water samples from the Marcellus Shale. <i>Microbial Ecology</i> , 2016, 72, 571-581.	1.4	41
236	Hydraulic fracturing offers view of microbial life in the deep terrestrial subsurface. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw166.	1.3	96

#	ARTICLE	IF	CITATIONS
238	Resolution of rare earth element interferences in fossil energy by-product samples using sector-field ICP-MS. <i>Fuel</i> , 2016, 185, 94-101.	3.4	15
239	Forward Osmosis (FO) for Water Reclamation from Emulsified Oil/Water Solutions: Effects of Membrane and Emulsion Characteristics. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5021-5032.	3.2	35
240	Fate and transport of dissolved methane and ethane in cretaceous shales of the Williston Basin, Canada. <i>Water Resources Research</i> , 2016, 52, 6440-6450.	1.7	17
241	Increased stream discharge after the 3 September 2016 M w 5.8 Pawnee, Oklahoma earthquake. <i>Geophysical Research Letters</i> , 2016, 43, 11,588.	1.5	52
242	Disequilibrium of Naturally Occurring Radioactive Materials (NORM) in Drill Cuttings from a Horizontal Drilling Operation. <i>Environmental Science and Technology Letters</i> , 2016, 3, 425-429.	3.9	24
243	Groundwater methane in relation to oil and gas development and shallow coal seams in the Denver-Julesburg Basin of Colorado. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 8391-8396.	3.3	75
244	Noble gas fractionation during subsurface gas migration. <i>Earth and Planetary Science Letters</i> , 2016, 450, 1-9.	1.8	14
245	Materials for next-generation desalination and water purification membranes. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	1,977
246	Searching for anomalous methane in shallow groundwater near shale gas wells. <i>Journal of Contaminant Hydrology</i> , 2016, 195, 23-30.	1.6	25
247	Methane storage in nanoporous material at supercritical temperature over a wide range of pressures. <i>Scientific Reports</i> , 2016, 6, 33461.	1.6	72
248	Developing monitoring plans to detect spills related to natural gas production. <i>Environmental Monitoring and Assessment</i> , 2016, 188, 647.	1.3	9
249	Shale gas development and cancer incidence in southwest Pennsylvania. <i>Public Health</i> , 2016, 141, 198-206.	1.4	24
250	Scenarios for Low Carbon and Low Water Electric Power Plant Operations: Implications for Upstream Water Use. <i>Environmental Science & Technology</i> , 2016, 50, 11460-11470.	4.6	23
251	Purification of High Salinity Brine by Multi-Stage Ion Concentration Polarization Desalination. <i>Scientific Reports</i> , 2016, 6, 31850.	1.6	67
252	Unconventional shale gas development: challenges for environmental policy and EA practice. <i>Impact Assessment and Project Appraisal</i> , 2016, 34, 97-109.	1.0	8
253	Permeation of oil-in-water emulsions through coalescing filter: Two-dimensional simulation based on phase-field model. <i>AIChE Journal</i> , 2016, 62, 2525-2532.	1.8	27
254	Age Dating Oil and Gas Wastewater Spills Using Radium Isotopes and Their Decay Products in Impacted Soil and Sediment. <i>Environmental Science and Technology Letters</i> , 2016, 3, 205-209.	3.9	23
255	Numerical modeling of fracking fluid migration through fault zones and fractures in the North German Basin. <i>Hydrogeology Journal</i> , 2016, 24, 1343-1358.	0.9	21

#	ARTICLE	IF	CITATIONS
256	Emissions from oil and gas operations in the United States and their air quality implications. Journal of the Air and Waste Management Association, 2016, 66, 549-575.	0.9	66
257	Local Land Use Planning Responses to Hydraulic Fracturing. Journal of the American Planning Association, 2016, 82, 222-235.	0.9	15
258	Which is the most efficient candidate for the recovery of confined methane: Water, carbon dioxide or nitrogen?. Extreme Mechanics Letters, 2016, 9, 127-138.	2.0	50
259	Characterization of bond line discontinuities in a high-Mn TWIP steel pipe welded by HF-ERW. Materials Characterization, 2016, 118, 14-21.	1.9	13
260	An optimization framework for the integration of water management and shale gas supply chain design. Computers and Chemical Engineering, 2016, 92, 230-255.	2.0	84
261	Methane adsorption on the surface of a model of shale: A density functional theory study. Applied Surface Science, 2016, 387, 379-384.	3.1	25
262	Characterization of Marcellus Shale and Huntersville Chert before and after exposure to hydraulic fracturing fluid via feature relocation using field-emission scanning electron microscopy. Fuel, 2016, 182, 227-235.	3.4	70
263	Three-dimensional numerical simulations of methane gas migration from decommissioned hydrocarbon production wells into shallow aquifers. Water Resources Research, 2016, 52, 5598-5618.	1.7	33
264	Optimal Water Management under Uncertainty for Shale Gas Production. Industrial & Engineering Chemistry Research, 2016, 55, 1322-1335.	1.8	78
265	The Unconventional Oil and Gas Process, and an Introduction to Exposure Pathways. , 2016, , 1-12.		0
266	Analysis of resource potential for China's unconventional gas and forecast for its long-term production growth. Energy Policy, 2016, 88, 389-401.	4.2	44
267	Reductive weathering of black shale and release of barium during hydraulic fracturing. Applied Geochemistry, 2016, 65, 73-86.	1.4	79
268	Numerical simulation of coalescence phenomena of oil-in-water emulsions permeating through straight membrane pore. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 70-77.	2.3	22
269	Smart composite membranes for advanced wastewater treatments. , 2016, , 371-419.		15
270	Geochemistry of formation waters from the Wolfcamp and Cline shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA. Chemical Geology, 2016, 425, 76-92.	1.4	124
271	Experimental study of treatment processes for shale gas fracturing flowback fluid in the eastern Sichuan Basin. Desalination and Water Treatment, 2016, 57, 24299-24312.	1.0	14
272	Element mobilization from Bakken shales as a function of water chemistry. Chemosphere, 2016, 149, 286-293.	4.2	39
273	Impacts of hydraulic fracturing on water quality: a review of literature, regulatory frameworks and an analysis of information gaps. Environmental Reviews, 2016, 24, 122-131.	2.1	41

#	ARTICLE	IF	CITATIONS
274	Prospective air pollutant emissions inventory for the development and production of unconventional natural gas in the Karoo basin, South Africa. <i>Atmospheric Environment</i> , 2016, 129, 34-42.	1.9	9
275	Realistic molecular model of kerogen's nanostructure. <i>Nature Materials</i> , 2016, 15, 576-582.	13.3	300
276	Environmental contamination due to shale gas development. <i>Science of the Total Environment</i> , 2016, 550, 431-438.	3.9	67
277	A two-step synthesis of Fe-substituted hexaaluminates with enhanced surface area and activity in methane catalytic combustion. <i>Catalysis Science and Technology</i> , 2016, 6, 4962-4969.	2.1	25
278	Universal Kriging of functional data: Trace-variography vs cross-variography? Application to gas forecasting in unconventional shales. <i>Spatial Statistics</i> , 2016, 15, 39-55.	0.9	23
279	Selenium enrichment in Carboniferous Shales, Britain and Ireland: Problem or opportunity for shale gas extraction?. <i>Applied Geochemistry</i> , 2016, 66, 82-87.	1.4	43
280	Elucidating hydraulic fracturing impacts on groundwater quality using a regional geospatial statistical modeling approach. <i>Science of the Total Environment</i> , 2016, 545-546, 114-126.	3.9	38
281	Hydraulic fracturing chemicals reporting: Analysis of available data and recommendations for policymakers. <i>Energy Policy</i> , 2016, 88, 504-514.	4.2	39
282	The impact of commercially treated oil and gas produced water discharges on bromide concentrations and modeled brominated trihalomethane disinfection byproducts at two downstream municipal drinking water plants in the upper Allegheny River, Pennsylvania, USA. <i>Science of the Total Environment</i> , 2016, 542, 505-520.	3.9	24
283	Occurrence and origin of methane in groundwater in Alberta (Canada): Gas geochemical and isotopic approaches. <i>Science of the Total Environment</i> , 2016, 541, 1253-1268.	3.9	70
284	Multi-Physics Pore-Network Modeling of Two-Phase Shale Matrix Flows. <i>Transport in Porous Media</i> , 2016, 111, 123-141.	1.2	64
285	Shale gas wastewater management under uncertainty. <i>Journal of Environmental Management</i> , 2016, 165, 188-198.	3.8	47
286	The use of best management practices to respond to externalities from developing shale gas resources. <i>Journal of Environmental Planning and Management</i> , 2016, 59, 746-768.	2.4	10
287	A systematic evaluation of chemicals in hydraulic-fracturing fluids and wastewater for reproductive and developmental toxicity. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2017, 27, 90-99.	1.8	125
288	Enhancing water security in a rapidly developing shale gas region. <i>Journal of Hydrology: Regional Studies</i> , 2017, 11, 266-277.	1.0	9
289	Identification of polypropylene glycols and polyethylene glycol carboxylates in flowback and produced water from hydraulic fracturing. <i>Journal of Hazardous Materials</i> , 2017, 323, 11-17.	6.5	68
290	Groundwater Baseline Water Quality in a Shale Gas Exploration Site and Fracturing Fluid - Shale Rock Interaction. <i>Procedia Earth and Planetary Science</i> , 2017, 17, 638-641.	0.6	6
291	Local control: authority, resistance, and knowledge production in fracking. <i>Wiley Interdisciplinary Reviews: Water</i> , 2017, 4, e1197.	2.8	2

#	ARTICLE	IF	CITATIONS
292	Environmental signatures and effects of an oil and gas wastewater spill in the Williston Basin, North Dakota. <i>Science of the Total Environment</i> , 2017, 579, 1781-1793.	3.9	124
293	Microbial methane from in situ biodegradation of coal and shale: A review and reevaluation of hydrogen and carbon isotope signatures. <i>Chemical Geology</i> , 2017, 453, 128-145.	1.4	108
294	Halogen-Mediated Conversion of Hydrocarbons to Commodities. <i>Chemical Reviews</i> , 2017, 117, 4182-4247.	23.0	260
295	Environmental impacts of shale gas development in China: A hybrid life cycle analysis. <i>Resources, Conservation and Recycling</i> , 2017, 120, 38-45.	5.3	34
296	Key strata characteristics controlling the integrity of deep wells in longwall mining areas. <i>International Journal of Coal Geology</i> , 2017, 172, 31-42.	1.9	28
297	Design and optimization of shale gas energy systems: Overview, research challenges, and future directions. <i>Computers and Chemical Engineering</i> , 2017, 106, 699-718.	2.0	91
298	A Review of the Human Health Impacts of Unconventional Natural Gas Development. <i>Current Epidemiology Reports</i> , 2017, 4, 38-45.	1.1	15
299	Controls on Methane Occurrences in Shallow Aquifers Overlying the Haynesville Shale Gas Field, East Texas. <i>Ground Water</i> , 2017, 55, 443-454.	0.7	39
300	Unconventional Oil and Gas Spills: Risks, Mitigation Priorities, and State Reporting Requirements. <i>Environmental Science & Technology</i> , 2017, 51, 2563-2573.	4.6	106
301	Controls on Methane Occurrences in Aquifers Overlying the Eagle Ford Shale Play, South Texas. <i>Ground Water</i> , 2017, 55, 455-468.	0.7	14
302	Partial desalination of hypersaline brine by lab-scale ion concentration polarization device. <i>Desalination</i> , 2017, 412, 20-31.	4.0	22
303	Two-Stage Fracturing Wastewater Management in Shale Gas Development. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 1570-1579.	1.8	4
304	Barriers to sharing water quality data: experiences from the Shale Network. <i>Journal of Environmental Planning and Management</i> , 2017, 60, 2103-2121.	2.4	5
305	Public perceptions of hydraulic fracturing for shale gas and oil in the United States and Canada. <i>Wiley Interdisciplinary Reviews: Climate Change</i> , 2017, 8, e450.	3.6	70
306	Pretreatment of shale gas drilling flowback fluid (SGDF) by the microscale FeO/persulfate/O ₃ process (mFeO/PS/O ₃). <i>Chemosphere</i> , 2017, 176, 192-201.	4.2	39
307	Boric acid incorporated on the surface of reactive nanosilica providing a nano-crosslinker with potential in guar gum fracturing fluid. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45037.	1.3	23
308	The investigation of shale gas wastewater treatment by electro-Fenton process: Statistical optimization of operational parameters. <i>Chemical Engineering Research and Design</i> , 2017, 109, 203-213.	2.7	32
309	Analysis of gas leakage occurrence along wells in Alberta, Canada, from a GHG perspective – Gas migration outside well casing. <i>International Journal of Greenhouse Gas Control</i> , 2017, 61, 146-154.	2.3	68

#	ARTICLE	IF	CITATIONS
310	Simulation to Enhance Shale Gas Recovery Using Carbon Dioxide in Silica Nanopores with Different Sizes. <i>Energy Technology</i> , 2017, 5, 2065-2071.	1.8	23
311	Induced Seismicity in Oklahoma Affects Shallow Groundwater. <i>Seismological Research Letters</i> , 2017, 88, 956-962.	0.8	17
312	The shale gas revolution: Barriers, sustainability, and emerging opportunities. <i>Applied Energy</i> , 2017, 199, 88-95.	5.1	242
313	Hydrogeochemical and Isotopic Indicators of Hydraulic Fracturing Flowback Fluids in Shallow Groundwater and Stream Water, derived from Dameigou Shale Gas Extraction in the Northern Qaidam Basin. <i>Environmental Science & Technology</i> , 2017, 51, 5889-5898.	4.6	32
314	Pore connectivity and tracer migration of typical shales in south China. <i>Fuel</i> , 2017, 203, 32-46.	3.4	84
315	Unconventional natural gas development did not result in detectable changes in water chemistry (within the South Fork Little Red River). <i>Environmental Monitoring and Assessment</i> , 2017, 189, 209.	1.3	6
316	Molecular Insights into the Enhanced Shale Gas Recovery by Carbon Dioxide in Kerogen Slit Nanopores. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10233-10241.	1.5	112
317	Surface Casing Pressure As an Indicator of Well Integrity Loss and Stray Gas Migration in the Wattenberg Field, Colorado. <i>Environmental Science & Technology</i> , 2017, 51, 3567-3574.	4.6	47
318	The effect of hydraulic flowback and produced water on gill morphology, oxidative stress and antioxidant response in rainbow trout (<i>Oncorhynchus mykiss</i>). <i>Scientific Reports</i> , 2017, 7, 46582.	1.6	60
319	Holistic risk assessment of surface water contamination due to Pb-210 in oil produced water from the Bakken Shale. <i>Chemosphere</i> , 2017, 169, 627-635.	4.2	14
320	Can Fracking Be Environmentally Acceptable?. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2017, 21, 04016013.	1.2	1
321	Potential impact of flowback water from hydraulic fracturing on agricultural soil quality: Metal/metalloid bioaccessibility, Microtox bioassay, and enzyme activities. <i>Science of the Total Environment</i> , 2017, 579, 1419-1426.	3.9	54
322	Temporal characterization of flowback and produced water quality from a hydraulically fractured oil and gas well. <i>Science of the Total Environment</i> , 2017, 596-597, 369-377.	3.9	115
323	Element release and reaction-induced porosity alteration during shale-hydraulic fracturing fluid interactions. <i>Applied Geochemistry</i> , 2017, 82, 47-62.	1.4	116
324	Biologically active filtration for fracturing flowback and produced water treatment. <i>Journal of Water Process Engineering</i> , 2017, 18, 29-40.	2.6	64
325	Calixarene-polymer hybrid film for selective detection of hydrocarbons in water. <i>New Journal of Chemistry</i> , 2017, 41, 6195-6202.	1.4	8
326	Molecular insight into the micro-behaviors of CH ₄ and CO ₂ in montmorillonite slit-nanopores. <i>Molecular Simulation</i> , 2017, 43, 1004-1011.	0.9	38
327	Spontaneous Imbibition of Three Leading Shale Formations in the Middle Yangtze Platform, South China. <i>Energy & Fuels</i> , 2017, 31, 6903-6916.	2.5	30

#	ARTICLE	IF	CITATIONS
328	Carbon nanotubes keep up the heat. <i>Nature Nanotechnology</i> , 2017, 12, 501-503.	15.6	62
329	Long-Chain Carboxylate Ionic Liquids Combining High Solubility and Low Viscosity for Light Hydrocarbon Separations. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 7336-7344.	1.8	25
330	Disinfection byproduct regulatory compliance surrogates and bromide-associated risk. <i>Journal of Environmental Sciences</i> , 2017, 58, 191-207.	3.2	23
332	Methane content and isotopic composition of shallow groundwater: implications for environmental monitoring related to shale gas exploitation. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 312, 577-585.	0.7	6
333	Insights into the subsurface transport of As(V) and Se(VI) in produced water from hydraulic fracturing using soil samples from Qingshankou Formation, Songliao Basin, China. <i>Environmental Pollution</i> , 2017, 223, 449-456.	3.7	25
334	Diffusive transport and reaction in clay rocks: A storage (nuclear waste, CO ₂ , H ₂), energy (shale gas) and water quality issue. <i>Advances in Water Resources</i> , 2017, 106, 39-59.	1.7	56
335	Phase field model of fluid-driven fracture in elastic media: Immersed fracture formulation and validation with analytical solutions. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 2565-2589.	1.4	64
336	Mobility and persistence of methane in groundwater in a controlled-release field experiment. <i>Nature Geoscience</i> , 2017, 10, 289-294.	5.4	106
337	Experimental investigations on the geometry and connectivity of pore space in organic-rich Wufeng and Longmaxi shales. <i>Marine and Petroleum Geology</i> , 2017, 84, 225-242.	1.5	107
338	Integrated value of shale gas development: A comparative analysis in the United States and China. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 76, 1465-1478.	8.2	35
339	Challenges with secondary use of multi-source water-quality data in the United States. <i>Water Research</i> , 2017, 110, 252-261.	5.3	67
340	Evidence of Sulfate-Dependent Anaerobic Methane Oxidation within an Area Impacted by Coalbed Methane-Related Gas Migration. <i>Environmental Science & Technology</i> , 2017, 51, 1901-1909.	4.6	24
341	Shifts in microbial community structure and function in surface waters impacted by unconventional oil and gas wastewater revealed by metagenomics. <i>Science of the Total Environment</i> , 2017, 580, 1205-1213.	3.9	39
342	Shale gas flowback water desalination: Single vs multiple-effect evaporation with vapor recompression cycle and thermal integration. <i>Desalination</i> , 2017, 404, 230-248.	4.0	76
343	Fouling in direct contact membrane distillation of produced water from unconventional gas extraction. <i>Journal of Membrane Science</i> , 2017, 524, 493-501.	4.1	81
344	Application of coagulation-UF hybrid process for shale gas fracturing flowback water recycling: Performance and fouling analysis. <i>Journal of Membrane Science</i> , 2017, 524, 460-469.	4.1	65
345	Effects on Biotransformation, Oxidative Stress, and Endocrine Disruption in Rainbow Trout (<i>Oncorhynchus mykiss</i>) Exposed to Hydraulic Fracturing Flowback and Produced Water. <i>Environmental Science & Technology</i> , 2017, 51, 940-947.	4.6	54
346	Experimental insights into geochemical changes in hydraulically fractured Marcellus Shale. <i>Applied Geochemistry</i> , 2017, 76, 36-50.	1.4	94

#	ARTICLE	IF	CITATIONS
347	Numerical Modeling of Gas and Water Flow in Shale Gas Formations with a Focus on the Fate of Hydraulic Fracturing Fluid. <i>Environmental Science & Technology</i> , 2017, 51, 13779-13787.	4.6	34
348	Boron removal from hydraulic fracturing wastewater by aluminum and iron coagulation: Mechanisms and limitations. <i>Water Research</i> , 2017, 126, 481-487.	5.3	77
349	Experimental study of mechanics and seepage characteristics of sandstones after liquid-nitrogen stimulation. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 47, 11-21.	2.1	20
350	Monitoring the evolution and migration of a methane gas plume in an unconfined sandy aquifer using time-lapse GPR and ERT. <i>Journal of Contaminant Hydrology</i> , 2017, 205, 12-24.	1.6	43
351	Multi-hazard risk pathway scenarios associated with unconventional gas development: Identification and challenges for their assessment. <i>Energy Procedia</i> , 2017, 125, 116-125.	1.8	5
352	Comparative Human Toxicity Impact of Electricity Produced from Shale Gas and Coal. <i>Environmental Science & Technology</i> , 2017, 51, 13018-13027.	4.6	16
353	Confined methane-water interfacial layers and thickness measurements using in situ Raman spectroscopy. <i>Lab on A Chip</i> , 2017, 17, 3883-3890.	3.1	2
354	Prospect of shale gas recovery enhancement by oxidation-induced rock burst. <i>Natural Gas Industry B</i> , 2017, 4, 449-456.	1.4	29
355	Technology and Engineering of the Water-Energy Nexus. <i>Annual Review of Environment and Resources</i> , 2017, 42, 407-437.	5.6	25
356	Cardio-respirometry disruption in zebrafish (<i>Danio rerio</i>) embryos exposed to hydraulic fracturing flowback and produced water. <i>Environmental Pollution</i> , 2017, 231, 1477-1487.	3.7	42
357	An analytical model for relative permeability in water-wet nanoporous media. <i>Chemical Engineering Science</i> , 2017, 174, 1-12.	1.9	113
358	From data to decisions: Processing information, biases, and beliefs for improved management of natural resources and environments. <i>Earth's Future</i> , 2017, 5, 356-378.	2.4	62
359	Effect of hydration on fractures and permeabilities in Mancos, Eagleford, Barnett and Marcellus shale cores under compressive stress conditions. <i>Journal of Petroleum Science and Engineering</i> , 2017, 156, 917-926.	2.1	31
360	Taming drillers through legislative action: Evidence from Pennsylvania's shale gas industry. <i>Resources and Energy Economics</i> , 2017, 50, 15-35.	1.1	10
361	Investigating the effects of heat activated persulfate on the degradation of furfural, a component of hydraulic fracturing fluid chemical additives. <i>Chemical Engineering Journal</i> , 2017, 327, 1021-1032.	6.6	50
362	Membrane-based zero liquid discharge: Myth or reality?. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 80, 192-202.	2.7	95
363	Mineral Reactions in Shale Gas Reservoirs: Barite Scale Formation from Reusing Produced Water As Hydraulic Fracturing Fluid. <i>Environmental Science & Technology</i> , 2017, 51, 9391-9402.	4.6	116
364	High-resolution vertical profiles of groundwater electrical conductivity (EC) and chloride from direct-push EC logs. <i>Hydrogeology Journal</i> , 2017, 25, 2151-2162.	0.9	2

#	ARTICLE	IF	CITATIONS
365	Inhibition of Biodegradation of Hydraulic Fracturing Compounds by Glutaraldehyde: Groundwater Column and Microcosm Experiments. <i>Environmental Science & Technology</i> , 2017, 51, 10251-10261.	4.6	25
366	Simulating gas-water relative permeabilities for nanoscale porous media with interfacial effects. <i>Open Physics</i> , 2017, 15, 517-524.	0.8	2
367	A reactive transport model for Marcellus shale weathering. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 217, 421-440.	1.6	38
368	Hydraulic fracturing and infant health: New evidence from Pennsylvania. <i>Science Advances</i> , 2017, 3, e1603021.	4.7	120
369	Water use in unconventional oil and gas development: an assessment on water use metric evaluation and selection. <i>Clean Technologies and Environmental Policy</i> , 2017, 19, 2417-2429.	2.1	1
370	Organic Chemical Characterization and Mass Balance of a Hydraulically Fractured Well: From Fracturing Fluid to Produced Water over 405 Days. <i>Environmental Science & Technology</i> , 2017, 51, 14006-14015.	4.6	57
371	Fluid-driven fracture propagation in heterogeneous media: Probability distributions of fracture trajectories. <i>Physical Review E</i> , 2017, 96, 053002.	0.8	10
373	Effects of Surface Composition on the Microbehaviors of CH ₄ and CO ₂ in Slit-Nanopores: A Simulation Exploration. <i>ACS Omega</i> , 2017, 2, 7600-7608.	1.6	26
374	Identification and Comparative Mammalian Cell Cytotoxicity of New Iodo-Phenolic Disinfection Byproducts in Chloraminated Oil and Gas Wastewaters. <i>Environmental Science and Technology Letters</i> , 2017, 4, 475-480.	3.9	83
375	Produced Water Surface Spills and the Risk for BTEX and Naphthalene Groundwater Contamination. <i>Water, Air, and Soil Pollution</i> , 2017, 228, 1.	1.1	25
376	New avenues for the large-scale harvesting of blue energy. <i>Nature Reviews Chemistry</i> , 2017, 1, .	13.8	383
377	Detecting inter-aquifer leakage in areas with limited data using hydraulics and multiple environmental tracers, including 4He, 36Cl/Cl, 14C and 87Sr/86Sr. <i>Hydrogeology Journal</i> , 2017, 25, 2031-2047.	0.9	12
378	Fate and Transport of Shale-derived, Biogenic Methane. <i>Scientific Reports</i> , 2017, 7, 4881.	1.6	11
379	Beliefs about impacts matter little for attitudes on shale gas development. <i>Energy Policy</i> , 2017, 109, 10-21.	4.2	38
380	Preferential enclathration of CO ₂ into tetra-n-butyl phosphonium bromide semiclathrate hydrate in moderate operating conditions: Application for CO ₂ capture from shale gas. <i>Applied Energy</i> , 2017, 199, 370-381.	5.1	48
381	Taking away David's sling: environmental justice and land-use conflict in extractive resource development. <i>Local Environment</i> , 2017, 22, 952-968.	1.1	12
382	Integrative taxonomy by molecular species delimitation: multi-locus data corroborate a new species of Balkan Drusinae micro-endemics. <i>BMC Evolutionary Biology</i> , 2017, 17, 129.	3.2	53
383	Do biofilm communities respond to the chemical signatures of fracking? A test involving streams in North-central Arkansas. <i>BMC Microbiology</i> , 2017, 17, 29.	1.3	19

#	ARTICLE	IF	CITATIONS
384	Movement of leopard tortoises in response to environmental and climatic variables in a semi-arid environment. <i>Movement Ecology</i> , 2017, 5, 5.	1.3	7
385	Shale Gas Process and Supply Chain Optimization. , 2017, , 21-46.		3
386	Potential water resource impacts of hydraulic fracturing from unconventional oil production in the Bakken shale. <i>Water Research</i> , 2017, 108, 1-24.	5.3	118
387	Unconventional oil and gas development and risk of childhood leukemia: Assessing the evidence. <i>Science of the Total Environment</i> , 2017, 576, 138-147.	3.9	76
388	Association of groundwater constituents with topography and distance to unconventional gas wells in NE Pennsylvania. <i>Science of the Total Environment</i> , 2017, 577, 195-201.	3.9	18
389	Mechanisms leading to potential impacts of shale gas development on groundwater quality. <i>Wiley Interdisciplinary Reviews: Water</i> , 2017, 4, e1188.	2.8	27
390	Membrane distillation (MD) integrated with crystallization (MDC) for shale gas produced water (SGPW) treatment. <i>Desalination</i> , 2017, 403, 172-178.	4.0	110
391	Measuring Concentrations of Dissolved Methane and Ethane and the ¹³ C of Methane in Shale and Till. <i>Ground Water</i> , 2017, 55, 119-128.	0.7	8
392	A decision analysis framework for estimating the potential hazards for drinking water resources of chemicals used in hydraulic fracturing fluids. <i>Science of the Total Environment</i> , 2017, 574, 1544-1558.	3.9	18
394	Geochemical indicators of the origins and evolution of methane in groundwater: Gippsland Basin, Australia. <i>Environmental Science and Pollution Research</i> , 2017, 24, 13168-13183.	2.7	23
395	How to Adapt Chemical Risk Assessment for Unconventional Hydrocarbon Extraction Related to the Water System. <i>Reviews of Environmental Contamination and Toxicology</i> , 2017, 246, 1-32.	0.7	5
396	Elasto-inertial migration of deformable capsules in a microchannel. <i>Biomicrofluidics</i> , 2017, 11, 064113.	1.2	25
397	Variation in beliefs about "fracking" between the UK and US. <i>Environmental Research Letters</i> , 2017, 12, 124004.	2.2	24
398	Biogeochemical constraints on the origin of methane in an alluvial aquifer: evidence for the upward migration of methane from underlying coal measures. <i>Biogeosciences</i> , 2017, 14, 215-228.	1.3	19
399	2.5 Forward Osmosis and Forward Osmosis Membranes. , 2017, , 95-123.		7
400	Radioactivity of Soil, Rock and Water in a Shale Gas Exploitation Area, SW China. <i>Water (Switzerland)</i> , 2017, 9, 299.	1.2	14
401	A Brief History of Oil and Gas Development From an Environmental Perspective. , 2017, , 3-10.		0
402	Public Health Concerns and Unconventional Oil and Gas Development. <i>Advances in Chemical Pollution, Environmental Management and Protection</i> , 2017, 1, 147-166.	0.3	1

#	ARTICLE	IF	CITATIONS
403	Fractal evolution under in situ pressure and sorption conditions for coal and shale. Scientific Reports, 2017, 7, 8971.	1.6	40
404	Efficient and robust classification of seismic data using nonlinear support vector machines. , 2017, , .		2
405	MALDI-TOF MS for the Identification of Cultivable Organic-Degrading Bacteria in Contaminated Groundwater near Unconventional Natural Gas Extraction Sites. Microorganisms, 2017, 5, 47.	1.6	15
406	Potential for Liquid Contamination of Groundwater. , 2017, , 75-91.		1
407	Considerations and Pitfalls in the Spatial Analysis of Water Quality Data and Its Association With Hydraulic Fracturing. Advances in Chemical Pollution, Environmental Management and Protection, 2017, 1, 227-256.	0.3	5
408	Strontium isotopes as a potential fingerprint of total dissolved solids associated with hydraulic-fracturing activities in the Barnett Shale, Texas. Environmental Geosciences, 2017, 24, 151-165.	0.6	1
409	Influence of Stratigraphic Conditions on the Deformation Characteristics of Oil/Gas Wells Piercing Longwall Pillars and Mining Optimization. Energies, 2017, 10, 775.	1.6	2
410	Best Management Practices From the "Responsible Shale Energy Extraction" Conference: Guiding Industry in Environmental Stewardship. Advances in Chemical Pollution, Environmental Management and Protection, 2017, , 381-405.	0.3	2
411	Prenatal Exposure to Unconventional Oil and Gas Operation Chemical Mixtures Altered Mammary Gland Development in Adult Female Mice. Endocrinology, 2018, 159, 1277-1289.	1.4	21
412	Should we call the neighbors? Voluntary deliberation and citizen complaints about oil and gas drilling. Energy Policy, 2018, 115, 258-272.	4.2	5
413	Colorado Water Watch: real-time groundwater monitoring for possible contamination from oil and gas activities. Environmental Monitoring and Assessment, 2018, 190, 138.	1.3	5
414	Origin of Methane and Sources of High Concentrations in Los Angeles Groundwater. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 818-831.	1.3	13
415	Visualization of gas dissolution following upward gas migration in porous media: Technique and implications for stray gas. Advances in Water Resources, 2018, 115, 33-43.	1.7	17
416	Laboratory study of proppant on shale fracture permeability and compressibility. Fuel, 2018, 222, 83-97.	3.4	81
417	Evaluation of gas well setback policy in the Marcellus Shale region of Pennsylvania in relation to emissions of fine particulate matter. Journal of the Air and Waste Management Association, 2018, 68, 988-1000.	0.9	14
418	Mine Water Problems and Solutions in China. Mine Water and the Environment, 2018, 37, 217-221.	0.9	77
419	Evaluation of the potential for gas leakage along wellbores in the St. Lawrence Lowlands basin, Quebec, Canada. Environmental Earth Sciences, 2018, 77, 1.	1.3	2
420	A phase-field modeling approach of fracture propagation in poroelastic media. Engineering Geology, 2018, 240, 189-203.	2.9	259

#	ARTICLE	IF	CITATIONS
421	Monitoring of unconventional oil and gas extraction and its policy implications: A case study from South Africa. <i>Energy Policy</i> , 2018, 118, 109-120.	4.2	5
422	Groundwater equality hazards of methane leakage from hydrocarbon wells: A review of observational and numerical studies and four testable hypotheses. <i>Wiley Interdisciplinary Reviews: Water</i> , 2018, 5, e1283.	2.8	31
423	The effect of fluorocarbon surfactant on the gas-wetting alteration of reservoir. <i>Petroleum Science and Technology</i> , 2018, 36, 951-958.	0.7	11
424	Identifying the risks and opportunities of unconventional oil and gas extraction using the strategic environmental assessment. <i>Current Opinion in Environmental Science and Health</i> , 2018, 3, 33-39.	2.1	12
425	Enabling global exchange of groundwater data: GroundWaterML2 (GWML2). <i>Hydrogeology Journal</i> , 2018, 26, 733-741.	0.9	13
426	The Broad Impact of a Narrow Conflict: How Natural Resource Windfalls Shape Policy and Politics. <i>Journal of Politics</i> , 2018, 80, 630-646.	1.4	19
427	The Water-Energy Nexus of Hydraulic Fracturing: A Global Hydrologic Analysis for Shale Oil and Gas Extraction. <i>Earth's Future</i> , 2018, 6, 745-756.	2.4	61
428	Synthesis and evaluation of properties of N,N-bis(perfluorooctyl)imine acetate sodium as a gas-wetting alteration agent. <i>RSC Advances</i> , 2018, 8, 7924-7931.	1.7	10
429	Preparation, characterization of PPS micro-porous membranes and their excellent performance in vacuum membrane distillation. <i>Journal of Membrane Science</i> , 2018, 556, 107-117.	4.1	39
430	Reasons for the low flowback rates of fracturing fluids in marine shale. <i>Natural Gas Industry B</i> , 2018, 5, 35-40.	1.4	15
431	Shale Gas Well, Hydraulic Fracturing, and Formation Data to Support Modeling of Gas and Water Flow in Shale Formations. <i>Water Resources Research</i> , 2018, 54, 3196-3206.	1.7	61
432	Phase Field Model of Hydraulic Fracturing in Poroelastic Media: Fracture Propagation, Arrest, and Branching Under Fluid Injection and Extraction. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 2127-2155.	1.4	61
433	Connecting the sustainable development goals by their energy inter-linkages. <i>Environmental Research Letters</i> , 2018, 13, 033006.	2.2	263
434	The potential for spills and leaks of contaminated liquids from shale gas developments. <i>Science of the Total Environment</i> , 2018, 626, 1463-1473.	3.9	24
435	Pre-drill Groundwater Geochemistry in the Karoo Basin, South Africa. <i>Ground Water</i> , 2018, 56, 187-203.	0.7	20
436	Differential retention and release of CO ₂ and CH ₄ in kerogen nanopores: Implications for gas extraction and carbon sequestration. <i>Fuel</i> , 2018, 220, 1-7.	3.4	63
437	Synthesis and Evaluation of Two Gas-Wetting Alteration Agents for a Shale Reservoir. <i>Energy & Fuels</i> , 2018, 32, 1515-1524.	2.5	21
438	Experimental investigation on the mechanical properties of a low-clay shale with different adsorption times in sub-/super-critical CO ₂ . <i>Energy</i> , 2018, 147, 1288-1298.	4.5	132

#	ARTICLE	IF	CITATIONS
439	Economic comparison of pressure driven membrane processes to electrically driven processes for use in hydraulic fracturing. <i>Separation Science and Technology</i> , 2018, 53, 767-776.	1.3	7
440	Oil and Gas Fracking and Tight Shale Resources. , 2018, , 71-78.		0
441	A Fractal Model for Gas-Water Relative Permeability in Inorganic Shale with Nanoscale Pores. <i>Transport in Porous Media</i> , 2018, 122, 305-331.	1.2	51
442	Unlocking High-Salinity Desalination with Cascading Osmotically Mediated Reverse Osmosis: Energy and Operating Pressure Analysis. <i>Environmental Science & Technology</i> , 2018, 52, 2242-2250.	4.6	121
443	Engaging over data on fracking and water quality. <i>Science</i> , 2018, 359, 395-397.	6.0	41
444	Using environmental tracers and modelling to identify natural and gas well-induced emissions of methane into streams. <i>Applied Geochemistry</i> , 2018, 91, 107-121.	1.4	9
445	Gas flow through cement-casing microannuli under varying stress conditions. <i>Geomechanics for Energy and the Environment</i> , 2018, 13, 1-13.	1.2	57
446	Characterization of the boron, lithium, and strontium isotopic variations of oil sands process-affected water in Alberta, Canada. <i>Applied Geochemistry</i> , 2018, 90, 50-62.	1.4	13
447	Empirically assessing the potential release of rare earth elements from black shale under simulated hydraulic fracturing conditions. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 50, 259-268.	2.1	4
448	High resolution spatial and temporal evolution of dissolved gases in groundwater during a controlled natural gas release experiment. <i>Science of the Total Environment</i> , 2018, 622-623, 1178-1192.	3.9	33
449	Desalination and fouling of NF/low pressure RO membrane for shale gas fracturing flowback water treatment. <i>Separation and Purification Technology</i> , 2018, 195, 216-223.	3.9	40
450	Experimental Investigation of the Geochemical Interactions between Supercritical CO ₂ and Shale: Implications for CO ₂ Storage in Gas-Bearing Shale Formations. <i>Energy & Fuels</i> , 2018, 32, 1963-1978.	2.5	95
451	A model for predicting organic compounds concentration change in water associated with horizontal hydraulic fracturing. <i>Science of the Total Environment</i> , 2018, 625, 1164-1174.	3.9	12
452	The pertinence of Sutton's law to exposure science: Lessons from unconventional shale gas drilling. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2018, 28, 427-436.	1.8	0
453	Effect of Water Imbibition on Fracture Generation in Mancos Shale under Isotropic and Anisotropic Stress Conditions. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2018, 144, .	1.5	21
454	The successful development of gas and oil resources from shales in North America. <i>Journal of Petroleum Science and Engineering</i> , 2018, 163, 399-420.	2.1	154
455	Freshwater salinization syndrome on a continental scale. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E574-E583.	3.3	364
456	Estimating the Creation and Removal Date of Fracking Ponds Using Trend Analysis of Landsat Imagery. <i>Environmental Management</i> , 2018, 61, 310-320.	1.2	7

#	ARTICLE	IF	CITATIONS
457	Sources of Radium Accumulation in Stream Sediments near Disposal Sites in Pennsylvania: Implications for Disposal of Conventional Oil and Gas Wastewater. <i>Environmental Science & Technology</i> , 2018, 52, 955-962.	4.6	45
458	Monitoring concentration and isotopic composition of methane in groundwater in the Utica Shale hydraulic fracturing region of Ohio. <i>Environmental Monitoring and Assessment</i> , 2018, 190, 322.	1.3	19
459	Busted amidst the Boom: The Creation of New Insecurities and Inequalities within Pennsylvania's Shale Gas Boomtowns. <i>Rural Sociology</i> , 2018, 83, 503-531.	1.1	20
460	An improved fracture height containment method: artificial gel-barrier technology and its simulation. <i>Environmental Earth Sciences</i> , 2018, 77, 1.	1.3	6
461	Synergistic management of flowback and produced waters during the upstream shale gas operations driven by non-cooperative stakeholders. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 52, 591-608.	2.1	14
462	Microcrack-based geomechanical modeling of rock-gas interaction during supercritical CO ₂ fracturing. <i>Journal of Petroleum Science and Engineering</i> , 2018, 164, 91-102.	2.1	79
463	Understanding and mitigating impacts of unconventional oil and gas development on land-use and ecosystem services in the U.S.. <i>Current Opinion in Environmental Science and Health</i> , 2018, 3, 19-26.	2.1	21
464	Energy-Environmental Implications Of Shale Gas Exploration In Parana Hydrological Basin, Brazil. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 90, 56-69.	8.2	16
465	Osmotically enhanced dewatering-reverse osmosis (OED-RO) hybrid system: Implications for shale gas produced water treatment. <i>Journal of Membrane Science</i> , 2018, 554, 282-290.	4.1	36
466	Effect of pretreatment and operating conditions on the performance of membrane distillation for the treatment of shale gas wastewater. <i>Desalination</i> , 2018, 437, 195-209.	4.0	70
467	Removal of organic compounds from shale gas flowback water. <i>Water Research</i> , 2018, 138, 47-55.	5.3	59
468	Methane Leakage From Hydrocarbon Wellbores into Overlying Groundwater: Numerical Investigation of the Multiphase Flow Processes Governing Migration. <i>Water Resources Research</i> , 2018, 54, 2959-2975.	1.7	24
469	A review of the public health impacts of unconventional natural gas development. <i>Environmental Geochemistry and Health</i> , 2018, 40, 1-57.	1.8	39
470	Detecting the effects of coal mining, acid rain, and natural gas extraction in Appalachian basin streams in Pennsylvania (USA) through analysis of barium and sulfate concentrations. <i>Environmental Geochemistry and Health</i> , 2018, 40, 865-885.	1.8	16
471	Fingerprinting coal-derived gases from the UK. <i>Chemical Geology</i> , 2018, 480, 75-85.	1.4	17
472	Neurodevelopmental and neurological effects of chemicals associated with unconventional oil and natural gas operations and their potential effects on infants and children. <i>Reviews on Environmental Health</i> , 2018, 33, 3-29.	1.1	33
473	Analysis of an osmotically-enhanced dewatering process for the treatment of highly saline (waste)waters. <i>Journal of Membrane Science</i> , 2018, 548, 685-693.	4.1	39
475	A mesoscale model for diffusion and permeation of shale gas at geological depth. <i>AIChE Journal</i> , 2018, 64, 1059-1066.	1.8	10

#	ARTICLE	IF	CITATIONS
476	Continental extent patterns in amphibian malformations linked to parasites, chemical contaminants, and their interactions. <i>Global Change Biology</i> , 2018, 24, e275-e288.	4.2	20
477	The Influence of Fracturing Fluids on Fracturing Processes: A Comparison Between Water, Oil and SC-CO ₂ . <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 299-313.	2.6	110
478	Sustainability lessons from shale development in the United States for Mexico and other emerging unconventional oil and gas developers. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 82, 1320-1332.	8.2	38
479	Assessing Methane in Shallow Groundwater in Unconventional Oil and Gas Play Areas, Eastern Kentucky. <i>Ground Water</i> , 2018, 56, 413-424.	0.7	4
480	Lattice-Boltzmann flow simulation of an oil-in-water emulsion through a coalescing filter: Effects of filter structure. <i>Chemical Engineering Science</i> , 2018, 177, 210-217.	1.9	31
481	Omniphobic membranes for direct contact membrane distillation: Effective deposition of zinc oxide nanoparticles. <i>Desalination</i> , 2018, 428, 255-263.	4.0	128
482	Release of Particulate Iron Sulfide during Shale-Fluid Interaction. <i>Environmental Science & Technology</i> , 2018, 52, 638-643.	4.6	27
483	Wastewater from hydraulic fracturing in the UK: assessing the viability and cost of management. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 325-335.	1.2	8
484	Temporal characterization and statistical analysis of flowback and produced waters and their potential for reuse. <i>Science of the Total Environment</i> , 2018, 619-620, 654-664.	3.9	69
485	Hazard assessment of hydraulic fracturing chemicals using an indexing method. <i>Science of the Total Environment</i> , 2018, 619-620, 281-290.	3.9	14
486	Geochemistry of groundwater in the Saint-Amand area, Quebec, Canada, and its influence on the distribution of methane in shallow aquifers. <i>Applied Geochemistry</i> , 2018, 89, 92-108.	1.4	20
487	Chemical Degradation of Polyacrylamide during Hydraulic Fracturing. <i>Environmental Science & Technology</i> , 2018, 52, 327-336.	4.6	68
488	Recovery of water and minerals from shale gas produced water by membrane distillation crystallization. <i>Water Research</i> , 2018, 129, 447-459.	5.3	119
489	Multi-criteria design of shale-gas-water supply chains and production systems towards optimal life cycle economics and greenhouse gas emissions under uncertainty. <i>Computers and Chemical Engineering</i> , 2018, 109, 216-235.	2.0	144
490	Advances and challenges in water management within energy systems. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 82, 4009-4019.	8.2	27
491	Discriminant analysis as a decision-making tool for geochemically fingerprinting sources of groundwater salinity. <i>Science of the Total Environment</i> , 2018, 618, 379-387.	3.9	22
492	Styrene butadiene rubber as a viscosity improver: Experimental investigations and quantum chemical studies. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2018, 232, 427-436.	1.0	8
493	Scientists "Nonscientist Teams Explore Methane Sources in Streams Near Oil/Gas Development. <i>Journal of Contemporary Water Research and Education</i> , 2018, 164, 80-111.	0.7	4

#	ARTICLE	IF	CITATIONS
494	Governance of Shale Gas Development: Insights From the Bloomington School of Institutional Analysis. SSRN Electronic Journal, 2018, , .	0.4	0
495	Impact of Pore Geometry and Water Saturation on Gas Effective Diffusion Coefficient in Soil. Applied Sciences (Switzerland), 2018, 8, 2097.	1.3	20
496	Retention of Hydraulic Fracturing Water in Shale: The Influence of Anionic Surfactant. Energies, 2018, 11, 3342.	1.6	20
497	Nanomodel visualization of fluid injections in tight formations. Nanoscale, 2018, 10, 21994-22002.	2.8	56
498	Annual Hydrographs and Water Use. , 0, , 283-297.		0
499	Effects of hydration on the microstructure and physical properties of shale. Petroleum Exploration and Development, 2018, 45, 1146-1153.	3.0	39
500	A decade of Marcellus Shale: Impacts to people, policy, and culture from 2008 to 2018 in the Greater Mid-Atlantic region of the United States. The Extractive Industries and Society, 2018, 5, 596-609.	0.7	31
501	Synthesis and Evaluation of Novel Gas-Wetting Reversal Agent for Shale Gas Reservoir. , 2018, , .		3
502	Detecting and explaining why aquifers occasionally become degraded near hydraulically fractured shale gas wells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12349-12358.	3.3	54
503	Governing Unconventional Oil and Gas Extraction: The Case of Pennsylvania. Review of Policy Research, 2019, 36, 75-98.	2.8	3
504	An Investigation of the Underlying Evolution of Shale Gas Researchâ€™s Domain Based on the Co-Word Network. Sustainability, 2018, 10, 164.	1.6	8
505	Members of Marinobacter and Arcobacter Influence System Biogeochemistry During Early Production of Hydraulically Fractured Natural Gas Wells in the Appalachian Basin. Frontiers in Microbiology, 2018, 9, 2646.	1.5	33
506	Simultaneous removal of organic matter and iron from hydraulic fracturing flowback water through sulfur cycling in a microbial fuel cell. Water Research, 2018, 147, 461-471.	5.3	47
507	From conflict to collaboration: can better governance systems facilitate the sustainable development of the northern pastoral industry, communities and landscapes?. Rangeland Journal, 2018, 40, 331.	0.4	5
508	Conservation of Aquatic Biodiversity in the Context of Multipleâ€™Use Management on National Forest System Lands. Fisheries, 2018, 43, 396-405.	0.6	12
509	Optimal design of water networks for shale gas hydraulic fracturing including economic and environmental criteria. Clean Technologies and Environmental Policy, 2018, 20, 2311-2332.	2.1	11
510	Aerated Electrolysis for Reducing Impacts of Shale Gas Production Wastewater on Water Sources regarding Disinfection Byproduct Formation. Environmental Science and Technology Letters, 2018, 5, 681-686.	3.9	8
511	Review of Water Saturation Calculation Methods in Shale Gas Reservoir. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
512	Feasible analysis of reusing flowback produced water in the operational performances of oil reservoirs. <i>Environmental Science and Pollution Research</i> , 2018, 25, 35387-35395.	2.7	53
513	Membrane fouling and reusability in membrane distillation of shale oil and gas produced water: Effects of membrane surface wettability. <i>Journal of Membrane Science</i> , 2018, 567, 199-208.	4.1	101
514	Rapid desorption of radium isotopes from black shale during hydraulic fracturing. 1. Source phases that control the release of Ra from Marcellus Shale. <i>Chemical Geology</i> , 2018, 496, 1-13.	1.4	9
515	Tidal Response of Groundwater in a Leaky Aquifer—Application to Oklahoma. <i>Water Resources Research</i> , 2018, 54, 8019-8033.	1.7	70
516	Accumulation of Marcellus Formation Oil and Gas Wastewater Metals in Freshwater Mussel Shells. <i>Environmental Science & Technology</i> , 2018, 52, 10883-10892.	4.6	28
517	Characterizing Near-Surface Fractured-Rock Aquifers: Insights Provided by the Numerical Analysis of Electrical Resistivity Experiments. <i>Water (Switzerland)</i> , 2018, 10, 1117.	1.2	12
518	Furfural degradation through heat-activated persulfate: Impacts of simulated brine and elevated pressures. <i>Chemical Engineering Journal</i> , 2018, 353, 727-735.	6.6	34
519	Composition and treatment of effluent from shale gas production. <i>Clean Technologies and Environmental Policy</i> , 2018, 20, 1245-1257.	2.1	2
520	Atmospheric impacts of a natural gas development within the urban context of Morgantown, West Virginia. <i>Science of the Total Environment</i> , 2018, 639, 406-416.	3.9	15
521	Shallow groundwater salinization of the Niagara Peninsula, Ontario, Canada. <i>Geochemistry: Exploration, Environment, Analysis</i> , 2018, 18, 155-174.	0.5	4
522	Big Groundwater Data Sets Reveal Possible Rare Contamination Amid Otherwise Improved Water Quality for Some Analytes in a Region of Marcellus Shale Development. <i>Environmental Science & Technology</i> , 2018, 52, 7149-7159.	4.6	53
523	Can high volume hydraulic fracturing effects be detected in large watersheds? A case study of the South Fork Little Red River. <i>Current Opinion in Environmental Science and Health</i> , 2018, 3, 40-46.	2.1	4
524	Assessing unconventional natural gas development: Understanding risks in the context of the EU. <i>Current Opinion in Environmental Science and Health</i> , 2018, 3, 47-51.	2.1	6
525	Formation of regulated and unregulated disinfection byproducts during chlorination of algal organic matter extracted from freshwater and marine algae. <i>Water Research</i> , 2018, 142, 313-324.	5.3	101
526	Disclosing water-energy-economics nexus in shale gas development. <i>Applied Energy</i> , 2018, 225, 710-731.	5.1	15
527	Study on fracturing flowback fluid treatment technology for shale gas in Yangzhou. <i>IOP Conference Series: Earth and Environmental Science</i> , 2018, 121, 052002.	0.2	0
528	Tools for Unknown Identification. <i>Comprehensive Analytical Chemistry</i> , 2018, 79, 125-145.	0.7	2
529	Occurrence features and gas content analysis of marine and continental shales: A comparative study of Longmaxi Formation and Yanchang Formation. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 56, 504-522.	2.1	44

#	ARTICLE	IF	CITATIONS
530	Methane in groundwater before, during, and after hydraulic fracturing of the Marcellus Shale. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6970-6975.	3.3	51
531	Combined electrocoagulation and membrane distillation for treating high salinity produced waters. Journal of Membrane Science, 2018, 564, 82-96.	4.1	79
532	Review of plausible chemical migration pathways in Australian coal seam gas basins. International Journal of Coal Geology, 2018, 195, 280-303.	1.9	20
533	High-Pressure Reverse Osmosis for Energy-Efficient Hypersaline Brine Desalination: Current Status, Design Considerations, and Research Needs. Environmental Science and Technology Letters, 2018, 5, 467-475.	3.9	213
535	Insights into the rejection of barium and strontium by nanofiltration membrane from experimental and modeling analysis. Journal of Membrane Science, 2018, 564, 742-752.	4.1	27
536	Modelling the water transport behavior in organic-rich nanoporous shale with generalized lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2018, 127, 123-134.	2.5	36
537	Water resource selection and optimisation for shale gas developments in Australia: A combinatorial approach. Computers and Industrial Engineering, 2018, 124, 1-11.	3.4	4
538	Assessing Residential Exposure Risk from Spills of Flowback Water from Marcellus Shale Hydraulic Fracturing Activity. International Journal of Environmental Research and Public Health, 2018, 15, 727.	1.2	8
539	Frequency Analysis of Failure Scenarios from Shale Gas Development. International Journal of Environmental Research and Public Health, 2018, 15, 885.	1.2	4
540	Developing deep high-resolution concentration and ¹³ C isotope profiles for methane, ethane, and propane. Journal of Petroleum Science and Engineering, 2018, 170, 280-290.	2.1	7
541	Succession of toxicity and microbiota in hydraulic fracturing flowback and produced water in the Denverâ€“Julesburg Basin. Science of the Total Environment, 2018, 644, 183-192.	3.9	35
542	Analytical investigation of hydraulic fracture-induced seismicity and fault activation. Environmental Earth Sciences, 2018, 77, 1.	1.3	9
544	The metabolism of oil extraction: A bottom-up approach applied to the case of Ecuador. Energy Policy, 2018, 122, 63-74.	4.2	15
545	Investigation on the damage of high-temperature shale subjected to liquid nitrogen cooling. Journal of Natural Gas Science and Engineering, 2018, 57, 284-294.	2.1	95
546	Gas Transport in Shale Nanopores with Mobile High-Viscosity Water Film. Industrial & Engineering Chemistry Research, 2018, 57, 11219-11228.	1.8	6
547	Water Use in the United States Energy System: A National Assessment and Unit Process Inventory of Water Consumption and Withdrawals. Environmental Science & Technology, 2018, 52, 6695-6703.	4.6	77
548	A novel CO ₂ and pressure responsive viscoelastic surfactant fluid for fracturing. Fuel, 2018, 229, 79-87.	3.4	39
549	A combined ultrafiltrationâ€“reverse osmosis process for external reuse of Weiyuan shale gas flowback and produced water. Environmental Science: Water Research and Technology, 2018, 4, 942-955.	1.2	39

#	ARTICLE	IF	CITATIONS
550	New Equilibrator Design for Rapid Detection of Methane in Groundwater During Purging. <i>Environmental Engineering Science</i> , 2018, 35, 897-908.	0.8	2
551	Draft Genome Sequences of <i>Marinobacter</i> Strains Recovered from Utica Shale-Produced Fluids. <i>Genome Announcements</i> , 2018, 6, .	0.8	5
552	Bacterial Biomarkers of Marcellus Shale Activity in Pennsylvania. <i>Frontiers in Microbiology</i> , 2018, 9, 1697.	1.5	11
553	Setback distances for unconventional oil and gas development: Delphi study results. <i>PLoS ONE</i> , 2018, 13, e0202462.	1.1	12
554	Enhanced Oil Recovery (EOR) in Shale Oil Reservoirs. , 2018, , 269-290.		1
555	Spatial distribution and temporal variation of methane, ethane and propane background levels in shallow aquifers – A case study from Lower Saxony (Germany). <i>Journal of Hydrology: Regional Studies</i> , 2018, 19, 57-79.	1.0	9
556	Simulation of a hydraulic fracturing wastewater surface spill on agricultural soil. <i>Science of the Total Environment</i> , 2018, 645, 229-234.	3.9	12
557	The treatment of flowback water in a sequencing batch reactor with aerobic granular sludge: Performance and microbial community structure. <i>Chemosphere</i> , 2018, 211, 1065-1072.	4.2	25
558	Analysis on integrity of cement sheath in the vertical section of wells during hydraulic fracturing. <i>Journal of Petroleum Science and Engineering</i> , 2018, 168, 370-379.	2.1	51
559	Desalination of shale gas wastewater: Thermal and membrane applications for zero-liquid discharge. , 2018, , 399-431.		4
560	Formation of disinfection by-products under influence of shale gas produced water. <i>Science of the Total Environment</i> , 2019, 647, 744-751.	3.9	20
561	Dependency of flow and transport properties on aperture distributions and compression states. <i>Geophysical Prospecting</i> , 2019, 67, 900-912.	1.0	7
562	Governance of shale gas development: Insights from the Bloomington school of institutional analysis. <i>Review of Austrian Economics</i> , 2019, 32, 159-179.	0.7	1
563	Synthesis and Acidizing Corrosion Inhibition Performance of N-Doped Carbon Quantum Dots. <i>Russian Journal of Applied Chemistry</i> , 2019, 92, 848-856.	0.1	16
564	Water Vapor Sorption Properties of Illinois Shales Under Dynamic Water Vapor Conditions: Experimentation and Modeling. <i>Water Resources Research</i> , 2019, 55, 7212-7228.	1.7	71
565	Characterizing and modeling environmental emergency of unconventional oil and gas spills in the USA: Life-year versus spill factors. <i>Journal of Cleaner Production</i> , 2019, 237, 117794.	4.6	1
566	Geochemical and microbial characterizations of flowback and produced water in three shale oil and gas plays in the central and western United States. <i>Water Research</i> , 2019, 164, 114942.	5.3	64
567	Interpreting Water Uptake by Shale with Ion Exchange, Surface Complexation, and Disjoining Pressure. <i>Energy & Fuels</i> , 2019, 33, 8250-8258.	2.5	20

#	ARTICLE	IF	CITATIONS
568	Hydro-biogeochemical impacts of fugitive methane on a shallow unconfined aquifer. <i>Science of the Total Environment</i> , 2019, 690, 1342-1354.	3.9	28
569	Geophysical response to simulated methane migration in groundwater based on a controlled injection experiment in a sandy unconfined aquifer. <i>Journal of Applied Geophysics</i> , 2019, 168, 59-70.	0.9	4
570	Enhanced Tight Oil Recovery by Volume Fracturing in Chang 7 Reservoir: Experimental Study and Field Practice. <i>Energies</i> , 2019, 12, 2419.	1.6	11
571	Exploring How to Use Groundwater Chemistry to Identify Migration of Methane near Shale Gas Wells in the Appalachian Basin. <i>Environmental Science & Technology</i> , 2019, 53, 9317-9327.	4.6	20
572	Adsorption and dissolution behaviors of CO ₂ and n-alkane mixtures in shale: Effects of the alkane type, shale properties and temperature. <i>Fuel</i> , 2019, 253, 1361-1370.	3.4	23
573	In Situ Sequestration of a Hydraulic Fracturing Fluid in Longmaxi Shale Gas Formation in the Sichuan Basin. <i>Energy & Fuels</i> , 2019, 33, 6983-6994.	2.5	18
574	Feasibility of a hybrid membrane-based process (MF-FO-MD) for fracking wastewater treatment. <i>Separation and Purification Technology</i> , 2019, 229, 115802.	3.9	33
575	A Framework for Climate Change-Related Research to Inform Environmental Protection. <i>Environmental Management</i> , 2019, 64, 245-257.	1.2	7
576	Chemical and bioassay assessment of waters related to hydraulic fracturing at a tight gas production site. <i>Science of the Total Environment</i> , 2019, 690, 636-646.	3.9	10
577	Membrane-based treatment of shale oil and gas wastewater: The current state of knowledge. <i>Frontiers of Environmental Science and Engineering</i> , 2019, 13, 1.	3.3	44
578	Reuse of shale gas flowback and produced water: Effects of coagulation and adsorption on ultrafiltration, reverse osmosis combined process. <i>Science of the Total Environment</i> , 2019, 689, 47-56.	3.9	55
579	Fracking and infant mortality: fresh evidence from Oklahoma. <i>Environmental Science and Pollution Research</i> , 2019, 26, 32360-32367.	2.7	11
580	Barometric-pumping controls fugitive gas emissions from a vadose zone natural gas release. <i>Scientific Reports</i> , 2019, 9, 14080.	1.6	43
582	Chemical and physicochemical properties of formation waters of the oil and gas industry. <i>Journal of Hydrology</i> , 2019, 578, 124011.	2.3	11
583	Food Crop Irrigation with Oilfield-Produced Water Suppresses Plant Immune Response. <i>Environmental Science and Technology Letters</i> , 2019, 6, 656-661.	3.9	24
586	Water Availability Assessment of Shale Gas Production in the Weiyuan Play, China. <i>Sustainability</i> , 2019, 11, 940.	1.6	15
587	Impregnation of novel additives in cement for preventing fluid migration through the cement sheath in oil well. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	3
588	An Integrated Machine-Learning Approach to Shale-Gas Supply-Chain Optimization and Refrac Candidate Identification. <i>SPE Reservoir Evaluation and Engineering</i> , 2019, 22, 1201-1224.	1.1	17

#	ARTICLE	IF	CITATIONS
589	Willingness to Pay for Enhanced Water Security in a Rapidly Developing Shale Gas Region in China. <i>Water</i> (Switzerland), 2019, 11, 1888.	1.2	9
590	Wettability alteration induced water uptake in shale oil reservoirs: A geochemical interpretation for oil-brine-OM interaction during hydraulic fracturing. <i>International Journal of Coal Geology</i> , 2019, 213, 103277.	1.9	31
591	Comprehensive groundwater safety assessment under potential shale gas contamination based on integrated analysis of reliabilityâ€“resilienceâ€“vulnerability and gas migration index. <i>Journal of Hydrology</i> , 2019, 578, 124072.	2.3	13
592	Effect of CO ₂ and H ₂ O on the behavior of shale gas confined inside calcite [104] slit-like nanopore: a molecular dynamics simulation study. <i>Journal of Molecular Modeling</i> , 2019, 25, 293.	0.8	18
593	Methane emissions from groundwater pumping in the USA. <i>Npj Climate and Atmospheric Science</i> , 2019, 2, .	2.6	13
594	Geochemical conditions conducive for retention of trace elements and radionuclides during shaleâ€“fluid interactions. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 1764-1776.	1.7	7
595	Establishing baseline biological conditions and monitoring metrics for stream benthic macroinvertebrates and fish in an area of potential shale gas development. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2019, 76, 1480-1494.	0.7	1
596	Impact of effective polarisability models on the near-field interaction of dissolved greenhouse gases at ice and air interfaces. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 21296-21304.	1.3	7
597	Water scarcity assessment based on estimated ultimate energy recovery and water footprint framework during shale gas production in the Changning play. <i>Journal of Cleaner Production</i> , 2019, 241, 118312.	4.6	23
598	FT-ICR MS and Orbitrap mass spectrometry approaches in environmental chemistry. , 2019, , 407-423.		2
599	Experimental study on the relationship between the matric potential and methane breakthrough pressure of partially water-saturated shale fractures. <i>Journal of Hydrology</i> , 2019, 578, 124044.	2.3	12
600	Assessing changes in groundwater chemistry in landscapes with more than 100 years of oil and gas development. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 384-396.	1.7	14
601	Degradation of polyethylene glycols and polypropylene glycols in microcosms simulating a spill of produced water in shallow groundwater. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 256-268.	1.7	27
602	Characterization and implications of solids associated with hydraulic fracturing flowback and produced water from the Duvernay Formation, Alberta, Canada. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 242-255.	1.7	26
603	Effect of expandable cement on increasing sealing ability of cement sheath in shale gas wells. <i>Journal of Petroleum Science and Engineering</i> , 2019, 176, 850-861.	2.1	11
604	Separation of light hydrocarbons with ionic liquids: A review. <i>Chinese Journal of Chemical Engineering</i> , 2019, 27, 1374-1382.	1.7	30
605	Evaluating the performance of gravity-driven membrane filtration as desalination pretreatment of shale gas flowback and produced water. <i>Journal of Membrane Science</i> , 2019, 587, 117187.	4.1	48
606	In situ transformation of ethoxylate and glycol surfactants by shale-colonizing microorganisms during hydraulic fracturing. <i>ISME Journal</i> , 2019, 13, 2690-2700.	4.4	18

#	ARTICLE	IF	CITATIONS
607	Transboundary extraction of groundwater in the presence of hydraulic fracturing. <i>Natural Resource Modelling</i> , 2019, 32, .	0.8	1
608	Interaction of shale gas recovery and moisture transport in post two-phase flowback stage. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 68, 102897.	2.1	14
609	Neutrosophic Optimization Model and Computational Algorithm for Optimal Shale Gas Water Management under Uncertainty. <i>Symmetry</i> , 2019, 11, 544.	1.1	36
610	A baseline of atmospheric greenhouse gases for prospective UK shale gas sites. <i>Science of the Total Environment</i> , 2019, 684, 1-13.	3.9	12
611	A rheological approach to study the early-age hydration of oil well cement: Effect of temperature, pressure and nanoclay. <i>Construction and Building Materials</i> , 2019, 215, 119-127.	3.2	43
612	Targeted Permeability Control in the Subsurface via Calcium Silicate Carbonation. <i>Environmental Science & Technology</i> , 2019, 53, 7136-7144.	4.6	10
613	Conventional Oilâ€”The Forgotten Part of the Waterâ€”Energy Nexus. <i>Ground Water</i> , 2019, 57, 669-677.	0.7	21
614	Effects of Moisture Contents on Shale Gas Recovery and CO ₂ Sequestration. <i>Langmuir</i> , 2019, 35, 8716-8725.	1.6	53
615	Osmosis, from molecular insights to large-scale applications. <i>Chemical Society Reviews</i> , 2019, 48, 3102-3144.	18.7	177
616	Baseline groundwater monitoring for shale gas extraction: definition of baseline conditions and recommendations from a real site (Wysin, Northern Poland). <i>Acta Geophysica</i> , 2019, 67, 365-384.	1.0	8
617	The Impact of Re-Injecting Flowback Fluids on Formation Damage. Case Study: Marcellus Shale. , 2019, , .		4
618	Waterless fluids in hydraulic fracturing â€” A review. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 67, 214-224.	2.1	61
619	Impact of shale gas development on regional water resources in China from water footprint assessment view. <i>Science of the Total Environment</i> , 2019, 679, 317-327.	3.9	27
620	Occurrence and fate of methane leakage from cut and buried abandoned gas wells in the Netherlands. <i>Science of the Total Environment</i> , 2019, 659, 773-782.	3.9	53
621	Organoclays used as colloidal and rheological additives in oil-based drilling fluids: An overview. <i>Applied Clay Science</i> , 2019, 177, 63-81.	2.6	56
622	Using permutational and multivariate statistics to understand inorganic well water chemistry and the occurrence of methane in groundwater, southeastern New Brunswick, Canada. <i>Science of the Total Environment</i> , 2019, 675, 667-678.	3.9	7
623	Numerical investigation of shut-in time on stress evolution and tight oil production. <i>Journal of Petroleum Science and Engineering</i> , 2019, 179, 716-733.	2.1	31
624	Accurate imaging of hydraulic fractures using templated electrical resistivity tomography. <i>Geothermics</i> , 2019, 81, 74-87.	1.5	11

#	ARTICLE	IF	CITATIONS
625	Effects of Moisture and Salinity on Methane Adsorption in Kerogen: A Molecular Simulation Study. <i>Energy & Fuels</i> , 2019, 33, 5368-5376.	2.5	37
626	Influence of horizontal control holes on fracture height containment in low permeability layered coal measure gas reservoirs. <i>Journal of Petroleum Science and Engineering</i> , 2019, 179, 104-111.	2.1	8
627	Improved understanding of proppant embedment behavior under reservoir conditions: A review study. <i>Powder Technology</i> , 2019, 352, 170-192.	2.1	48
628	An Analysis of Environmental and Economic Impacts of Fossil Fuel Production in the U.S. from 2001 to 2015. <i>Society and Natural Resources</i> , 2019, 32, 693-708.	0.9	13
629	The osmotic effect of hyper-saline hydraulic fracturing fluid on rainbow trout, <i>Oncorhynchus mykiss</i> . <i>Aquatic Toxicology</i> , 2019, 211, 1-10.	1.9	18
630	Surface Modification of PVDF Membranes for Treating Produced Waters by Direct Contact Membrane Distillation. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 685.	1.2	33
631	Glutaraldehyde inhibits biological treatment of organic additives in hydraulic fracturing produced water. <i>Science of the Total Environment</i> , 2019, 666, 1161-1168.	3.9	16
632	Adsorption-induced pore blocking and its mechanisms in nanoporous shale due to interactions with supercritical CO ₂ . <i>Journal of Petroleum Science and Engineering</i> , 2019, 178, 74-81.	2.1	38
633	Baseline geochemical study of the Aberpergwm mining site in the South Wales Coalfield. <i>Journal of Geochemical Exploration</i> , 2019, 202, 100-112.	1.5	6
634	Shale gas transport in wedged nanopores with water films. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 66, 217-232.	2.1	7
635	The demographics of fracking: A spatial analysis for four U.S. states. <i>Ecological Economics</i> , 2019, 161, 202-215.	2.9	29
636	Assessing the sustainability of the shale gas industry by combining DPSIRM model and RAGA-PP techniques: An empirical analysis of Sichuan and Chongqing, China. <i>Energy</i> , 2019, 176, 353-364.	4.5	40
637	Electrospun nanofibrous membranes in membrane distillation: Recent developments and future perspectives. <i>Separation and Purification Technology</i> , 2019, 221, 44-63.	3.9	75
638	The Food-Energy-Water Nexus, Regional Sustainability, and Hydraulic Fracturing: An Integrated Assessment of the Denver Region. <i>Case Studies in the Environment</i> , 2019, 3, 1-21.	0.4	6
639	A systematic assessment of carcinogenicity of chemicals in hydraulic-fracturing fluids and flowback water. <i>Environmental Pollution</i> , 2019, 251, 128-136.	3.7	13
640	Statistical Considerations for Interpreting Censored and Intermittent Surface Water Monitoring Data. <i>ACS Symposium Series</i> , 2019, , 365-376.	0.5	1
641	Effect of desiccation on shut-in benefits in removing water blockage in tight water-wet cores. <i>Fuel</i> , 2019, 244, 314-323.	3.4	35
642	Status and Influence of Shale Gas Well Integrity Failure. <i>Materials Science Forum</i> , 2019, 944, 892-897.	0.3	0

#	ARTICLE	IF	CITATIONS
643	Advancing knowledge of gas migration and fugitive gas from energy wells in northeast British Columbia, Canada. , 2019, 9, 134-151.		32
644	Techno-economic analysis of ion concentration polarization desalination for high salinity desalination applications. Water Research, 2019, 155, 162-174.	5.3	20
645	Radon in groundwater baseline study prior to unconventional shale gas development and hydraulic fracturing in the Karoo Basin (South Africa). Applied Radiation and Isotopes, 2019, 147, 7-13.	0.7	5
646	A critical review of risks, characteristics, and treatment strategies for potentially toxic elements in wastewater from shale gas extraction. Environment International, 2019, 125, 452-469.	4.8	112
647	Towards defining a baseline status of scarce groundwater resources in anticipation of hydraulic fracturing in the Eastern Cape Karoo, South Africa: salinity, aquifer yields and groundwater levels. Geological Society Special Publication, 2019, 479, 129-145.	0.8	5
648	Mechanism of Ultra-Low Water Recovery Rate with High Productivity in Fuling Gas Shale Filed. , 2019, , .		1
649	Design and Scheduling of Desalination System for Shale Gas Flowback Wastewater Treatment. Computer Aided Chemical Engineering, 2019, 47, 53-58.	0.3	1
650	Quantifying the social equity state of an energy system: environmental and labor market equity of the shale gas boom in Appalachia. Environmental Research Letters, 2019, 14, 124072.	2.2	10
651	Cumulative environmental and employment impacts of the shale gas boom. Nature Sustainability, 2019, 2, 1122-1131.	11.5	34
652	Multicomponent Ionic Transport Modeling in Physically and Electrostatically Heterogeneous Porous Media With PhreeqcRM Coupling for Geochemical Reactions. Water Resources Research, 2019, 55, 11121-11143.	1.7	43
653	Pore Structure Alteration Characteristics of Different Mineralogical Composition Shale during Shale-Fracturing Fluid Physical-Chemical Interactions. Geofluids, 2019, 2019, 1-13.	0.3	5
654	Fracturing fluid retention in shale gas reservoirs:mechanisms and functions. Arabian Journal of Geosciences, 2019, 12, 1.	0.6	15
655	Towards Quantifying the Likelihood of Water Resource Impacts from Unconventional Gas Development. Ground Water, 2019, 57, 547-561.	0.7	12
656	A Critical Review of State-of-the-Art and Emerging Approaches to Identify Fracking-Derived Gases and Associated Contaminants in Aquifers. Environmental Science & Technology, 2019, 53, 1063-1077.	4.6	56
657	Use and effectiveness of health impact assessment in the energy and natural resources sector in the United States, 2007 – 2016. Impact Assessment and Project Appraisal, 2019, 37, 17-32.	1.0	3
658	Development of Functionalized Proppant for the Control of NORM in Marcellus Shale Produced Water. Environmental Science & Technology, 2019, 53, 373-382.	4.6	9
659	A review of microscopic seepage mechanism for shale gas extracted by supercritical CO2 flooding. Fuel, 2019, 238, 412-424.	3.4	98
660	A Review of Analytical Methods for Characterizing the Potential Environmental Impacts of Unconventional Oil and Gas Development. Analytical Chemistry, 2019, 91, 689-703.	3.2	22

#	ARTICLE	IF	CITATIONS
661	Integrated shale gas supply chain design and water management under uncertainty. <i>AIChE Journal</i> , 2019, 65, 924-936.	1.8	19
662	Characterization of transport through polymers for fracking fluid treatment and organic acid concentration in extractive membrane bioreactors. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 690-700.	1.6	5
663	Assessing potential impacts of shale gas development on shallow aquifers through upward fluid migration: A multi-disciplinary approach applied to the Utica Shale in eastern Canada. <i>Marine and Petroleum Geology</i> , 2019, 100, 466-483.	1.5	10
664	Treatment of fracking wastewaters via forward osmosis: Evaluation of suitable organic draw solutions. <i>Desalination</i> , 2019, 452, 149-158.	4.0	29
665	Water Footprint Assessment for Coal-to-Gas in China. <i>Natural Resources Research</i> , 2019, 28, 1447-1459.	2.2	11
666	Effective treatment of shale oil and gas produced water by membrane distillation coupled with precipitative softening and walnut shell filtration. <i>Desalination</i> , 2019, 454, 82-90.	4.0	92
667	Predicting natural methane occurrence in domestic groundwater wells in the Marcellus Shale region: A case for empirical modelling approaches. <i>Hydrological Processes</i> , 2019, 33, 1022-1028.	1.1	3
668	Potential and implemented membrane-based technologies for the treatment and reuse of flowback and produced water from shale gas and oil plays: A review. <i>Desalination</i> , 2019, 455, 34-57.	4.0	233
669	Identification, spatial extent and distribution of fugitive gas migration on the well pad scale. <i>Science of the Total Environment</i> , 2019, 652, 356-366.	3.9	37
670	Methane Emissions from the Marcellus Shale in Southwestern Pennsylvania and Northern West Virginia Based on Airborne Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 1862-1878.	1.2	26
671	Water quality perceptions and natural resources Extraction: A matter of geography?. <i>Journal of Environmental Management</i> , 2019, 234, 379-386.	3.8	6
672	Fuzzy clustering analysis of hydraulic fracturing additives for environmental and human health risk mitigation. <i>Clean Technologies and Environmental Policy</i> , 2019, 21, 39-53.	2.1	12
673	Estimation of the water cycle related to shale gas production under high data uncertainties: Dutch perspective. <i>Journal of Environmental Management</i> , 2019, 231, 483-493.	3.8	14
674	Does type of well drilling matter for local governments' fund balances?. <i>Journal of Public Affairs</i> , 2019, 19, e1878.	1.7	0
675	The water-energy-food nexus of unconventional oil and gas extraction in the Vaca Muerta Play, Argentina. <i>Journal of Cleaner Production</i> , 2019, 207, 743-750.	4.6	29
676	Data-driven distributionally robust optimization of shale gas supply chains under uncertainty. <i>AIChE Journal</i> , 2019, 65, 947-963.	1.8	37
677	An integrated coagulation-ultrafiltration-nanofiltration process for internal reuse of shale gas flowback and produced water. <i>Separation and Purification Technology</i> , 2019, 211, 310-321.	3.9	98
678	Is Shale Gas a Good Bridge to Renewables? An Application to Europe. <i>Environmental and Resource Economics</i> , 2019, 72, 721-762.	1.5	5

#	ARTICLE	IF	CITATIONS
679	Mineralogy and geochemical investigation of Cambrian and Ordovician-Silurian shales in South China: Implication for potential environment pollutions. Geological Journal, 2020, 55, 477-500.	0.6	5
680	Shut-In Effect in Removing Water Blockage in Shale-Oil Reservoirs With Stress-Dependent Permeability Considered. SPE Reservoir Evaluation and Engineering, 2020, 23, 081-094.	1.1	23
681	Determining conventional and unconventional oil and gas well brines in natural sample II: Cation analyses with ICP-MS and ICP-OES. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2020, 55, 11-23.	0.9	10
682	Simultaneous recovery of ammonium, potassium and magnesium from produced water by struvite precipitation. Chemical Engineering Journal, 2020, 382, 123001.	6.6	86
683	Organic geochemical and petrophysical characteristics of transitional coal-measure shale gas reservoirs and their relationships with sedimentary environments: A case study from the Carboniferous-Permian Qinshui Basin, China. Journal of Petroleum Science and Engineering, 2020, 184, 106510.	2.1	22
684	Contentious baselining: The politics of "pre-drilling" environmental measures in shale gas territory. Environment and Planning E, Nature and Space, 2020, 3, 76-94.	1.6	9
685	Role of biogeochemistry in efficient shale oil and gas production. Fuel, 2020, 259, 116207.	3.4	24
686	Molecular simulations of competitive adsorption behavior between CH ₄ -C ₂ H ₆ in K-illite clay at supercritical conditions. Fuel, 2020, 260, 116358.	3.4	38
687	Bibliography and additional resources. , 2020, , 299-322.		0
688	Quantifying, comparing, and contrasting forest change pattern from shale gas infrastructure development in the British Columbia's shale gas plays. International Journal of Sustainable Development and World Ecology, 2020, 27, 114-128.	3.2	8
689	An extended overview of natural gas use embodied in world economy and supply chains: Policy implications from a time series analysis. Energy Policy, 2020, 137, 111068.	4.2	31
690	Comparative study of well soaking timing (pre vs. post flowback) for water blockage removal from matrix-fracture interface. Petroleum, 2020, 6, 286-292.	1.3	25
691	Probabilistic forecasting and economic evaluation of pressure-drawdown effect in unconventional oil reservoirs under uncertainty of water blockage severity. Journal of Petroleum Science and Engineering, 2020, 185, 106646.	2.1	19
692	Water and hydraulic fracturing. , 2020, , 233-262.		0
693	Numerical Investigation of a Methane Leakage from a Geothermal Well into a Shallow Aquifer. Ground Water, 2020, 58, 598-610.	0.7	6
694	Fault Reactivation and Induced Seismicity During Multistage Hydraulic Fracturing: Microseismic Analysis and Geomechanical Modeling. SPE Journal, 2020, 25, 692-711.	1.7	38
695	Synergistic utilization of inherent halides and alcohols in hydraulic fracturing wastewater for radical-based treatment: A case study of di-(2-ethylhexyl) phthalate removal. Journal of Hazardous Materials, 2020, 384, 121321.	6.5	16
696	Measuring the air pollution cost of shale gas development in China. Energy and Environment, 2020, 31, 1098-1111.	2.7	3

#	ARTICLE	IF	CITATIONS
697	Experimental investigation of the effects of different types of fracturing fluids on the pore structure characteristics of Shale Reservoir Rocks. <i>Energy Exploration and Exploitation</i> , 2020, 38, 682-702.	1.1	5
698	Measuring forest change patterns from oil and gas land use dynamics in northeastern British Columbia, 1975 to 2017. <i>Environmental Monitoring and Assessment</i> , 2020, 192, 24.	1.3	6
699	Sustainable reuse of shale gas wastewater by pre-ozonation with ultrafiltration-reverse osmosis. <i>Chemical Engineering Journal</i> , 2020, 392, 123743.	6.6	60
700	Fit-for-purpose treatment of produced water with iron and polymeric coagulant for reuse in hydraulic fracturing: Temperature effects on aggregation and high-rate sedimentation. <i>Water Research</i> , 2020, 170, 115330.	5.3	28
701	Fluids management. , 2020, , 321-372.		0
702	A framework to determine sensitive inorganic monitoring indicators for tracing groundwater contamination by produced formation water from shale gas development in the Fuling Gasfield, SW China. <i>Journal of Hydrology</i> , 2020, 581, 124403.	2.3	27
703	Detection of spills related to natural gas production. <i>Water Environment Research</i> , 2020, 92, 1104-1110.	1.3	1
704	Implications for Heavy Metal Extractions from Hyper Saline Brines with [NTf ₂] ⁻ Ionic Liquids: Performance, Solubility, and Cost. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 12536-12544.	1.8	7
705	Reservoir Characteristics of the Lower Silurian Longmaxi Shale in Zhaotong Region, Southern China. <i>Geofluids</i> , 2020, 2020, 1-11.	0.3	5
706	The impact of water scarcity on support for hydraulic fracturing regulation: A water-energy nexus study. <i>Energy Policy</i> , 2020, 146, 111718.	4.2	12
707	Impact of unconventional natural gas development on regional water resources and market supply in China from the perspective of game analysis. <i>Energy Policy</i> , 2020, 145, 111750.	4.2	13
708	Heterogeneous preferences for shale water management: Evidence from a choice experiment in Fuling shale gas field, southwest China. <i>Energy Policy</i> , 2020, 147, 111831.	4.2	13
709	Influence of Reactive Flow Conditions on Barite Scaling in Marcellus Shale during Stimulation and Shut-In Periods of Hydraulic Fracturing. <i>Energy & Fuels</i> , 2020, 34, 13625-13635.	2.5	22
710	Efficient adsorption of organic matters and ions by porous biochar aerogel as pre-treatment of ultrafiltration for shale gas wastewater reuse. <i>Chemical Engineering Journal Advances</i> , 2020, 2, 100011.	2.4	14
711	Fracking, farming, and water. <i>Energy Policy</i> , 2020, 146, 111799.	4.2	6
712	An outlier detection approach for water footprint assessments in shale formations: case Eagle Ford play (Texas). <i>Environmental Earth Sciences</i> , 2020, 79, 1.	1.3	2
713	Membrane distillation assisted by heat pump for improved desalination energy efficiency. <i>Desalination</i> , 2020, 496, 114694.	4.0	27
714	Costs of increasing oil and gas setbacks are initially modest but rise sharply. <i>Energy Policy</i> , 2020, 146, 111749.	4.2	10

#	ARTICLE	IF	CITATIONS
715	Development of Shale Gas in China and Treatment Options for Wastewater Produced from the Exploitation: Sustainability Lessons from the United States. <i>Journal of Environmental Engineering, ASCE</i> , 2020, 146, .	0.7	13
716	Methane oxidation and methylotroph population dynamics in groundwater mesocosms. <i>Environmental Microbiology</i> , 2020, 22, 1222-1237.	1.8	18
717	Rapid classification of primary cementing flows. <i>Chemical Engineering Science</i> , 2020, 219, 115506.	1.9	6
718	Reservoir-scale study of oil shale hydration swelling and thermal expansion after hydraulic fracturing. <i>Journal of Petroleum Science and Engineering</i> , 2020, 195, 107619.	2.1	15
719	Review on the Evaluation of the Impacts of Wastewater Disposal in Hydraulic Fracturing Industry in the United States. <i>Technologies</i> , 2020, 8, 67.	3.0	30
720	Transport of produced water through reactive porous media. <i>Water Research</i> , 2020, 185, 116258.	5.3	3
721	A Comprehensive Guide to Different Fracturing Technologies: A Review. <i>Energies</i> , 2020, 13, 3326.	1.6	32
722	Gas-water relative permeability of unconventional reservoir rocks: Hysteresis and influence on production after shut-in. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 82, 103511.	2.1	13
723	Experimental investigation on the effects of thermal treatment on the physical and mechanical properties of shale. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 82, 103496.	2.1	47
724	Assessing Contamination of Stream Networks near Shale Gas Development Using a New Geospatial Tool. <i>Environmental Science & Technology</i> , 2020, 54, 8632-8639.	4.6	11
725	Nanoengineering of cement using graphite platelets to refine inherent microstructural defects. <i>Composites Part B: Engineering</i> , 2020, 202, 108277.	5.9	21
726	Hybrid Multiobjective Optimization Using Deterministic and Metaheuristic Techniques for Flowback Water Reusing in Hydraulic Fracturing Processes. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 15298-15308.	1.8	11
727	Evaluating Domestic Well Vulnerability to Contamination From Unconventional Oil and Gas Development Sites. <i>Water Resources Research</i> , 2020, 56, e2020WR028005.	1.7	24
728	Propensity for fugitive gas migration in glaciofluvial deposits: An assessment of near-surface hydrofacies in the Peace Region, Northeastern British Columbia. <i>Science of the Total Environment</i> , 2020, 749, 141459.	3.9	9
729	Estimating the Fracturing Fluid Recovery in Shale Gas Reservoirs: Experiments and Field Data Analysis. <i>Arabian Journal for Science and Engineering</i> , 2020, 45, 7851-7861.	1.7	3
730	Treatment of hydraulic fracturing flowback fluid by FeO-persulfate (PS) process. <i>E3S Web of Conferences</i> , 2020, 167, 01005.	0.2	1
731	Advancing CCU Technologies Pursuant to the SDGs: A Challenge for Policy Making. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	25
733	Intermediate-Scale Laboratory Investigation of Stray Gas Migration Impacts: Transient Gas Flow and Surface Expression. <i>Environmental Science & Technology</i> , 2020, 54, 12493-12501.	4.6	16

#	ARTICLE	IF	CITATIONS
734	Study on Competitive Adsorption and Displacing Properties of CO ₂ Enhanced Shale Gas Recovery: Advances and Challenges. <i>Geofluids</i> , 2020, 2020, 1-15.	0.3	61
735	Biological effects of inhaled hydraulic fracturing sand dust. V. Pulmonary inflammatory, cytotoxic and oxidant effects. <i>Toxicology and Applied Pharmacology</i> , 2020, 408, 115280.	1.3	10
736	CFD-DEM simulation of proppant transport by supercritical CO ₂ in a vertical planar fracture. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 84, 103647.	2.1	38
737	Chemical characterization in hydraulic fracturing flowback and produced water (HF-FPW) of shale gas in Sichuan of China. <i>Environmental Science and Pollution Research</i> , 2020, 27, 26532-26542.	2.7	31
738	Patch-Based Multiscale Algorithm for Flow and Reactive Transport in Fracture-Microcrack Systems in Shales. <i>Water Resources Research</i> , 2020, 56, e2019WR025960.	1.7	7
739	Intermediate-Scale Laboratory Investigation of Stray Gas Migration Impacts: Methane Source Architecture and Dissolution. <i>Environmental Science & Technology</i> , 2020, 54, 6299-6307.	4.6	18
740	Metals Coprecipitation with Barite: Nano-XRF Observation of Enhanced Strontium Incorporation. <i>Environmental Engineering Science</i> , 2020, 37, 235-245.	0.8	22
741	Development potential evaluation of CO ₂ -EOR in abandoned coal mines. , 2020, 10, 643-658.		9
742	Shale gas development has limited effects on stream biology and geochemistry in a gradient-based, multiparameter study in Pennsylvania. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 3670-3677.	3.3	22
743	Compartmentalisation and groundwater-surface water interactions in a prospective shale gas basin: Assessment using variance analysis and multivariate statistics on water quality data. <i>Hydrological Processes</i> , 2020, 34, 3271-3294.	1.1	1
744	Hybrid FEM and peridynamic simulation of hydraulic fracture propagation in saturated porous media. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 366, 113101.	3.4	100
745	Zero Liquid Discharge of Ultrahigh-Salinity Brines with Temperature Swing Solvent Extraction. <i>Environmental Science & Technology</i> , 2020, 54, 9124-9131.	4.6	52
746	Longitudinal interference analysis of shale gas multi-stage fracturing horizontal wells upon high-precision pressure test. <i>Energy Science and Engineering</i> , 2020, 8, 2387-2401.	1.9	7
747	Molecular insight on competitive adsorption and diffusion characteristics of shale gas in water-bearing channels. <i>Fuel</i> , 2020, 278, 118406.	3.4	27
748	Hydromechanical bond-based peridynamic model for pressurized and fluid-driven fracturing processes in fissured porous rocks. <i>International Journal of Rock Mechanics and Mining Sciences</i> , 2020, 132, 104383.	2.6	47
749	A smart recyclable VES fluid for high temperature and high pressure fracturing. <i>Journal of Petroleum Science and Engineering</i> , 2020, 190, 107097.	2.1	18
750	Transport model for shale gas well leakage through the surrounding fractured zones of a longwall mine. <i>International Journal of Mining Science and Technology</i> , 2020, 30, 635-641.	4.6	19
751	Effects of italicized angle and turning angle on shale gas nanoflows in non-straight nanopores: A nonequilibrium molecular dynamics study. <i>Fuel</i> , 2020, 278, 118275.	3.4	6

#	ARTICLE	IF	CITATIONS
752	Biogeochemistry and the associated redox signature of co-produced water from coalbed methane wells in the Shizhuangnan block in the southern Qinshui Basin, China. Energy Exploration and Exploitation, 2020, 38, 1034-1053.	1.1	3
753	Assessing Resilience to Energy Poverty in Europe through a Multi-Criteria Analysis Framework. Sustainability, 2020, 12, 4899.	1.6	12
754	Improving precision in regional scale numerical simulations of groundwater flow into underground openings. Engineering Geology, 2020, 274, 105727.	2.9	10
755	Critical Fluid Injection Volumes for Uncontrolled Fracture Ascent. Geophysical Research Letters, 2020, 47, e2020GL087774.	1.5	12
756	A Laboratory Study of the Impact of Reinjecting Flowback Fluids on Formation Damage in the Marcellus Shale. SPE Journal, 2020, 25, 788-799.	1.7	15
757	Household Water Security: An Analysis of Water Affect in the Context of Hydraulic Fracturing in West Virginia, Appalachia. Water (Switzerland), 2020, 12, 147.	1.2	14
758	Laboratory investigation of free-phase stray gas migration in shallow aquifers using modified light transmission. Advances in Water Resources, 2020, 139, 103543.	1.7	21
759	Optimal Design of a UF-RO Treatment System for Shale Gas Fracturing Flowback Wastewater. Industrial & Engineering Chemistry Research, 2020, 59, 5905-5920.	1.8	6
760	Shale gas produced water management using membrane distillation: An optimization-based approach. Resources, Conservation and Recycling, 2020, 158, 104803.	5.3	27
761	Highly Efficient Bromide Removal from Shale Gas Produced Water by Unactivated Peroxymonosulfate for Controlling Disinfection Byproduct Formation in Impacted Water Supplies. Environmental Science & Technology, 2020, 54, 5186-5196.	4.6	11
762	Reusing oil and gas produced water for agricultural irrigation: Effects on soil health and the soil microbiome. Science of the Total Environment, 2020, 722, 137888.	3.9	41
763	The Use of Noble Gas Isotopes in Detecting Methane Contamination of Groundwater in Shale Gas Development Areas: An Overview of Technology and Methods. Analytical Sciences, 2020, 36, 521-530.	0.8	1
764	Baseline Groundwater Quality before Shale Gas Development in Xishui, Southwest China: Analyses of Hydrochemistry and Multiple Environmental Isotopes (2H, 18O, 13C, 87Sr/86Sr, 11B, and Noble Gas) Tj ETQq0 0 0 rgt /Over block 10 Tf		
765	Proximity to oil wells in North Dakota does not impact nest success of ducks but lowers nest densities. Condor, 2020, 122, .	0.7	14
766	Insights from mixing calculations and geochemical modeling of Montney Formation post hydraulic fracturing flowback water chemistry. Journal of Petroleum Science and Engineering, 2020, 195, 107589.	2.1	18
767	Are we modeling the properties of unconventional shales correctly?. Fuel, 2020, 267, 117316.	3.4	12
768	Development of smart viscoelastic surfactants and its applications in fracturing fluid: A review. Journal of Petroleum Science and Engineering, 2020, 190, 107107.	2.1	76
769	Will Water Issues Constrain Oil and Gas Production in the United States?. Environmental Science & Technology, 2020, 54, 3510-3519.	4.6	65

#	ARTICLE	IF	CITATIONS
770	Phase field modeling of hydraulic fracture propagation in transversely isotropic poroelastic media. <i>Acta Geotechnica</i> , 2020, 15, 2599-2618.	2.9	39
771	Phase field method for quasi-static hydro-fracture in porous media under stress boundary condition considering the effect of initial stress field. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 107, 102523.	2.1	47
772	Techno-economic analysis of converting oil & gas produced water into valuable resources. <i>Desalination</i> , 2020, 481, 114381.	4.0	32
773	Water use for shale gas development in China's Fuling shale gas field. <i>Journal of Cleaner Production</i> , 2020, 256, 120680.	4.6	28
774	Gas well integrity and methane migration: evaluation of published evidence during shale-gas development in the USA. <i>Hydrogeology Journal</i> , 2020, 28, 1481-1502.	0.9	19
775	Modification of Microscopic Properties of Shale by Carbonic Acid Treatment: Implications for CO ₂ -Based Fracturing in Shale Formations. <i>Energy & Fuels</i> , 2020, 34, 3458-3466.	2.5	21
776	Dynamic behaviors of methane adsorption on partially saturated shales. <i>Journal of Petroleum Science and Engineering</i> , 2020, 190, 107071.	2.1	11
777	Hydrochemistry of flowback water from Changning shale gas field and associated shallow groundwater in Southern Sichuan Basin, China: Implications for the possible impact of shale gas development on groundwater quality. <i>Science of the Total Environment</i> , 2020, 713, 136591.	3.9	28
778	Paradigm shifts and current challenges in wastewater management. <i>Journal of Hazardous Materials</i> , 2020, 390, 122139.	6.5	80
779	Sealing effects of marginal gas injection on oil shale in situ pyrolysis exploitation. <i>Journal of Petroleum Science and Engineering</i> , 2020, 189, 106968.	2.1	11
780	Simulating the Geological Fate of Terrestrial Organic Matter: Lignin vs Cellulose. <i>Energy & Fuels</i> , 2020, 34, 1537-1547.	2.5	15
781	How far can hydraulic fractures go? A comparative analysis of water flowback, tracer, and microseismic data from the Horn River Basin. <i>Marine and Petroleum Geology</i> , 2020, 115, 104259.	1.5	15
782	The roles of suspended solids in persulfate/Fe ²⁺ treatment of hydraulic fracturing wastewater: Synergistic interplay of inherent wastewater components. <i>Chemical Engineering Journal</i> , 2020, 388, 124243.	6.6	29
783	Insights into recovery of multi-component shale gas by CO ₂ injection: A molecular perspective. <i>Fuel</i> , 2020, 267, 117247.	3.4	42
784	A comparative study of fracture surface roughness and flow characteristics between CO ₂ and water fracturing. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 76, 103188.	2.1	27
785	Optimum surfactant criteria for controlling invasion-induced water blockage in tight water-wet cores. <i>Journal of Petroleum Science and Engineering</i> , 2020, 188, 106931.	2.1	16
786	The economic impact of oil and gas development in the Permian Basin: Local and spillover effects. <i>Resources Policy</i> , 2020, 66, 101599.	4.2	16
787	Impact of pulsation frequency and pressure amplitude on the evolution of coal pore structures during gas fracturing. <i>Fuel</i> , 2020, 268, 117324.	3.4	5

#	ARTICLE	IF	CITATIONS
788	A Generic Method for Predicting Environmental Concentrations of Hydraulic Fracturing Chemicals in Soil and Shallow Groundwater. <i>Water (Switzerland)</i> , 2020, 12, 941.	1.2	13
789	Effect of slick-water fracturing fluid on the frictional properties of shale reservoir rock gouges. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2020, 6, 1.	1.3	6
790	Daily natural gas price forecasting by a weighted hybrid data-driven model. <i>Journal of Petroleum Science and Engineering</i> , 2020, 192, 107240.	2.1	20
791	Surfactant selection criteria with flowback efficiency and oil recovery considered. <i>Journal of Petroleum Science and Engineering</i> , 2020, 192, 107305.	2.1	16
792	Response of aquatic microbial communities and bioindicator modelling of hydraulic fracturing flowback and produced water. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	12
793	Experimental investigation of water vapor adsorption isotherm on gas-producing Longmaxi shale: Mathematical modeling and implication for water distribution in shale reservoirs. <i>Chemical Engineering Journal</i> , 2021, 406, 125982.	6.6	41
794	Numerical Investigation of Wellbore Methane Leakage From a Dual-Permeability Reservoir and Subsequent Transport in Groundwater. <i>Water Resources Research</i> , 2021, 57, e2019WR026991.	1.7	5
795	Treatment and nutrient recovery of synthetic flowback water from shale gas extraction by <i>air-cathode</i> (<i>PMO</i> / <i>CB</i>) microbial desalination cells. <i>Journal of Chemical Technology and Biotechnology</i> , 2021, 96, 262-272.	1.6	13
796	CO ₂ enhanced gas recovery and sequestration in depleted gas reservoirs: A review. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 107685.	2.1	125
797	The synergistic effect of electrocoagulation coupled with E-peroxone process for shale gas fracturing flowback water treatment. <i>Chemosphere</i> , 2021, 262, 127968.	4.2	9
798	Redistribution of fracturing fluid in shales and its impact on gas transport capacity. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 86, 103747.	2.1	20
799	Pore structure characterization and its effect on methane adsorption in shale kerogen. <i>Petroleum Science</i> , 2021, 18, 565-578.	2.4	41
800	Watershed-scale assessment of surface water-related risks from shale gas development in mountainous areas, China. <i>Journal of Environmental Management</i> , 2021, 279, 111589.	3.8	7
801	Occurrence and origin of groundwater methane in the Stellarton Basin, Nova Scotia, Canada. <i>Science of the Total Environment</i> , 2021, 754, 141888.	3.9	3
802	Analysis of carbonaceous materials in shales using mid-infrared spectroscopy. <i>Vibrational Spectroscopy</i> , 2021, 112, 103186.	1.2	15
803	Characterizing Pore-Scale Geochemical Alterations in Eagle Ford and Barnett Shale from Exposure to Hydraulic Fracturing Fluid and CO ₂ /H ₂ O. <i>Energy & Fuels</i> , 2021, 35, 583-598.	2.5	12
804	Geochemical element mobilisation by interaction of Bowland shale with acidic fluids. <i>Fuel</i> , 2021, 289, 119914.	3.4	8
805	A state-of-art review on waterless gas shale fracturing technologies. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 108048.	2.1	53

#	ARTICLE	IF	CITATIONS
806	Coupling system dynamics analysis and risk aversion programming for optimizing the mixed noise-driven shale gas-water supply chains. <i>Journal of Cleaner Production</i> , 2021, 278, 123209.	4.6	77
807	Salinization of Alpine rivers during winter months. <i>Environmental Science and Pollution Research</i> , 2021, 28, 7295-7306.	2.7	16
808	Self-Regenerating Hybrid Anion Exchange Process for Removing Radium, Barium, and Strontium from Marcellus-Produced Wastewater Using Only Acid Mine Drainage. <i>ACS ES&T Water</i> , 2021, 1, 195-204.	2.3	2
809	Reliability assessment of the vertical well system subjected to erosion and tubing failure. <i>Ships and Offshore Structures</i> , 2021, 16, 127-134.	0.9	3
810	Assessment of Water Resource Constraints on Shale Gas Development. <i>Springer Briefs in Geography</i> , 2021, , 43-65.	0.1	0
811	Geochemical controls on CO ₂ interactions with deep subsurface shales: implications for geologic carbon sequestration. <i>Environmental Sciences: Processes and Impacts</i> , 2021, 23, 1278-1300.	1.7	16
812	Techno-ecologically synergistic food-“energy”-water systems can meet human and ecosystem needs. <i>Energy and Environmental Science</i> , 2021, 14, 3700-3716.	15.6	11
813	Status and prospects of the decentralised valorisation of natural gas into energy and energy carriers. <i>Chemical Society Reviews</i> , 2021, 50, 2984-3012.	18.7	40
814	Assessment of UV Disinfection and Advanced Oxidation Processes for Treatment and Reuse of Hydraulic Fracturing Produced Water. <i>ACS ES&T Engineering</i> , 2021, 1, 490-500.	3.7	9
815	A Critical Review of Analytical Methods for Comprehensive Characterization of Produced Water. <i>Water (Switzerland)</i> , 2021, 13, 183.	1.2	33
816	Hybrid membrane processes for treating oil and gas produced water. , 2021, , 339-369.		1
817	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.	15.6	84
818	Factors Controlling Shale Reservoirs and Development Potential Evaluation: A Case Study. <i>Geofluids</i> , 2021, 2021, 1-13.	0.3	2
819	Determining the impact of biofilm in the bioaugmentation process of benzene-contaminated resources. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104976.	3.3	7
820	Enhanced treatment of shale gas fracturing waste fluid through plant-microbial synergism. <i>Environmental Science and Pollution Research</i> , 2021, 28, 29919-29930.	2.7	1
821	Organic Acid-Enhanced Viscoelastic Surfactant and Its Application in Fracturing Fluids. <i>Energy & Fuels</i> , 2021, 35, 3130-3139.	2.5	19
822	The Impact of Shale Oil and Gas Development on Rangelands in the Permian Basin Region: An Assessment Using High-Resolution Remote Sensing Data. <i>Remote Sensing</i> , 2021, 13, 824.	1.8	6
823	Investigation of Slickwater Effect on Permeability of Gas Shale from Longmaxi Formation. <i>Energy & Fuels</i> , 2021, 35, 3104-3111.	2.5	10

#	ARTICLE	IF	CITATIONS
824	Design of facile technology for the efficient removal of hydroxypropyl guar gum from fracturing fluid. PLoS ONE, 2021, 16, e0247948.	1.1	7
825	Identifying and Regulating the Environmental Risks in the Development and Utilization of Natural Gas as a Low-Carbon Energy Source. Frontiers in Energy Research, 2021, 9, .	1.2	13
826	Land cover changes and ecosystem services at the Negro River Basin, Argentina: what is missing for better assessing nature's contribution?. International Journal of River Basin Management, 0, , 1-14.	1.5	0
827	Effect of polyacrylamide friction reducer on calcite dissolution rate at 25°C and implication for hydraulic fracturing. Journal of Natural Gas Science and Engineering, 2021, 87, 103770.	2.1	4
828	Public data from three US states provide new insights into well integrity. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	28
829	Remote Sensing of Forest Structural Changes Due to the Recent Boom of Unconventional Shale Gas Extraction Activities in Appalachian Ohio. Remote Sensing, 2021, 13, 1453.	1.8	7
830	Fracturing flowback fluids from shale gas wells in western chongqing: Geochemical analyses and relevance for exploration & development. Journal of Natural Gas Science and Engineering, 2021, 88, 103821.	2.1	11
831	Effects of cyclic cryogenic treatment on rock physical and mechanical properties of Eagle Ford shale samples - An experimental study. Journal of Natural Gas Science and Engineering, 2021, 88, 103772.	2.1	13
832	Upscaling Reactive Transport and Clogging in Shale Microcracks by Deep Learning. Water Resources Research, 2021, 57, e2020WR029125.	1.7	5
833	Synthesis of Ultralight Cement Using Solid Waste Fly Ash Cenosphere for Low-Fracture Gradient Formation with Reduced Shrinkage. Journal of Hazardous, Toxic, and Radioactive Waste, 2021, 25, 04021001.	1.2	4
834	Shale oil production and groundwater: What can we learn from produced water data?. PLoS ONE, 2021, 16, e0250791.	1.1	3
835	Characterizing oil and gas wells with fugitive gas migration through Bayesian multilevel logistic regression. Science of the Total Environment, 2021, 769, 144678.	3.9	15
836	Irrigator perceptions and the value of groundwater quality in the High Plains Aquifer. Journal of Soils and Water Conservation, 0, , 00118.	0.8	1
837	Comparison of the Hydraulic Fracturing Water Cycle in China and North America: A Critical Review. Environmental Science & Technology, 2021, 55, 7167-7185.	4.6	57
838	Dynamic fluid states in organic-inorganic nanocomposite: Implications for shale gas recovery and CO2 sequestration. Chemical Engineering Journal, 2021, 411, 128423.	6.6	102
839	Arsenic release to the environment from hydrocarbon production, storage, transportation, use and waste management. Journal of Hazardous Materials, 2021, 411, 125013.	6.5	21
840	Removal of organic compounds from shale gas fracturing flowback water by an integrated electrocoagulation and electro-peroxone process. Separation and Purification Technology, 2021, 265, 118496.	3.9	18
841	Contrasting Public and Scientific Assessments of Fracking. Sustainability, 2021, 13, 6650.	1.6	9

#	ARTICLE	IF	CITATIONS
842	A review of physical, chemical, and hydrogeologic characteristics of stray gas migration: Implications for investigation and remediation. <i>Science of the Total Environment</i> , 2021, 779, 146234.	3.9	26
843	Potential Impacts of Shale Gas Development on Inorganic Groundwater Chemistry: Implications for Environmental Baseline Assessment in Shallow Aquifers. <i>Environmental Science & Technology</i> , 2021, 55, 9657-9671.	4.6	33
844	Influence of Flow Pathway Geometry on Barite Scale Deposition in Marcellus Shale during Hydraulic Fracturing. <i>Energy & Fuels</i> , 2021, 35, 11947-11957.	2.5	3
845	Comparison of Energy Consumption of Osmotically Assisted Reverse Osmosis and Low-Salt-Rejection Reverse Osmosis for Brine Management. <i>Environmental Science & Technology</i> , 2021, 55, 10714-10723.	4.6	25
846	Exploring controls on halogen and methane occurrence in groundwater of New York State. <i>Applied Geochemistry</i> , 2021, 130, 104834.	1.4	1
847	Experimental study of slickwater volume effect on methane desorption on Longmaxi shale. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 91, 103950.	2.1	8
848	In-situ electric-enhanced membrane distillation for simultaneous flux-increasing and anti-wetting. <i>Journal of Membrane Science</i> , 2021, 630, 119305.	4.1	17
849	A study on the hydraulic aperture of microannuli at the casing-cement interface using a large-scale laboratory setup. <i>Geomechanics for Energy and the Environment</i> , 2022, 29, 100269.	1.2	12
850	Detecting anomalous methane in groundwater within hydrocarbon production areas across the United States. <i>Water Research</i> , 2021, 200, 117236.	5.3	13
851	In Silico Evolution of High-Performing Metal Organic Frameworks for Methane Adsorption. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 3232-3239.	2.5	9
852	A review of issues, characteristics, and management for wastewater due to hydraulic fracturing in the U.S.. <i>Journal of Petroleum Science and Engineering</i> , 2021, 202, 108536.	2.1	22
853	A fully coupled thermo-hydro-mechanical model with ice-water phase change for liquid nitrogen injection simulation. <i>Journal of Petroleum Science and Engineering</i> , 2021, 203, 108676.	2.1	12
854	Evaluating the potential for sustainable development of China's shale gas industry by combining multi-level DPSIR framework, PPFCI technique and RAGA algorithm. <i>Science of the Total Environment</i> , 2021, 780, 146525.	3.9	16
855	Large-sample evidence on the impact of unconventional oil and gas development on surface waters. <i>Science</i> , 2021, 373, 896-902.	6.0	46
856	Unveiling stimulation fluid-driven alterations in shale pore architecture through combined interpretation of TD-NMR and multi-component gas adsorption. <i>Fuel</i> , 2021, 297, 120744.	3.4	6
857	Prediction of high-pressure adsorption of CH ₄ and CO ₂ in shale. <i>International Journal of Greenhouse Gas Control</i> , 2021, 110, 103440.	2.3	14
858	Are Deep Aquifers Really Confined? Insights From Deep Groundwater Tidal Responses in the North China Platform. <i>Water Resources Research</i> , 2021, 57, e2021WR030195.	1.7	14
859	Pretreatment of Produced Waters Containing High Total Dissolved Solids. , 2021, , .		3

#	ARTICLE	IF	CITATIONS
860	Experimental study of the stimulating mechanism of shut-in after hydraulic fracturing in unconventional oil reservoirs. <i>Fuel</i> , 2021, 300, 120982.	3.4	30
861	Recycled text and risk communication in natural gas pipeline environmental impact assessments. <i>Energy Policy</i> , 2021, 156, 112379.	4.2	4
862	Free-Phase Gas Detection in Groundwater Wells Via Water Pressure and Continuous Field Parameters. <i>Ground Water</i> , 2021, , .	0.7	1
863	Study on the binding focusing state of particles in inertial migration. <i>Applied Mathematical Modelling</i> , 2021, 97, 1-18.	2.2	11
864	Systemic risk analyses for potential impacts of onshore unconventional oil and gas development on public health and the environment: A critical review. <i>Science of the Total Environment</i> , 2021, 786, 147512.	3.9	4
865	Comprehensive Electrokinetic-Assisted Separation of Oil Emulsion with Ultrahigh Flux. <i>ACS Nano</i> , 2021, 15, 15815-15823.	7.3	20
866	Investigation of the interface cracks on the cement sheath stress in shale gas wells during hydraulic fracturing. <i>Journal of Petroleum Science and Engineering</i> , 2021, 205, 108981.	2.1	11
867	Modelling the attenuation of flowback chemicals for a soil-groundwater pathway from a hypothetical spill accident. <i>Science of the Total Environment</i> , 2022, 806, 150686.	3.9	9
868	Rock physical and chemical alterations during the in-situ interaction between fracturing fluid and Silurian organic-rich shales in China. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 94, 104075.	2.1	7
869	Improving oil recovery of Eagle Ford shale samples using cryogenic and cyclic gas injection methods - An experimental study. <i>Fuel</i> , 2021, 302, 121170.	3.4	9
870	Comparing conventional and green fracturing fluids by chemical characterisation and effect-based screening. <i>Science of the Total Environment</i> , 2021, 794, 148727.	3.9	6
871	A review of foam-based fracturing fluids applications: From lab studies to field implementations. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 95, 104236.	2.1	29
872	Molecular insights into carbon dioxide enhanced multi-component shale gas recovery and its sequestration in realistic kerogen. <i>Chemical Engineering Journal</i> , 2021, 425, 130292.	6.6	49
873	Combined micro-proppant and supercritical carbon dioxide (SC-CO ₂) fracturing in shale gas reservoirs: A review. <i>Fuel</i> , 2021, 305, 121431.	3.4	53
874	Comprehensive review of membrane design and synthesis for membrane distillation. <i>Desalination</i> , 2021, 518, 115168.	4.0	68
875	Methane adsorption on shale under in situ conditions: Gas-in-place estimation considering in situ stress. <i>Fuel</i> , 2022, 308, 121991.	3.4	20
876	Solar-driven desalination and resource recovery of shale gas wastewater by on-site interfacial evaporation. <i>Chemical Engineering Journal</i> , 2022, 428, 132624.	6.6	41
877	Understanding controls on the geochemistry of hydrocarbon produced waters from different basins across the US. <i>Environmental Sciences: Processes and Impacts</i> , 2021, 23, 28-47.	1.7	2

#	ARTICLE	IF	CITATIONS
878	A Review of Environmental Risks in Shale Gas Development. Springer Briefs in Geography, 2021, , 19-42.	0.1	0
879	Assessment of GHG Emissions from Shale Gas Development. Springer Briefs in Geography, 2021, , 67-80.	0.1	0
880	Introduction to Carbon Civilization. Lecture Notes in Energy, 2014, , 1-42.	0.2	2
881	Origins and Consequences of State-Level Variation in Shale Regulation: The Cases of Pennsylvania and New York. , 2015, , 179-201.		8
882	The International Scale of the Groundwater Issue. , 2016, , 21-48.		43
883	Hydraulic Fracturing and Its Potential Impact on Shallow Groundwater. , 2016, , 67-99.		1
884	Strategic Design and Tactical Planning for Energy Supply Chain Systems. , 2017, , 47-74.		2
885	Prospects for Sustainability in Humanâ€“Environment Patterns: Dynamic Management of Common Resources. , 2017, , 319-347.		7
886	Critical evaluation of human health risks due to hydraulic fracturing in natural gas and petroleum production. Archives of Toxicology, 2020, 94, 967-1016.	1.9	36
887	Optimal planning and modular infrastructure dynamic allocation for shale gas production. Applied Energy, 2020, 261, 114439.	5.1	39
888	Numerical simulation of pressure evolution and migration of hydraulic fracturing fluids in the shale gas reservoirs of Sichuan Basin, China. Journal of Hydrology, 2020, 588, 125082.	2.3	10
889	Impact of water-rock interactions on indicators of hydraulic fracturing flowback fluids produced from the Jurassic shale of Qaidam Basin, NW China. Journal of Hydrology, 2020, 590, 125541.	2.3	13
890	How robust is the renewable energy industry to political shocks? Evidence from the 2016 U.S. elections. Business and Politics, 2018, 20, 523-552.	0.6	13
891	Water Sorption and Transport in Shales: An Experimental and Simulation Study. Water Resources Research, 2021, 57, e2019WR026888.	1.7	33
892	Ecological risk assessment of accidental release of flowback water: A conceptual framework. Human and Ecological Risk Assessment (HERA), 2018, 24, 398-426.	1.7	8
893	Geologic and hydrologic aspects of brine disposal intervals in the Appalachian Basin. Environmental Geosciences, 2015, 22, 97-113.	0.6	3
894	Stream Vulnerability to Widespread and Emergent Stressors: A Focus on Unconventional Oil and Gas. PLoS ONE, 2015, 10, e0137416.	1.1	31
895	The risks of hydraulic fracturing and the responsibilities of engineers. Elementa, 2017, 5, .	1.1	2

#	ARTICLE	IF	CITATIONS
896	The Impact of the U.S. Shale Boom on Agriculture: Evidence from North Dakota. SSRN Electronic Journal, 0, , .	0.4	2
897	Analysis on Regional Water Resources Development Threshold Model based on Neural Network. , 2016, , .		1
900	Thereâ€™s a World Going on Undergroundâ€™ Infant Mortality and Fracking in Pennsylvania. Journal of Environmental Protection, 2017, 08, 381-393.	0.3	20
901	Conceptual model development using a generic Features, Events, and Processes (FEP) database for assessing the potential impact of hydraulic fracturing on groundwater aquifers. Advances in Geosciences, 0, 45, 185-192.	12.0	29
902	Monitoring Marcellus: A Case Study of a Collaborative Volunteer Monitoring Project to Document the Impact of Unconventional Shale Gas Extraction on Small Streams. Citizen Science: Theory and Practice, 2016, 1, 7.	0.6	6
903	Governance of Fracking in Africa. Governance in Africa, 2015, 2, 4.	0.8	6
904	From Boom to Bust? A Critical Look at US Shale Gas Projections. Economics of Energy and Environmental Policy, 2015, 4, .	0.7	11
905	Cognitive Biases in Understanding the Influence of Shale Gas Exploitation: From Environmental and Economic Perspectives. Frontiers in Energy Research, 2021, 9, .	1.2	1
906	Towards quantifying subsurface methane emissions from energy wells with integrity failure. Atmospheric Pollution Research, 2021, 12, 101223.	1.8	5
907	Minimize the trade-off between wetting resistance and water permeance in membrane distillation with ion-sieving coating layer. Chemical Engineering Journal, 2022, 430, 133165.	6.6	20
908	Renewable energy and biological conservation in a changing world. Biological Conservation, 2021, 263, 109354.	1.9	19
909	Current R&Ds Status for Shale Gas Extraction. Transactions of the KSME C Industrial Technology and Innovation, 2013, 1, 91-98.	0.0	0
910	Transition to Low- and Zero-Carbon Energy and Fuels. Lecture Notes in Energy, 2014, , 279-323.	0.2	0
911	A Real Options Approach to Amenity Valuation the Role of Uncertainty and Risk Aversion. SSRN Electronic Journal, 0, , .	0.4	0
912	Hydraulic Fracturing Chemicals Reporting: Analysis of Available Data and Recommendations for Policymakers. SSRN Electronic Journal, 0, , .	0.4	0
913	Environmental Impact of Gas Seepage. , 2015, , 109-139.		0
914	Overview of Hydraulic Fracturing Operations and Technologies. , 2015, , 24-43.		0
915	Co-Precipitation of Radium with Barium and Strontium Sulfate and Its Impact on the Fate of Radium during Treatment of Produced Water from Unconventional Gas Extraction. , 2015, , 183-204.		0

#	ARTICLE	IF	CITATIONS
917	Åžeyl GazÄ±; Jeolojik Å–zellikleri, Å–evresel Etkileri ve KÄ¼resel Ekonomik AnlamÄ±. TÄ¼rkiye Jeoloji BÄ¼lteni / Geological Bulletin of Turkey, 2016, 59, 211-237.	0.0	0
918	Integration of Water and Energy Sustainability. Green Chemistry and Chemical Engineering, 2016, , 341-379.	0.0	0
919	Managing Uncertainty in Large-Scale Inversions for the Oil and Gas Industry with Big Data. Studies in Big Data, 2018, , 149-173.	0.8	0
921	Perspectives on successful coal seam gas well decommissioning. APPEA Journal, 2018, 58, 94.	0.4	1
922	Landscape Analysis: Fracking Technology. Innovation, Technology and Knowledge Management, 2018, , 19-44.	0.4	3
923	Unconventional Oil and Gas: Interactions with and Implications for Groundwater. Water Security in A New World, 2020, , 267-290.	0.1	0
924	The Disposal of Water from Hydraulic Fracturing: A South African Perspective. Water Security in A New World, 2020, , 345-362.	0.1	0
925	Failure behavior and acoustic emission characteristics of shale after subjection to high temperature. IOP Conference Series: Earth and Environmental Science, 2021, 861, 062091.	0.2	0
926	Shale gas development and regional economic growth: Evidence from Fuling, China. Energy, 2022, 239, 122254.	4.5	21
927	Beyond treatment technology: Understanding motivations and barriers for wastewater treatment and reuse in unconventional energy production. Resources, Conservation and Recycling, 2022, 177, 106011.	5.3	14
928	Complementary responses of stream fish and benthic macroinvertebrate assemblages to environmental drivers in a shale-gas development area. Facets, 2020, 5, 200-227.	1.1	3
930	Application of laser-induced breakdown spectroscopy for detection of elements in flowback water samples from shale gas wells. Applied Optics, 2020, 59, 2254.	0.9	0
931	Water treatment based on atomically engineered materials: Atomic layer deposition and beyond. Matter, 2021, 4, 3515-3548.	5.0	66
932	Studies of Mineral Nucleation and Growth Across Multiple Scales: Review of the Current State of Research Using the Example of Barite (BaSO ₄). ACS Earth and Space Chemistry, 2021, 5, 3338-3361.	1.2	15
933	Ce-modified SrFeO ₃ - for ethane oxidative dehydrogenation coupled with CO ₂ splitting via a chemical looping scheme. Applied Catalysis B: Environmental, 2022, 303, 120894.	10.8	47
934	Imaging of steel casingâ€™s conductivity using surface electrical data and a deep learning approach. , 2020, , .		1
937	Fracking and Water. , 2021, , 93-120.		2
938	Activity and Water Footprint of Unconventional Energy Production under Hydroclimate Variation in Colorado. ACS ES&T Water, 2021, 1, 281-290.	2.3	2

#	ARTICLE	IF	CITATIONS
939	Baseline surface- and groundwater monitoring prior to an onshore shale gas operation in the Vale of Pickering, UK. Quarterly Journal of Engineering Geology and Hydrogeology, 2022, 55, .	0.8	1
940	Insight into the Methods for Improving the Utilization Efficiency of Fracturing Liquid in Unconventional Reservoirs. Geofluids, 2021, 2021, 1-13.	0.3	0
941	Water Consumption and Pollution Cost of the Shale Gas Development: a Review and a Case Study. Water, Air, and Soil Pollution, 2021, 232, 1.	1.1	1
942	Factors affecting groundwater quality used for domestic supply in Marcellus Shale region of North-Central and North-East Pennsylvania, USA. Applied Geochemistry, 2022, 137, 105149.	1.4	8
943	Experimental investigation into simultaneous adsorption of water vapor and methane onto shales. Journal of Hydrology, 2022, 604, 127200.	2.3	6
944	Synecdoche and Battles Over the Meaning of "Fracking". Environmental Communication, 2022, 16, 339-351.	1.2	3
945	Capillary Heterogeneity Linked to Methane Lateral Migration in Shallow Unconfined Aquifers. Geophysical Research Letters, 2021, 48, .	1.5	12
946	Turbulent Drag Reduction with an Ultra-High-Molecular-Weight Water-Soluble Polymer in Slick-Water Hydrofracking. Molecules, 2022, 27, 351.	1.7	13
947	Early insights on the fracking impacts to the water-energy nexus in Brazil: is there a risk of water scarcity in the shale gas prospective areas?. Journal of Cleaner Production, 2022, 336, 130390.	4.6	4
948	Rheological and morphological characteristics of foam fluid using hydroxypropyl guar and surfactant. Journal of Petroleum Science and Engineering, 2022, 211, 110124.	2.1	7
949	A Review on Recent Progress in Membrane Distillation Crystallization. ChemBioEng Reviews, 2022, 9, 93-109.	2.6	11
950	Temporal changes in domestic water well methane reflect shifting sources of groundwater: Implications for evaluating contamination attributed to shale gas development. Applied Geochemistry, 2022, 136, 105175.	1.4	5
951	A New Approach To Calculate Gas Saturation in Shale Reservoirs. Energy & Fuels, 2022, 36, 1904-1915.	2.5	7
952	Groundwaters in Northeastern Pennsylvania near intense hydraulic fracturing activities exhibit few organic chemical impacts. Environmental Sciences: Processes and Impacts, 2022, 24, 252-264.	1.7	5
953	Strategic Planning for Optimal Management of Different Types of Shale Gas Wastewater. ACS Sustainable Chemistry and Engineering, 2022, 10, 1451-1470.	3.2	6
954	Investigation of the Enrichment and Accumulation of Normal Pressure Shale Gas in Anchang Syncline Outside of Sichuan Basin. Frontiers in Earth Science, 2022, 9, .	0.8	3
955	Review of Behavioral Psychology in Transition to Solar Photovoltaics for Low-Income Individuals. Sustainability, 2022, 14, 1537.	1.6	26
956	Unraveling the Complex Composition of Produced Water by Specialized Extraction Methodologies. Environmental Science & Technology, 2022, 56, 2334-2344.	4.6	17

#	ARTICLE	IF	CITATIONS
957	The Laplace-transform embedded discrete fracture model for flow simulation of stimulated reservoir volume. <i>Journal of Petroleum Exploration and Production</i> , 2022, 12, 2303-2328.	1.2	1
958	Advanced treatment of hydraulic fracturing flowback water using a novel combined process. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107178.	3.3	0
959	Singlet oxygen-dominated electrocatalytic oxidation treatment for the high-salinity quaternary ammonium compound wastewater with Ti/(RuIry)O ₂ anode. <i>Environmental Research</i> , 2022, 209, 112815.	3.7	13
960	Comprehensive treatment of oil-contaminated soils using CO ₂ -Responsive O/W microemulsions. <i>Journal of Cleaner Production</i> , 2022, 341, 130857.	4.6	7
961	Influence of Particle Size on the Low-Temperature Nitrogen Adsorption of Deep Shale in Southern Sichuan, China. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 302.	0.8	6
962	Continual long-term monitoring of methane in wells above the Utica Shale using total dissolved gas pressure probes. <i>Hydrogeology Journal</i> , 2022, 30, 1005-1019.	0.9	3
963	Experimental Study on Oil Drop Discharge Behavior during Dynamic Imbibition in Tight Oil Sandstone with Aid of Surfactant. <i>Energies</i> , 2022, 15, 1533.	1.6	0
964	Experimental Investigation of Barium Sources and Fluid-Rock Interaction in Unconventional Marcellus Shale Wells Using Ba Isotopes. <i>Energy & Fuels</i> , 2022, 36, 4470-4478.	2.5	1
965	Geochemical Modeling of Celestite (SrSO ₄) Precipitation and Reactive Transport in Shales. <i>Environmental Science & Technology</i> , 2022, 56, 4336-4344.	4.6	7
966	Advances of supramolecular interaction systems for improved oil recovery (IOR). <i>Advances in Colloid and Interface Science</i> , 2022, 301, 102617.	7.0	29
967	Organic Weighting Hydraulic Fracturing Fluid: Complex Interactions between Formate Salts, Hydroxy Carboxylate Acid, and Guar. <i>SPE Journal</i> , 2022, 27, 2334-2351.	1.7	4
968	A Numerical Experiment of Full Waveform Inversion of Complex Structures Concealed Around a Horizontal Hydraulic Fracturing Well Using Perforation Seismic Data. <i>Frontiers in Earth Science</i> , 2022, 10, .	0.8	0
969	Treatment and Recovery of High-Value Elements from Produced Water. <i>Water (Switzerland)</i> , 2022, 14, 880.	1.2	11
970	Mitigation of fouling and wetting in membrane distillation by electrical repulsion using a multi-layered single-wall carbon nanotube/polyvinylidene fluoride membrane. <i>Journal of Membrane Science</i> , 2022, 653, 120519.	4.1	18
971	Role of desorption-adsorption and ion exchange in isotopic and chemical (Li, B, and Sr) evolution of water following water-rock interaction. <i>Journal of Hydrology</i> , 2022, 610, 127800.	2.3	10
972	Recent water disposal and pore pressure evolution in the Delaware Mountain Group, Delaware Basin, Southeast New Mexico and West Texas, USA. <i>Journal of Hydrology: Regional Studies</i> , 2022, 40, 101041.	1.0	7
973	Measurements of Atmospheric Methane Emissions from Stray Gas Migration: A Case Study from the Marcellus Shale. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 909-919.	1.2	0
974	Experimental investigation into the permeability of water vapor in shales. <i>Journal of Hydrology</i> , 2022, 609, 127697.	2.3	4

#	ARTICLE	IF	CITATIONS
975	Towards sustainable oil/gas fracking by reusing its process water: A review on fundamentals, challenges, and opportunities. <i>Journal of Petroleum Science and Engineering</i> , 2022, 213, 110422.	2.1	10
976	Removal of organic contaminants from flowback water using Fenton process. <i>Journal of Water Process Engineering</i> , 2022, 47, 102680.	2.6	5
977	Carbon dioxide adsorption to 40 MPa on extracted shale from Sichuan Basin, southwestern China. <i>Fuel</i> , 2022, 318, 123666.	3.4	17
978	Characteristics of dissolved ozone flotation for the enhanced treatment of bio-treated drilling wastewater from a gas field. <i>Chemosphere</i> , 2022, 298, 134290.	4.2	5
979	Mechanism of the Production Impact in Shale Gas Wells Caused by Water Invasion during Interwell Interference. <i>ACS Omega</i> , 2021, 6, 35821-35829.	1.6	4
980	Failure characteristics of shale after being subjected to high temperatures under uniaxial compression. <i>Bulletin of Engineering Geology and the Environment</i> , 2022, 81, 1.	1.6	19
981	Chemical and Reactive Transport Processes Associated with Hydraulic Fracturing of Unconventional Oil/Gas Shales. <i>Chemical Reviews</i> , 2022, 122, 9198-9263.	23.0	25
993	Quality assessment of the surrounding surface water of Tengra tila gas field blowout zone. <i>International Journal of Environmental Science and Technology</i> , 2023, 20, 2455-2470.	1.8	1
994	Development of CO ₂ -Sensitive Viscoelastic Fracturing Fluid for Low Permeability Reservoirs: A Review. <i>Processes</i> , 2022, 10, 885.	1.3	6
995	Long-Chain PFASs-Free Omniphobic Membranes for Sustained Membrane Distillation. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 23808-23816.	4.0	14
996	Intensification 4.0 of hydraulic fracturing process involving incentive schemes and the use of matching law. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, , 108968.	1.8	2
997	Effect of fluid saturation and salinity on sandstone rock weakening: experimental investigations and interpretations from physicochemical perspective. <i>Acta Geotechnica</i> , 2023, 18, 171-186.	2.9	1
998	Dynamic model for the simultaneous adsorption of water vapor and methane on shales. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 102, 104578.	2.1	2
999	Isotopic characteristics of the excess hydraulic fracturing flowback fluid in tight oil reservoir: Implication for source, composition, and flowback stage division. <i>Journal of Petroleum Science and Engineering</i> , 2022, 214, 110545.	2.1	0
1000	Granular activated carbon (GAC) fixed bed adsorption combined with ultrafiltration for shale gas wastewater internal reuse. <i>Environmental Research</i> , 2022, 212, 113486.	3.7	4
1001	Bioelectrochemical systems-based metal removal and recovery from wastewater and polluted soil: Key factors, development, and perspective. <i>Journal of Environmental Management</i> , 2022, 317, 115333.	3.8	13
1002	Copper removal and elemental sulfur recovery from fracturing flowback water in a microbial fuel cell with an extra electrochemical anode. <i>Chemosphere</i> , 2022, 303, 135128.	4.2	10
1003	Cationic Stabilized Layered Graphene Oxide (Co) Membrane For Shale Gas Wastewater Treatment: An Atomistic Insight. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
1004	The Microbial Community and Functional Potential in the Midland Basin Reveal a Community Dominated by Both Thiosulfate and Sulfate-Reducing Microorganisms. <i>Microbiology Spectrum</i> , 2022, 10, .	1.2	5
1005	Ions transport in electromembrane desalination: A numerical modeling for the return flow ion-concentration-polarization desalination system. <i>Chemical Engineering Research and Design</i> , 2022, 184, 366-377.	2.7	6
1006	The water footprint of hydraulic fracturing under different hydroclimate conditions in the Central and Western United States. <i>Science of the Total Environment</i> , 2022, 840, 156651.	3.9	5
1007	Fouling and chemically enhanced backwashing performance of low-pressure membranes during the treatment of shale gas produced water. <i>Science of the Total Environment</i> , 2022, 840, 156664.	3.9	7
1008	Geochemical Evidence of Potential Groundwater Contamination with Human Health Risks Where Hydraulic Fracturing Overlaps with Extensive Legacy Hydrocarbon Extraction. <i>Environmental Science & Technology</i> , 2022, 56, 10010-10019.	4.6	6
1009	Study on Formation Damage of Fracturing and Its Prevention through an Environmentally Friendly Method of Oxidative Stimulation in Shale Gas Reservoirs. <i>Energy & Fuels</i> , 2022, 36, 7687-7698.	2.5	2
1010	Combining eDNA and morphological approaches to reveal the impacts of long-term discharges of shale gas wastewaters on receiving waters. <i>Water Research</i> , 2022, 222, 118869.	5.3	8
1011	Potential biomarkers of endocrine and habitat disruption identified via RNA-Seq in <i>Salvelinus fontinalis</i> with proximity to fracking operations in Pennsylvania headwater stream ecosystems. <i>Ecotoxicology</i> , 0, , .	1.1	0
1012	Identifying strontium sources of flowback fluid and groundwater pollution using ⁸⁷ Sr/ ⁸⁶ Sr and geochemical model in Sulige gasfield, China. <i>Chemosphere</i> , 2022, 306, 135594.	4.2	15
1013	Isotopes as Tracers of Atmospheric and Groundwater Methane Sources. , 2022, , 272-291.		0
1014	The PSR-FA-NAR model for assessing and forecasting environmental impacts: An empirical analysis of Changningâ€“Weiyuan shale gas play in China. <i>Frontiers in Environmental Science</i> , 0, 10, .	1.5	0
1015	Numerical Study on Proppant Transport in Supercritical Carbon Dioxide under Different Fracture Shapes: Flat, Wedge-Shaped, and Bifurcated. <i>Energy & Fuels</i> , 2022, 36, 10278-10290.	2.5	4
1016	Integrated Experimental and Modeling Study of Geochemical Reactions of Simple Fracturing Fluids with Caney Shale. <i>Energy & Fuels</i> , 2022, 36, 10064-10081.	2.5	3
1017	Impact of Supercritical CO ₂ on Shale Reservoirs and Its Implication for CO ₂ Sequestration. <i>Energy & Fuels</i> , 2022, 36, 9882-9903.	2.5	17
1018	Experimental investigation of proppant transport in hydraulically fractured wells using supercritical CO ₂ . <i>Journal of Petroleum Science and Engineering</i> , 2022, 217, 110907.	2.1	11
1019	Sustainable development index of shale gas exploitation in China, the UK, and the US. <i>Environmental Science and Ecotechnology</i> , 2022, 12, 100202.	6.7	9
1020	Numerical simulation of fluid-driven fracturing in orthotropic poroelastic media based on a peridynamics-finite element coupling approach. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2022, 158, 105199.	2.6	9
1021	From water analysis to scale and corrosion control improvements: A Permian Basin example. <i>Chemical Geology</i> , 2022, 610, 121077.	1.4	0

#	ARTICLE	IF	CITATIONS
1022	Optimization-based technoeconomic comparison of multi-stage membrane distillation configurations for hypersaline produced water desalination. <i>Desalination</i> , 2022, 543, 116098.	4.0	2
1023	Fractal Characteristics of Deep Shales in Southern China by Small-Angle Neutron Scattering and Low-Pressure Nitrogen Adsorption. <i>Fractal and Fractional</i> , 2022, 6, 484.	1.6	5
1024	Intrinsic and specific groundwater vulnerability determination as a pre-operational baseline assessment of an unconventional hydrocarbon industry. <i>International Journal of Environmental Science and Technology</i> , 0, , .	1.8	0
1025	Are UK Rivers Getting Saltier and More Alkaline?. <i>Water (Switzerland)</i> , 2022, 14, 2813.	1.2	6
1026	A hydro-mechanical-damage fully coupled cohesive phase field model for complicated fracking simulations in poroelastic media. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 399, 115451.	3.4	7
1027	Wettability Alteration of Kerogen by Interacting with Hydraulic Fracturing Fluid. , 2022, , .		1
1028	Efficient sulfur cycling improved the performance of flowback water treatment in a microbial fuel cell. <i>Journal of Environmental Management</i> , 2022, 323, 116368.	3.8	4
1029	Numerical simulation of diverting fracturing for staged fracturing horizontal well in shale gas reservoir. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 0, , 1-22.	1.4	2
1030	Phase-field modeling of crack growth and interaction in rock. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2022, 8, .	1.3	7
1031	<scp>PEG</scp> -based polymer coated proppants in supercritical <scp> CO ₂</scp> : A new approach in current fracturing protocols. <i>Journal of Applied Polymer Science</i> , 0, , .	1.3	1
1032	Simulation of fracture control during temporary plugging at fracture openings in deep and ultra-deep shale-gas horizontal wells. <i>Natural Gas Industry B</i> , 2022, 9, 487-496.	1.4	7
1033	Rheological and fracturing characteristics of a cationic guar gum. <i>International Journal of Biological Macromolecules</i> , 2023, 224, 196-206.	3.6	3
1034	Identifying persistent, mobile and toxic (PMT) organic compounds detected in shale gas wastewater. <i>Science of the Total Environment</i> , 2023, 858, 159821.	3.9	6
1035	Coupled coal-gas interaction during CBM and CO ₂ -ECBM recovery in coal seams: a critical review. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2022, 8, .	1.3	5
1036	Relationship between Shale Hydration and Shale Collapse. <i>ACS Omega</i> , 0, , .	1.6	0
1037	Connecting diverse disciplines to improve understanding of surface water-groundwater interactions. <i>Journal of Hydrology X</i> , 2022, 17, 100141.	0.8	1
1038	Wettability Impact on Nanoconfined Methane Adsorption Behavior: A Simplified Local Density Investigation. <i>Energy & Fuels</i> , 2022, 36, 14204-14219.	2.5	6
1039	Outcomes of the Halliburton Loophole: Chemicals regulated by the Safe Drinking Water Act in US fracking disclosures, 2014-2021. <i>Environmental Pollution</i> , 2023, 322, 120552.	3.7	1

#	ARTICLE	IF	CITATIONS
1040	Lab-scale Investigation of Slickwater Impact on Methane Desorption on Longmaxi Gas Shale. <i>Chemical Engineering and Technology</i> , 0, , .	0.9	1
1041	Passive freezing desalination driven by radiative cooling. <i>Joule</i> , 2022, 6, 2762-2775.	11.7	12
1042	Upscaling a chemical screening approach to assess impacts of shale, tight and deep gas development on unconfined aquifers. <i>Journal of Hydrology: Regional Studies</i> , 2023, 45, 101296.	1.0	1
1043	Coupling iron-carbon micro-electrolysis with persulfate advanced oxidation for hydraulic fracturing return fluid treatment. <i>Chemosphere</i> , 2023, 313, 137415.	4.2	3
1044	Comparison of water stress regarding potential shale energy development in China and the US. <i>Resources, Conservation and Recycling</i> , 2023, 190, 106823.	5.3	0
1045	Hemivariational inequality for contaminant reaction-diffusion model of recovered fracturing fluid in the wellbore of shale gas reservoir. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2023, 118, 107020.	1.7	2
1046	Investigation of Oxidative Dissolution and Mineral Swelling Effects on Seepage Channels and Permeability of Calcareous Shale Reservoirs: An Experimental Study. <i>Energy & Fuels</i> , 2022, 36, 14943-14953.	2.5	2
1047	Impact of cyclic liquid nitrogen treatment on the pore and fracture structures of shale at different scales and its effect on permeability enhancement. , 2023, 221, 211367.		2
1048	Towards efficient water management in large-scale shale gas fields of China. <i>Journal of Water Reuse and Desalination</i> , 2022, 12, 451-459.	1.2	0
1049	Assessing gestational exposure to trace elements in an area of unconventional oil and gas activity: comparison with reference populations and evaluation of variability. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2023, 33, 94-101.	1.8	5
1050	A Review of Energy Industry Chain and Energy Supply Chain. <i>Energies</i> , 2022, 15, 9246.	1.6	4
1051	Absolute Adsorption Calculation of Shale Gas Based on the Ono-Kondo Lattice Model. <i>Energy & Fuels</i> , 2023, 37, 328-338.	2.5	3
1052	Dissolved organic matter in complex shale gas wastewater analyzed with ESI FT-ICR MS: Typical characteristics and potential of biological treatment. <i>Journal of Hazardous Materials</i> , 2023, 447, 130823.	6.5	9
1054	pH-responsive clean fracturing fluid based on pseudo-trimeric surfactants. <i>Colloid and Polymer Science</i> , 2023, 301, 189-197.	1.0	4
1055	Policy conflicts in shale development in China and the United States. <i>Review of Policy Research</i> , 2023, 40, 589-605.	2.8	1
1056	Dynamics simulation of the effect of cosolvent on the solubility and tackifying behavior of PDMS tackifier in supercritical CO ₂ fracturing fluid. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 662, 130985.	2.3	5
1057	Experimental investigations of CO ₂ adsorption behavior in shales: Implication for CO ₂ geological storage. <i>Frontiers in Earth Science</i> , 0, 10, .	0.8	1
1058	Hydrochemistry, Sources and Management of Fracturing Flowback Fluid in Tight Sandstone Gasfield in Sulige Gasfield (China). <i>Archives of Environmental Contamination and Toxicology</i> , 2023, 84, 284-298.	2.1	4

#	ARTICLE	IF	CITATIONS
1059	Groundwater stress induced by shale resources development in the US: Evolution, response, and mitigation. Applied Energy, 2023, 340, 121037.	5.1	2
1060	Conceptual Hydrodynamic Model with Hydrochemical and Isotopic Signatures of the Triassic and Silurian-Devonian Groundwater Systems in Northwestern Saudi Arabia. Journal of Geochemical Exploration, 2023, 249, 107215.	1.5	0
1061	Plug and abandonment of oil and gas wells – A comprehensive review of regulations, practices, and related impact of materials selection. , 2023, 226, 211718.		7
1062	Water footprint of shale gas development in China in the carbon neutral era. Journal of Environmental Management, 2023, 331, 117238.	3.8	8
1063	Multifunctional carbon aerogel granules designed for column reactor for efficient treatment of shale gas flowback and produced water. Chemical Engineering Journal, 2023, 459, 141544.	6.6	4
1064	A multi-stage screening approach to evaluate risks from inter-aquifer leakage associated with gas well and water bore integrity failure. Journal of Hydrology, 2023, 618, 129244.	2.3	1
1065	Reuse of Produced Water from the Petroleum Industry: Case Studies from the Intermountain-West Region, USA. Energy & Fuels, 2023, 37, 3672-3684.	2.5	3
1066	Water Distribution in Marine Shales: Based on Two-Dimensional Nuclear Magnetic Resonance and Low-Temperature Nitrogen Adsorption. Energy & Fuels, 2023, 37, 5034-5047.	2.5	2
1067	Pre-Operational Environmental Baseline in a Tight Gas Reservoir: Hydrochemical Assessment and Geochemical Background of Surface Water in São Francisco Basin (Brazil). , 2023, , .		0
1068	Sensitivity Assessment of Boron Isotope as Indicator of Contaminated Groundwater for Hydraulic Fracturing Flowback Fluids Produced from the Dameigou Shale of the Northern Qaidam Basin. Sustainability, 2023, 15, 5481.	1.6	1
1069	Hydraulic fracturing. , 2024, , 371-379.		0
1070	CO ₂ -Repurification Microemulsion Detergent for Oil-Based Slurry Cleaning. Langmuir, 2023, 39, 4967-4974.	1.6	1
1071	Influence of Water on the Methane Adsorption Capacity of Organic-Rich Shales and Its Controlling Factors: A Review. Energies, 2023, 16, 3305.	1.6	2
1072	Recent advances in multimode microfluidic separation of particles and cells. Electrophoresis, 2023, 44, 910-937.	1.3	9
1078	Pore structures and fluid behaviors in geomaterials. , 2023, , 115-181.		0
1092	US drinking water quality: exposure risk profiles for seven legacy and emerging contaminants. Journal of Exposure Science and Environmental Epidemiology, 2024, 34, 3-22.	1.8	3
1102	Hydraulic Fracturing Induced Fault Reactivation. , 2023, , 207-235.		0
1128	Shale gas extraction technologies. , 2024, , 211-242.		0

#	ARTICLE	IF	CITATIONS
1134	Water management challenges for tight reservoir fracture stimulation. , 2024, , 79-102.		0
1135	Critical Elements Extraction from Flowback and Produced Water: From Lab to Field. , 2024, , .		0