

Wei Liu

List of Publications by Year in descending order

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47
papers

2,228
citations

186209

28
h-index

223716

46
g-index

47
all docs

47
docs citations

47
times ranked

874
citing authors

#	ARTICLE	IF	CITATIONS
1	Discontinuous fatigue of salt rock with low-stress intervals. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2019, 115, 77-86.	2.6	156
2	Feasibility evaluation of large-scale underground hydrogen storage in bedded salt rocks of China: A case study in Jiangsu province. <i>Energy</i> , 2020, 198, 117348.	4.5	149
3	Physical simulation of construction and control of two butted-well horizontal cavern energy storage using large molded rock salt specimens. <i>Energy</i> , 2019, 185, 682-694.	4.5	143
4	Experimental investigation of mechanical behavior of bedded rock salt containing inclined interlayer. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2014, 69, 39-49.	2.6	113
5	Preliminary investigation on the feasibility of a clean CAES system coupled with wind and solar energy in China. <i>Energy</i> , 2017, 127, 462-478.	4.5	102
6	Permeability characteristics of mudstone cap rock and interlayers in bedded salt formations and tightness assessment for underground gas storage caverns. <i>Engineering Geology</i> , 2015, 193, 212-223.	2.9	91
7	Stability study and optimization design of small-spacing two-well (SSTW) salt caverns for natural gas storages. <i>Journal of Energy Storage</i> , 2020, 27, 101131.	3.9	90
8	Fastest-growing source prediction of US electricity production based on a novel hybrid model using wavelet transform. <i>International Journal of Energy Research</i> , 2022, 46, 1766-1788.	2.2	87
9	Stability and availability evaluation of underground strategic petroleum reserve (SPR) caverns in bedded rock salt of Jintan, China. <i>Energy</i> , 2017, 134, 504-514.	4.5	85
10	Time Interval Effect in Triaxial Discontinuous Cyclic Compression Tests and Simulations for the Residual Stress in Rock Salt. <i>Rock Mechanics and Rock Engineering</i> , 2020, 53, 4061-4076.	2.6	85
11	A new hybrid algorithm model for prediction of internal corrosion rate of multiphase pipeline. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 85, 103716.	2.1	79
12	Comprehensive feasibility study of two-well-horizontal caverns for natural gas storage in thinly-bedded salt rocks in China. <i>Energy</i> , 2018, 143, 1006-1019.	4.5	77
13	Study on the mechanism of roof collapse and leakage of horizontal cavern in thinly bedded salt rocks. <i>Environmental Earth Sciences</i> , 2019, 78, 1.	1.3	70
14	Research on gas leakage and collapse in the cavern roof of underground natural gas storage in thinly bedded salt rocks. <i>Journal of Energy Storage</i> , 2020, 31, 101669.	3.9	69
15	Evaluation of Potential for Salt Cavern Gas Storage and Integration of Brine Extraction: Cavern Utilization, Yangtze River Delta Region. <i>Natural Resources Research</i> , 2020, 29, 3275-3290.	2.2	60
16	Investigation on the influences of interlayer contents on stability and usability of energy storage caverns in bedded rock salt. <i>Energy</i> , 2021, 231, 120968.	4.5	53
17	Research on the Stability and Treatments of Natural Gas Storage Caverns With Different Shapes in Bedded Salt Rocks. <i>IEEE Access</i> , 2020, 8, 18995-19007.	2.6	50
18	Dynamic response of underground gas storage salt cavern under seismic loads. <i>Tunnelling and Underground Space Technology</i> , 2014, 43, 241-252.	3.0	44

#	ARTICLE	IF	CITATIONS
19	Study on the mechanical properties of man-made salt rock samples with impurities. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 84, 103683.	2.1	44
20	Thermodynamic and applicability analysis of a hybrid CAES system using abandoned coal mine in China. <i>Energy</i> , 2018, 157, 31-44.	4.5	43
21	Investigation on the permeability characteristics of bedded salt rocks and the tightness of natural gas caverns in such formations. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 35, 468-482.	2.1	42
22	Microscopic Pore Structure of Surrounding Rock for Underground Strategic Petroleum Reserve (SPR) Caverns in Bedded Rock Salt. <i>Energies</i> , 2020, 13, 1565.	1.6	42
23	Long-term strength determination and nonlinear creep damage constitutive model of salt rock based on multistage creep test: Implications for underground natural gas storage in salt cavern. <i>Energy Science and Engineering</i> , 2020, 8, 1592-1603.	1.9	40
24	Influences of filling abandoned salt caverns with alkali wastes on surface subsidence. <i>Environmental Earth Sciences</i> , 2015, 73, 6939-6950.	1.3	39
25	Fatigue performance of ordinary concrete under discontinuous cyclic loading. <i>Construction and Building Materials</i> , 2018, 166, 974-981.	3.2	36
26	Study on Sealing Failure of Wellbore in Bedded Salt Cavern Gas Storage. <i>Rock Mechanics and Rock Engineering</i> , 2019, 52, 215-228.	2.6	34
27	Study on Damage and Repair Mechanical Characteristics of Rock Salt Under Uniaxial Compression. <i>Rock Mechanics and Rock Engineering</i> , 2019, 52, 659-671.	2.6	34
28	Large-scale CO ₂ disposal/storage in bedded rock salt caverns of China: An evaluation of safety and suitability. <i>Energy</i> , 2022, 249, 123727.	4.5	31
29	Investigation on the Deformation and Strength Characteristics of Rock Salt Under Different Confining Pressures. <i>Geotechnical and Geological Engineering</i> , 2020, 38, 5703-5717.	0.8	28
30	Microscopic investigations on the healing and softening of damaged salt by uniaxial deformation from CT, SEM and NMR: effect of fluids (brine and oil). <i>RSC Advances</i> , 2020, 10, 2877-2886.	1.7	22
31	Construction simulating and controlling of the two-well-vertical(TWV) salt caverns with gas blanket. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 96, 104291.	2.1	20
32	Similarity assessment of acoustic emission signals and its application in source localization. <i>Ultrasonics</i> , 2017, 75, 36-45.	2.1	19
33	Tightness evaluation and countermeasures for hydrogen storage salt cavern contains various lithological interlayers. <i>Journal of Energy Storage</i> , 2022, 50, 104454.	3.9	19
34	Quantitative investigation on the stability of salt cavity gas storage with multiple interlayers above the cavity roof. <i>Journal of Energy Storage</i> , 2021, 44, 103298.	3.9	18
35	Construction simulation of large-spacing-two-well salt cavern with gas blanket and stability evaluation of cavern for gas storage. <i>Journal of Energy Storage</i> , 2022, 48, 103932.	3.9	18
36	Range estimation of horizontal stress of deep rock based on Mohr-Coulomb criterion. <i>Results in Physics</i> , 2019, 12, 2107-2111.	2.0	17

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37	Stability analysis of a typical two-well-horizontal saddle-shaped salt cavern. <i>Journal of Energy Storage</i> , 2021, 40, 102763.	3.9	17
38	Softening model for failure analysis of insoluble interlayers during salt cavern leaching for natural gas storage. <i>Acta Geotechnica</i> , 2018, 13, 801-816.	2.9	13
39	Preliminary research on the theory and application of unsaturated Red-layers embankment settlement based on rheology and consolidation theory. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	12
40	Geological Feasibility of Underground Oil Storage in Jintan Salt Mine of China. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-11.	1.0	12
41	Crack Evolution and Failure Modes of Shale Containing a Pre-Existing Fissure under Compression. <i>ACS Omega</i> , 2021, 6, 25461-25475.	1.6	10
42	Experimental Study on the Anisotropic Characteristics and Engineering Application of Tight Sandstone. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-12.	1.0	4
43	Geochemical Characteristics and Sedimentary Environment of the Upper Permian Longtan Coal Series Shale in Western Guizhou Province, South China. <i>Geofluids</i> , 2021, 2021, 1-11.	0.3	4
44	Factors Controlling Shale Reservoirs and Development Potential Evaluation: A Case Study. <i>Geofluids</i> , 2021, 2021, 1-13.	0.3	2
45	Experimental Study on the Mechanical and Permeability Properties of Lining Concrete Under Different Complex Stress Paths. <i>Frontiers in Earth Science</i> , 2022, 10, .	0.8	2
46	Study on Mechanical Properties of Shale Under Different Loading Rates. <i>Frontiers in Earth Science</i> , 2022, 9, .	0.8	2
47	Investigation on the experimental determination of the apparent preconsolidation stress and effective-sealing condition for clay cap rock. <i>Arabian Journal of Geosciences</i> , 2018, 11, 1.	0.6	1