

Fulong Ning

List of Publications by Year in descending order

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105
papers

3,228
citations

126907

33
h-index

175258

52
g-index

107
all docs

107
docs citations

107
times ranked

1371
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical properties of clathrate hydrates: status and perspectives. <i>Energy and Environmental Science</i> , 2012, 5, 6779.	30.8	161
2	Production potential and stability of hydrate-bearing sediments at the site GMGS3-W19 in the South China Sea: A preliminary feasibility study. <i>Marine and Petroleum Geology</i> , 2017, 86, 447-473.	3.3	136
3	Wellbore stability analysis during drilling through marine gas hydrate-bearing sediments in Shenhu area: A case study. <i>Journal of Petroleum Science and Engineering</i> , 2018, 170, 345-367.	4.2	113
4	Numerical simulation on gas production from hydrate reservoir at the 1st offshore test site in the eastern Nankai Trough. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 30, 64-76.	4.4	102
5	Permeability of hydrate-bearing sediments. <i>Earth-Science Reviews</i> , 2020, 202, 103100.	9.1	102
6	Mechanical instability of monocrystalline and polycrystalline methane hydrates. <i>Nature Communications</i> , 2015, 6, 8743.	12.8	93
7	Gas production from a silty hydrate reservoir in the South China Sea using hydraulic fracturing: A numerical simulation. <i>Energy Science and Engineering</i> , 2019, 7, 1106-1122.	4.0	91
8	Strength Estimation for Hydrate-Bearing Sediments From Direct Shear Tests of Hydrate-Bearing Sand and Silt. <i>Geophysical Research Letters</i> , 2018, 45, 715-723.	4.0	85
9	Compressibility, thermal expansion coefficient and heat capacity of CH ₄ and CO ₂ hydrate mixtures using molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 2869-2883.	2.8	82
10	Grain-Size-Controlled Mechanical Properties of Polycrystalline Monolayer MoS ₂ . <i>Nano Letters</i> , 2018, 18, 1543-1552.	9.1	82
11	Numerical simulation of gas production from hydrate-bearing sediments in the Shenhu area by depressurising: The effect of burden permeability. <i>Journal of Unconventional Oil and Gas Resources</i> , 2015, 12, 23-33.	3.5	77
12	An easy and efficient way to evaluate mechanical properties of gas hydrate-bearing sediments: The direct shear test. <i>Journal of Petroleum Science and Engineering</i> , 2017, 149, 56-64.	4.2	71
13	Hydrate-induced clogging of sand-control screen and its implication on hydrate production operation. <i>Energy</i> , 2020, 206, 118030.	8.8	70
14	Whole process analysis of geothermal exploitation and power generation from a depleted high-temperature gas reservoir by recycling CO ₂ . <i>Energy</i> , 2021, 217, 119340.	8.8	67
15	Effect of hydrophilic silica nanoparticles on hydrate formation: Insight from the experimental study. <i>Journal of Energy Chemistry</i> , 2019, 30, 90-100.	12.9	61
16	Invasion of drilling mud into gas-hydrate-bearing sediments. Part I: effect of drilling mud properties. <i>Geophysical Journal International</i> , 2013, 193, 1370-1384.	2.4	60
17	Fractal characteristics of unsaturated sands and implications to relative permeability in hydrate-bearing sediments. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 66, 11-17.	4.4	60
18	Tetrahydrofuran Hydrate in Clayey Sediments—Laboratory Formation, Morphology, and Wave Characterization. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 3307-3319.	3.4	56

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19	Optimization and analysis of gravel packing parameters in horizontal wells for natural gas hydrate production. <i>Energy</i> , 2021, 219, 119585.	8.8	56
20	Gas-hydrate formation, agglomeration and inhibition in oil-based drilling fluids for deep-water drilling. <i>Journal of Natural Gas Chemistry</i> , 2010, 19, 234-240.	1.8	53
21	A sand-production control system for gas production from clayey silt hydrate reservoirs. <i>China Geology</i> , 2019, 2, 121-132.	1.0	50
22	Lithological characteristics and hydrocarbon gas sources of gas hydrate-bearing sediments in the Shenhu area, South China Sea: Implications from the W01B and W02B sites. <i>Marine Geology</i> , 2019, 408, 36-47.	2.1	49
23	Polyethylene Glycol Drilling Fluid for Drilling in Marine Gas Hydrates-Bearing Sediments: An Experimental Study. <i>Energies</i> , 2011, 4, 140-150.	3.1	47
24	Geothermal energy exploitation from depleted high-temperature gas reservoirs by recycling CO ₂ : The superiority and existing problems. <i>Geoscience Frontiers</i> , 2021, 12, 101078.	8.4	45
25	Two-level intelligent modeling method for the rate of penetration in complex geological drilling process. <i>Applied Soft Computing Journal</i> , 2019, 80, 592-602.	7.2	44
26	Hydrate growth in quartzitic sands and implication of pore fractal characteristics to hydraulic, mechanical, and electrical properties of hydrate-bearing sediments. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 75, 103109.	4.4	44
27	Numerical study of gas production from fine-grained hydrate reservoirs using a multilateral horizontal well system. <i>Applied Energy</i> , 2021, 301, 117450.	10.1	43
28	Molecular insights into CO ₂ hydrate formation in the presence of hydrophilic and hydrophobic solid surfaces. <i>Energy</i> , 2021, 234, 121260.	8.8	42
29	Pore Fractal Characteristics of Hydrate-Bearing Sands and Implications to the Saturated Water Permeability. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018721.	3.4	41
30	Invasion of drilling mud into gas-hydrate-bearing sediments. Part II: Effects of geophysical properties of sediments. <i>Geophysical Journal International</i> , 2013, 193, 1385-1398.	2.4	38
31	Nanotube-chirality-controlled tensile characteristics in coiled carbon metastructures. <i>Carbon</i> , 2018, 133, 335-349.	10.3	37
32	Nature-inspired entwined coiled carbon mechanical metamaterials: molecular dynamics simulations. <i>Nanoscale</i> , 2018, 10, 15641-15653.	5.6	37
33	Enhanced gas production of silty clay hydrate reservoirs using multilateral wells and reservoir reformation techniques: Numerical simulations. <i>Energy</i> , 2022, 254, 124220.	8.8	36
34	The dynamic behavior of gas hydrate dissociation by heating in tight sandy reservoirs: A molecular dynamics simulation study. <i>Fuel</i> , 2019, 258, 116106.	6.4	35
35	Simulation of the thermal shock of brittle materials using the finite-discrete element method. <i>Engineering Analysis With Boundary Elements</i> , 2020, 115, 142-155.	3.7	34
36	Particle migration and formation damage during geothermal exploitation from weakly consolidated sandstone reservoirs via water and CO ₂ recycling. <i>Energy</i> , 2022, 240, 122507.	8.8	34

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37	Mechanical Properties of Methane Hydrate: Intrinsic Differences from Ice. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29081-29093.	3.1	31
38	Protocol for sand control screen design of production wells for clayey silt hydrate reservoirs: A case study. <i>Energy Science and Engineering</i> , 2020, 8, 1438-1449.	4.0	29
39	Estimation of in-situ mechanical properties of gas hydrate-bearing sediments from well logging. <i>Petroleum Exploration and Development</i> , 2013, 40, 542-547.	7.0	28
40	Role of Guest Molecules in the Mechanical Properties of Clathrate Hydrates. <i>Crystal Growth and Design</i> , 2018, 18, 6729-6741.	3.0	28
41	Numerical analysis of horizontal wellbore state during drilling at the first offshore hydrate production test site in Shenhu area of the South China Sea. <i>Ocean Engineering</i> , 2021, 238, 109614.	4.3	26
42	Dynamic coupling responses and sand production behavior of gas hydrate-bearing sediments during depressurization: An experimental study. <i>Journal of Petroleum Science and Engineering</i> , 2021, 201, 108506.	4.2	25
43	Effect of permeability anisotropy on depressurization-induced gas production from hydrate reservoirs in the South China Sea. <i>Energy Science and Engineering</i> , 2020, 8, 2690-2707.	4.0	24
44	Mechanical Response of Nanocrystalline Ice-Contained Methane Hydrates: Key Role of Water Ice. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 14016-14028.	8.0	23
45	Insight on the stability of polycrystalline natural gas hydrates by molecular dynamics simulations. <i>Fuel</i> , 2021, 289, 119946.	6.4	23
46	The effect of drilling mud properties on shallow lateral resistivity logging of gas hydrate bearing sediments. <i>Journal of Petroleum Science and Engineering</i> , 2015, 127, 259-269.	4.2	22
47	A porothermoelastic wellbore stability model for riserless drilling through gas hydrate-bearing sediments in the Shenhu area of the South China Sea. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 72, 103036.	4.4	22
48	Effect of shearing actions on the rheological properties and mesostructures of CMC, PVP and CMC+PVP aqueous solutions as simple water-based drilling fluids for gas hydrate drilling. <i>Journal of Unconventional Oil and Gas Resources</i> , 2016, 14, 86-98.	3.5	21
49	The effect of surfactants on hydrate particle agglomeration in liquid hydrocarbon continuous systems: a molecular dynamics simulation study. <i>RSC Advances</i> , 2020, 10, 31027-31038.	3.6	21
50	Reservoir characteristics and critical influencing factors on gas hydrate accumulations in the Shenhu area, South China Sea. <i>Marine and Petroleum Geology</i> , 2021, 133, 105238.	3.3	21
51	Effect of stress on permeability of clay silty cores recovered from the Shenhu hydrate area of the South China Sea. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 99, 104421.	4.4	21
52	Effect of agents on hydrate formation and low-temperature rheology of polyalcohol drilling fluid. <i>Journal of Earth Science (Wuhan, China)</i> , 2011, 22, 652-657.	3.2	20
53	Mechanical properties of monocrystalline and polycrystalline monolayer black phosphorus. <i>Nanotechnology</i> , 2017, 28, 045702.	2.6	20
54	Methane Hydrate Formation in the Salty Water Confined in Clay Nanopores: A Molecular Simulation Study. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6128-6140.	6.7	20

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55	The kinetic effects of hydrate anti-agglomerants/surfactants. <i>Fuel</i> , 2022, 318, 123566.	6.4	19
56	Facilitating gas hydrate dissociation kinetics and gas migration in clay interlayer by surface cations shielding effects. <i>Fuel</i> , 2022, 318, 123576.	6.4	18
57	Characterization of seismic wave velocity and attenuation and interpretation of tetrahydrofuran hydrate-bearing sand using resonant column testing. <i>Marine and Petroleum Geology</i> , 2020, 122, 104620.	3.3	17
58	Numerical simulation on gas production from inclined layered methane hydrate reservoirs in the Nankai Trough: A case study. <i>Energy Reports</i> , 2021, 7, 8608-8623.	5.1	17
59	Molecular insights into the effects of surface property and pore size of non-swelling clay on methane hydrate formation. <i>Fuel</i> , 2022, 311, 122607.	6.4	17
60	Numerical analysis on gas production from heterogeneous hydrate system in Shenhu area by depressurizing: Effects of hydrate-free interlayers. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 101, 104504.	4.4	17
61	A Method to Use Solar Energy for the Production of Gas from Marine Hydrate-Bearing Sediments: A Case Study on the Shenhu Area. <i>Energies</i> , 2010, 3, 1861-1879.	3.1	15
62	Modeling Thermodynamic Properties of Propane or Tetrahydrofuran Mixed with Carbon Dioxide or Methane in Structure-II Clathrate Hydrates. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23911-23925.	3.1	15
63	Measurement of methane solubility in pure water in equilibrium with hydrate by using high-pressure optical capillary cell. <i>Marine Chemistry</i> , 2019, 212, 74-82.	2.3	15
64	Aerobic microbial oxidation of hydrocarbon gases: Implications for oil and gas exploration. <i>Marine and Petroleum Geology</i> , 2019, 103, 76-86.	3.3	15
65	Saturation Modeling of Gas Hydrate Using Machine Learning with X-Ray CT Images. <i>Energies</i> , 2020, 13, 5032.	3.1	15
66	Large-Scale Test Model of the Progressive Deformation and Failure of Cracked Soil Slopes. <i>Journal of Earth Science (Wuhan, China)</i> , 2020, 31, 1097-1108.	3.2	15
67	Fractal analyses on saturation exponent in Archie's law for electrical properties of hydrate-bearing porous media. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 107642.	4.2	15
68	Numerical analysis on gas production from silty hydrate reservoirs in the South China sea by depressurizing: The effect of permeability reduction caused by pore compression. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 104, 104680.	4.4	15
69	Mechanical properties of bi- and poly-crystalline ice. <i>AIP Advances</i> , 2018, 8, .	1.3	14
70	A testing assembly for combination measurements on gas hydrate-bearing sediments using x-ray computed tomography and low-field nuclear magnetic resonance. <i>Review of Scientific Instruments</i> , 2021, 92, 085108.	1.3	14
71	The effects of hydrate formation and dissociation on the water-oil interface: Insight into the stability of an emulsion. <i>Fuel</i> , 2020, 266, 116980.	6.4	12
72	Nuclear Magnetic Resonance Transverse Surface Relaxivity in Quartzitic Sands Containing Gas Hydrate. <i>Energy & Fuels</i> , 2021, 35, 6144-6152.	5.1	12

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73	Mechanical Instability of Methane Hydrateâ€“Mineral Interface Systems. ACS Applied Materials & Interfaces, 2021, 13, 46043-46054.	8.0	12
74	Geomechanical property evolution of hydrate-bearing sediments under dynamic loads: Nonlinear behaviors of modulus and damping ratio. Engineering Geology, 2021, 295, 106427.	6.3	12
75	Effects of hydrophilic and hydrophobic nanoâ€“CaCO ₃ on kinetics of hydrate formation. Energy Science and Engineering, 2022, 10, 507-524.	4.0	12
76	Molecular study on the behavior of methane hydrate decomposition induced by ions electrophoresis. Fuel, 2022, 307, 121866.	6.4	11
77	FRactal Analyses of the Shape Factor in Kozenyâ€“Carmen Equation for Hydraulic Permeability in Hydrate-Bearing Sediments. Fractals, 2021, 29, .	3.7	10
78	Micromechanical tangential force measurements between tetrahydrofuran hydrate particles. Fuel, 2022, 316, 123073.	6.4	10
79	An Online Modeling Method for Formation Drillability Based on OS-Nadaboost-ELM Algorithm in Deep Drilling Process * *This work was supported in part by the National Natural Science Foundation of China under Grant 61273102, the Fundamental Research Funds for the Central Universities under Grant CUG160705, the Hubei Provincial Natural Science Foundation of China under Grant 2015CFA010, and the 111 project under Grant B17040. IFAC-PapersOnline, 2017, 50, 12006-12007.	0.9	9
80	Molecular Dynamics Study on the Spontaneous Adsorption of Aromatic Carboxylic Acids to Methane Hydrate Surfaces: Implications for Hydrate Antiagglomeration. Energy & Fuels, 2022, 36, 3628-3639.	5.1	9
81	Key factors analyses for prediction of accurate gas production rate in hydrate reservoirs during model construction. Journal of Natural Gas Science and Engineering, 2022, 102, 104566.	4.4	8
82	Complex Coupled Effects of Seawater Ions and Clay Surfaces on CH ₄ Hydrate Formation in Kaolinite Janus-Nanopores and Bulk Solution. Energy & Fuels, 2022, 36, 5775-5783.	5.1	8
83	Negative Effects of Inorganic Salt Invasion on the Dissociation Kinetics of Silica-Confined Gas Hydrate via Thermal Stimulation. Energy & Fuels, 2022, 36, 6216-6228.	5.1	8
84	Numerical simulations of depressurizationâ€“induced gas production from hydrate reservoirs at site CMGS3â€“W19 with different free gas saturations in the northern South China Sea. Energy Science and Engineering, 2021, 9, 1416-1439.	4.0	7
85	Comparison and application of different empirical correlations for estimating the hydrate safety margin of oil-based drilling fluids containing ethylene glycol. Journal of Natural Gas Chemistry, 2011, 20, 25-33.	1.8	6
86	Effect on the performance of drilling fluids at downhole rock surfaces at low temperatures. Journal of Earth Science (Wuhan, China), 2016, 27, 856-863.	3.2	6
87	Dynamic responses of THF hydrate-bearing sediments under small strain: Resonance column test. Journal of Natural Gas Science and Engineering, 2020, 81, 103399.	4.4	6
88	Grain-Size-Governed Shear Failure Mechanism of Polycrystalline Methane Hydrates. Journal of Physical Chemistry C, 2021, 125, 10034-10042.	3.1	6
89	Effect of hydrophilic silica nanoparticles on hydrate formation during methane gas migration in a simulated wellbore. Petroleum, 2021, 7, 485-495.	2.8	5
90	Experimental study on sand production and coupling response of silty hydrate reservoir with different contents of fine clay during depressurization. Petroleum, 2023, 9, 72-82.	2.8	5

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91	Electric Field-Controlled Structural Instability and Mechanical Properties of Methane Hydrates. Crystal Growth and Design, 2022, 22, 3107-3118.	3.0	5
92	The Effect of Thermal Properties of Sediments on the Gas Production from Hydrate Reservoirs by Depressurization and Thermal Stimulation. Procedia Engineering, 2014, 73, 326-336.	1.2	4
93	Mechanical creep instability of nanocrystalline methane hydrates. Physical Chemistry Chemical Physics, 2021, 23, 3615-3626.	2.8	4
94	A coupled thermal-hydraulic-mechanical model for the kinetic dissociation of methane hydrate in a depressurizing well. Journal of Petroleum Science and Engineering, 2021, 207, 109021.	4.2	4
95	Investigation on the effect of growth temperature and contact interface on surface characteristics of THF clathrate hydrates by atomic force microscopy. Scientia Sinica: Physica, Mechanica Et Astronomica, 2019, 49, 034612.	0.4	4
96	Sand production behaviors during gas recovery from sandy and clayey hydrate-bearing sediments: A comparative analysis. Energy Science and Engineering, 2022, 10, 2224-2238.	4.0	4
97	Experimental Research of Gas Hydrate Drilling Fluids Using Polyethylene Glycol as an Inhibitor. Journal of China University of Geosciences, 2006, 17, 276-282.	0.5	3
98	Relation Model of Burden Operation and State Variables of Blast Furnace Based on Low Frequency Feature Extraction * *This work was supported by the National Nature Science Foundation of China under Grant No.61333002, the Hubei Provincial Nature Science Foundation of China under Grant No. 2015CFA010 and No. 2016CFB480, and the 111 project under Grant B17040.. IFAC-PapersOnLine, 2017, 50, 13796-13801.	0.9	3
99	Influence of AFM Tip Temperature on THF Hydrate Stability: Theoretical Model and Numerical Simulation. Scanning, 2019, 2019, 1-10.	1.5	3
100	A fractal model for the relative permeability prediction of hydrate-bearing sediments. Scientia Sinica: Physica, Mechanica Et Astronomica, 2019, 49, 034614.	0.4	2
101	Micromechanical tests of tetrahydrofuran hydrate using atomic force microscope. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2020, 50, 31-40.	0.5	2
102	The effect of particle size and hydrate status on dynamic mechanical properties of hydrate-bearing sediments. Energy Science and Engineering, 2022, 10, 340-354.	4.0	1
103	The Experimental System of Gas Hydrates Integrative Simulation and its control module. , 2008, , .		0
104	Performance Of Formate Based Drilling Fluids For Gas Hydrates Drilling In Deep Water. , 2009, , .		0
105	High Pressure Control in Synthetic Experimental System of Gas Hydrates Simulation. , 2009, , .		0