Fazhi Yan

List of Publications by Year
in descending order

45 papers	1,566 citations	331670 21 h-index	302126 39 g-index
45 all docs	45 docs citations	45 times ranked	743 citing authors

#	Article	IF	Citations
1	A novel ECBM extraction technology based on the integration of hydraulic slotting and hydraulic fracturing. Journal of Natural Gas Science and Engineering, 2015, 22, 571-579.	4.4	161
2	Novel integrated techniques of drillingâ€“slottingâ€“separation-sealing for enhanced coal bed methane recovery in underground coal mines. Journal of Natural Gas Science and Engineering, 2015, 26, 960-973.	4.4	155
3	Cross-borehole hydraulic slotting technique for preventing and controlling coal and gas outbursts during coal roadway excavation. Journal of Natural Gas Science and Engineering, 2015, 26, 518-525.	4.4	129
4	Breakdown process and fragmentation characteristics of anthracite subjected to high-voltage electrical pulses treatment. Fuel, 2020, 275, 117926.	6.4	73
5	Cracking Process and Stress Field Evolution in Specimen Containing Combined Flaw Under Uniaxial Compression. Rock Mechanics and Rock Engineering, 2016, 49, 3095-3113.	5.4	67
6	Experimental investigation on anthracite coal fragmentation by high-voltage electrical pulses in the air condition: Effect of breakdown voltage. Fuel, 2016, 183, 583-592.	6.4	66
7	Experimental investigation on crack competitive extension during hydraulic fracturing in coal measures strata. Fuel, 2020, 265, 117003.	6.4	66
8	Using high-voltage electrical pulses to crush coal in an air environment: An experimental study. Powder Technology, 2016, 298, 50-56.	4.2	65
9	Structural Evolution Characteristics of Middleâ€“High Rank Coal Samples Subjected to High-Voltage Electrical Pulse. Energy & Fuels, 2018, 32, 3263-3271.	5.1	65
10	Effect of moisture content on structural evolution characteristics of bituminous coal subjected to high-voltage electrical pulses. Fuel, 2019, 241, 571-578.	6.4	63
11	Changes in pore structure and permeability of anthracite coal before and after high-voltage electrical pulses treatment. Powder Technology, 2019, 343, 560-567.	4.2	61
12	Effect of capacitance on physicochemical evolution characteristics of bituminous coal treated by high-voltage electric pulses. Powder Technology, 2020, 367, 47-55.	4.2	57
13	Dynamic behavior of gas pressure and optimization of borehole length in stress relaxation zone during coalbed methane production. Fuel, 2018, 233, 816-824.	6.4	41
14	Test system for the visualization of dynamic disasters and its application to coal and gas outburst. International Journal of Rock Mechanics and Minings Sciences, 2019, 122, 104083.	5.8	32
15	Experimental study of drainage radius considering borehole interaction based on 3D monitoring of gas pressure in coal. Fuel, 2019, 239, 955-963.	6.4	30
16	Influence of coupled effect among flaw parameters on strength characteristic of precracked specimen: Application of response surface methodology and fractal method. Journal of Natural Gas Science and Engineering, 2015, 26, 857-866.	4.4	29
17	Improving the Conductivity and Porosity of Coal with NaCl Solution for High-Voltage Electrical Fragmentation. Energy & Fuels, 2018, 32, 5010-5019.	5.1	27
18	Effects of heating temperature on pore structure evolution of briquette coals. Fuel, 2021, 296, 120651.	6.4	25

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19	Influence of Geo-stress on Dynamic Response Characteristics of Coal and Gas Outburst. Rock Mechanics and Rock Engineering, 2020, 53, 4819-4837.	5.4	24
20	A Gasâ€“Solidâ€“Liquid Coupling Model of Coal Seams and the Optimization of Gas Drainage Boreholes. Energies, 2018, 11, 560.	3.1	23
21	Experimental Analysis of the Dynamic Effects of Coalâ€“Gas Outburst and a Protean Contraction and Expansion Flow Model. Natural Resources Research, 2020, 29, 1617-1637.	4.7	23
22	Petrophysical variation of coal treated by cyclic high-voltage electrical pulse for coalbed methane recovery. Journal of Petroleum Science and Engineering, 2019, 178, 795-804.	4.2	22
23	Effect of high-voltage thermal breakdown on pore characteristics of coal. International Journal of Mining Science and Technology, 2017, 27, 1051-1055.	10.3	21
24	Interlayer interference during coalbed methane coproduction in multilayer superimposed gas-bearing system by 3D monitoring of reservoir pressure: An experimental study. Fuel, 2021, 304, 121472.	6.4	20
25	Changes in Pore Structure of Dry-hot Rock with Supercritical CO₂ Treatment. Energy & Fuels, 2020, 34, 6059-6068.	5.1	18
26	Investigation on gas drainage effect under different borehole layout via 3D monitoring of gas pressure. Journal of Natural Gas Science and Engineering, 2022, 101, 104522.	4.4	18
27	Swelling characteristics and permeability evolution of anthracite coal containing expansive clay under water-saturated conditions. Fuel, 2020, 279, 118501.	6.4	17
28	Evolution characteristics of coal microstructure and its influence on methane adsorption capacity under high temperature pyrolysis. Energy, 2022, 254, 124262.	8.8	17
29	Effect of heating on the molecular carbon structure and the evolution of mechanical properties of briquette coal. Energy, 2021, 237, 121548.	8.8	16
30	Fluid response characteristics of multilayer superimposed CBM production under the different number of gas-producing layers condition. Journal of Natural Gas Science and Engineering, 2021, 89, 103858.	4.4	15
31	Dynamic Evolution of the Fluid Effect of Multiple Reservoirs Due to CBM Coproduction: An Experimental Investigation. Energy & Fuels, 2020, 34, 10947-10957.	5.1	12
32	Effects of different conductive ions on pore-structure evolution of medium- and high-rank coal bodies induced by electric pulses. Fuel, 2021, 293, 120437.	6.4	12
33	Influence of supercritical CO2 saturation on the failure process of hot dry rock with acoustic emission monitoring. Powder Technology, 2020, 374, 241-249.	4.2	11
34	Experimental and numerical simulation analyses of selective fragmentation of coal samples by plasma. Fuel, 2019, 255, 115717.	6.4	10
35	Evolution characteristics of reservoir parameters during coalbed methane drainage via in-seam horizontal boreholes. Powder Technology, 2020, 362, 591-603.	4.2	10
36	Distribution characteristics of pulverized coal and stressâ€“gas pressureâ€“temperature response laws in coal and gas outburst under deep mining conditions. Energy Science and Engineering, 2022, 10, 2205-2223.	4.0	10

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37	On the evolution mechanism of permeability during gas drainage: Insights from deformation field, gas pressure field and temperature field. Chemical Engineering Research and Design, 2022, 162, 825-836.	5.6	10
38	Different adsorbed gas effects on the reservoir parameters and production in coalbed methane extraction by multibranch horizontal wells. Energy Science and Engineering, 2020, 8, 1370-1385.	4.0	9
39	Physical Simulations of Gas Production Mechanism in Constant-Rate Co-production from Multiple Coal Reservoirs. Natural Resources Research, 2021, 30, 1427-1443.	4.7	9
40	Pressure of different gases injected into large-scale coal matrix: Analysis of timeâ€“space dependence and prediction using light gradient boosting machine. Fuel, 2020, 279, 118448.	6.4	8
41	Evaluating the maximum rate of penetration for drilling borehole in soft coal seam. Energy Science and Engineering, 2020, 8, 3273-3284.	4.0	6
42	Experimental investigation on disturbance effect during coalbed methane production. Journal of Petroleum Science and Engineering, 2022, 208, 109591.	4.2	6
43	A Study on the Factors Influencing Coal Fracturing Range Caused by Liquid Carbon Dioxide Phase Transition. Geofluids, 2022, 2022, 1-12.	0.7	3
44	Effect of molecular carbon structures on the evolution of the pores and strength of lignite briquette coal with different heating rates. Fuel, 2022, 307, 121917.	6.4	2
45	Evolution of the Pore and Fracture Microstructure Inside Coal Impacted by a High-Voltage Electric Pulse after AlCl₃ Solution Treatment. Energy & Fuels, 2021, 35, 18484-18494.	5.1	2