Deming Wang

List of Publications by Year
in descending order

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63 papers	2,236 citations	201674 27 h-index	233421 45 g-index
63 all docs	63 docs citations	63 times ranked	1151 citing authors

#	Article	IF	Citations
1	Risk assessment of gas explosion in coal mines based on fuzzy AHP and bayesian network. Chemical Engineering Research and Design, 2020, 135, 207-218.	5.6	139
2	Controlling coal fires using the three-phase foam and water mist techniques in the Anjialing Open Pit Mine, China. Natural Hazards, 2015, 75, 1833-1852.	3.4	110
3	Experimental investigation of coal dust wetting ability of anionic surfactants with different structures. Chemical Engineering Research and Design, 2019, 121, 69-76.	5.6	106
4	Kinetics characteristics of coal low-temperature oxidation in oxygen-depleted air. Journal of Loss Prevention in the Process Industries, 2015, 35, 224-231.	3.3	103
5	Effects of chemical properties of coal dust on its wettability. Powder Technology, 2017, 318, 33-39.	4.2	90
6	Effect of Temperature on Foaming Ability and Foam Stability of Typical Surfactants Used for Foaming Agent. Journal of Surfactants and Detergents, 2017, 20, 615-622.	2.1	89
7	Application of foam to suppress rock dust in a large cross-section rock roadway driven with roadheader. Advanced Powder Technology, 2013, 24, 257-262.	4.1	86
8	Experimental study on changes of pore structure and mechanical properties of sandstone after high-temperature treatment using nuclear magnetic resonance. Engineering Geology, 2020, 275, 105739.	6.3	85
9	Experimental investigation on the wettability of respirable coal dust based on infrared spectroscopy and contact angle analysis. Advanced Powder Technology, 2017, 28, 3130-3139.	4.1	84
10	Effect of water-soluble polymers on the performance of dust-suppression foams: Wettability, surface viscosity and stability. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 568, 92-98.	4.7	77
11	Risk assessment of mine ignition sources using fuzzy Bayesian network. Chemical Engineering Research and Design, 2019, 125, 297-306.	5.6	73
12	Experimental investigation on the dilatational interfacial rheology of dust-suppressing foam and its effect on foam performance. Chemical Engineering Research and Design, 2019, 123, 351-357.	5.6	58
13	Optimization and implementation of a foam system to suppress dust in coal mine excavation face. Chemical Engineering Research and Design, 2015, 96, 184-190.	5.6	57
14	Experimental investigation of the performance of a novel foam generator for dust suppression in underground coal mines. Advanced Powder Technology, 2014, 25, 1053-1059.	4.1	54
15	An In Situ Testing Method for Analyzing the Changes of Active Groups in Coal Oxidation at Low Temperatures. Spectroscopy Letters, 2014, 47, 495-503.	1.0	54
16	Void fraction distribution in overburden disturbed by longwall mining of coal. Environmental Earth Sciences, 2016, 75, 1.	2.7	53
17	Detection, extinguishing, and monitoring of a coal fire in Xinjiang, China. Environmental Science and Pollution Research, 2018, 25, 26603-26616.	5.3	47
18	Novel approach for extinguishing large-scale coal fires using gasâ€“liquid foams in open pit mines. Environmental Science and Pollution Research, 2015, 22, 18363-18371.	5.3	41

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19	Oxidation and Self-Reaction of Carboxyl Groups During Coal Spontaneous Combustion. Spectroscopy Letters, 2015, 48, 173-178.	1.0	40
20	Experimental investigation and field application of foam used for suppressing roadheader cutting hard rock in underground tunneling. Tunnelling and Underground Space Technology, 2015, 49, 1-8.	6.2	39
21	The effect of geometries and cutting parameters of conical pick on the characteristics of dust generation: Experimental investigation and theoretical exploration. Fuel Processing Technology, 2020, 198, 106243.	7.2	39
22	Experimental Investigation on a Sustained Release Type of Inhibitor for Retarding the Spontaneous Combustion of Coal. Energy & Fuels, 2016, 30, 8904-8914.	5.1	37
23	Flame retardant, thermal, and mechanical properties of glass fiber/nanoclay reinforced phenol-urea-formaldehyde foam. Polymer Composites, 2016, 37, 2323-2332.	4.6	37
24	Synthesis and characterization of phenolâ€ureaâ€formaldehyde foaming resin used to block air leakage in mining. Polymer Composites, 2014, 35, 2056-2066.	4.6	33
25	Experimental investigation of the fire-fighting characteristics of aqueous foam in underground goaf. Chemical Engineering Research and Design, 2017, 106, 239-245.	5.6	31
26	Experimental study on foaming properties of anion-cation compound foaming agent to prevent coal spontaneous combustion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 581, 123847.	4.7	30
27	Novel Approach for Suppressing Cutting Dust Using Foam on a Fully Mechanized Face with Hard Parting. Journal of Occupational and Environmental Hygiene, 2014, 11, 154-164.	1.0	28
28	Investigation on the new design of foaming device used for dust suppression in underground coal mines. Powder Technology, 2017, 315, 270-275.	4.2	27
29	The effect of coal proximate compositions on the characteristics of dust generation using a conical pick cutting system. Powder Technology, 2019, 355, 573-581.	4.2	27
30	Experimental investigation of the pressure gradient of a new spiral mesh foam generator. Chemical Engineering Research and Design, 2015, 94, 44-54.	5.6	26
31	A new design of foaming agent mixing device for a pneumatic foaming system used for mine dust suppression. International Journal of Mining Science and Technology, 2016, 26, 187-192.	10.3	26
32	An experimental investigation on the influence of coal brittleness on dust generation. Powder Technology, 2020, 364, 457-466.	4.2	25
33	Experimental Investigation of the Mechanism of Foaming Agent Concentration Affecting Foam Stability. Journal of Surfactants and Detergents, 2017, 20, 1443-1451.	2.1	24
34	Experimental study on characteristics of surface potential and current induced by stress on coal mine sandstone roof. Engineering Geology, 2020, 266, 105468.	6.3	24
35	Induced polarization response of porous media with metallic particles â€" Part 6: The case of metals and semimetals. Geophysics, 2017, 82, E97-E110.	2.6	21
36	Improvement of Foaming Ability of Surfactant Solutions by Water-Soluble Polymers: Experiment and Molecular Dynamics Simulation. Polymers, 2020, 12, 571.	4.5	21

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37	Instantaneous discharge characteristics and its methane ignition mechanism of coal mine rock damage. Environmental Science and Pollution Research, 2022, 29, 62495-62506.	5.3	21
38	A New Design of Double-Stage Parallel Adding Equipment Used for Dust Suppression in Underground Coal Mines. Arabian Journal for Science and Engineering, 2014, 39, 8319-8330.	1.1	19
39	Influence of gas flow rate and sodium carboxymethylcellulose on foam properties of fatty alcohol sodium polyoxyethylene ether sulfate solution. Journal of Dispersion Science and Technology, 2017, 38, 961-966.	2.4	19
40	Effect of partially hydrolyzed polyacrylamide on the solution and foam properties of sodium alcohol ether sulfate. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 556, 51-60.	4.7	17
41	Smoldering combustion of coal under forced air flow: experimental investigation. Journal of Fire Sciences, 2016, 34, 267-288.	2.0	16
42	The influence of pore structure of coal on characteristics of dust generation during the process of conical pick cutting. Powder Technology, 2020, 363, 559-568.	4.2	16
43	Influence of polymers on dust-related foam properties of sodium dodecyl benzene sulfonate with Foamscan. Journal of Dispersion Science and Technology, 2017, 38, 1726-1731.	2.4	15
44	Experimental Study on the Inhibition Effects of Nitrogen and Carbon Dioxide on Coal Spontaneous Combustion. Energies, 2020, 13, 5256.	3.1	15
45	Study on the mechanism of polyethylene oxide groups improving the foamability of anionic surfactants in hard water. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 613, 126046.	4.7	14
46	ENVIRONMENTAL HAZARDS OF COAL FIRE AND THEIR PREVENTION IN CHINA. Environmental Engineering and Management Journal, 2013, 12, 1915-1919.	0.6	14
47	Improved foam application at the tunnel face with large ventilation volume and low pressure supplied water. Tunnelling and Underground Space Technology, 2020, 95, 103139.	6.2	13
48	Experimental investigation of fire extinguishment using expansion foam in the underground goaf. Arabian Journal of Geosciences, 2015, 8, 9055-9063.	1.3	11
49	Interaction of Particles with Surfactant Thin Films: Implications for Dust Suppression. Langmuir, 2019, 35, 7641-7649.	3.5	11
50	Three-dimensional-imaging thermal surfaces of coal fires based on UAV thermal infrared data. International Journal of Remote Sensing, 2021, 42, 672-692.	2.9	11
51	Treatment of smouldering coal refuse piles: an application in China. Environmental Technology (United Kingdom), 2020, 41, 3105-3118.	2.2	10
52	An Efficient Synthesis of Nâ€Substitutedâ€3â€arylâ€3â€(2â€hydroxyâ€4,4â€dimethylâ€6â€oxocyclohexâ€1â€enyl)propanamides by Fourâ€component Reaction in Aqueous Medium. Chinese Journal of Chemistry, 2011, 29, 2368-2372.	1.5	9
53	The effects of poly(ethylene glycol) on the low-temperature oxidation reaction of coal as monitored using in situ series diffuse reflectance FTIR. Korean Journal of Chemical Engineering, 2014, 31, 801-806.	2.7	9
54	The competitive reaction mechanism between oxidation and pyrolysis consumption during lowâ€rank coal combustion at leanâ€oxygen conditions: A quantitative calculation based on thermogravimetric analyses. Canadian Journal of Chemical Engineering, 2018, 96, 2575-2585.	1.7	9

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55	Recent Progress in Polymer-Containing Soft Matters for Safe Mining of Coal. Polymers, 2019, 11, 1706.	4.5	9
56	A novel method of fuzzy fault tree analysis combined with VB program to identify and assess the risk of coal dust explosions. PLoS ONE, 2017, 12, e0182453.	2.5	8
57	Thermal analysis of Vitamin C affecting low-temperature oxidation of coal. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 519-522.	1.0	7
58	Characterizing dilatation energy of released gas from underground coal seam by drilling boreholes. Natural Hazards, 2015, 75, 2965-2984.	3.4	6
59	Effects of Geometric Parameters on Air Suction Characteristics of a New Jet-Type Foam Generator for Mine Dust Suppression. Arabian Journal for Science and Engineering, 2018, 43, 1445-1454.	3.0	4
60	Research on the Law of Head Loss of Jet Pumps in the Cavitation State. ACS Omega, 2022, 7, 12661-12679.	3.5	4
61	Research on Noise-Induced Characteristics of Unsteady Cavitation of a Jet Pump. ACS Omega, 2022, 7, 12255-12267.	3.5	4
62	Experimental Investigation on Flow Characteristics of Aqueous Foams through the Jet Device and Horizontal Pipe. Journal of Dispersion Science and Technology, 2016, 37, 536-543.	2.4	3
63	Investigation of methane-air explosions and its destruction at longwall coalface in underground coalmines. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, , 1-18.	2.3	1