# Guang Xu

List of Publications by Year
in descending order



| 59 | 1,588 | 236612 25 | 315357 38 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 59 | 59 | 59 | 1035 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Surfactant-aided coal dust suppression: A review of evaluation methods and influencing factors. Science of the Total Environment, 2018, 639, 1060-1076. | 3.9 | 151 |
| 2 | Numerical study of gasâ€“solid two-phase flow in a coal roadway after blasting. Advanced Powder Technology, 2016, 27, 1607-1617. | 2.0 | 99 |
| 3 | A coupled electromagnetic irradiation, heat and mass transfer model for microwave heating and its numerical simulation on coal. Fuel Processing Technology, 2018, 177, 237-245. | 3.7 | 79 |
| 4 | Characterization of coal particles wettability in surfactant solution by using four laboratory static tests. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 567, 304-312. | 2.3 | 76 |
| 5 | Minimizing DPM pollution in an underground mine by optimizing auxiliary ventilation systems using CFD. Tunnelling and Underground Space Technology, 2019, 87, 112-121. | 3.0 | 72 |
| 6 | Modeling the load of SARS-CoV-2 virus in human expelled particles during coughing and speaking. PLoS ONE, 2020, 15, e0241539. | 1.1 | 63 |
| 7 | Improving coal permeability using microwave heating technologyâ€”A review. Fuel, 2020, 266, 117022. | 3.4 | 60 |
| 8 | Computational fluid dynamics applied to mining engineering: a review. International Journal of Mining, Reclamation and Environment, 2017, 31, 251-275. | 1.2 | 54 |
| 9 | Evaluation of the coal dust suppression efficiency of different surfactants: A factorial experiment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 595, 124686. | 2.3 | 51 |
| 10 | Factors influencing the filtration performance of homemade face masks. Journal of Occupational and Environmental Hygiene, 2021, 18, 128-138. | 0.4 | 44 |
| 11 | A review of the health effects and exposure-responsible relationship of diesel particulate matter for underground mines. International Journal of Mining Science and Technology, 2017, 27, 831-838. | 4.6 | 40 |
| 12 | Evaluation of SDBS surfactant on coal wetting performance with static methods: Preliminary laboratory tests. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 2140-2150. | 1.2 | 38 |
| 13 | Research and application of non-traditional chemical stabilizers on bauxite residue (red sand) dust control, a review. Science of the Total Environment, 2018, 616-617, 1552-1565. | 3.9 | 38 |
| 14 | Development of a remote analysis method for underground ventilation systems using tracer gas and CFD in a simplified laboratory apparatus. Tunnelling and Underground Space Technology, 2013, 33, 1-11. | 3.0 | 37 |
| 15 | Remote characterization of ventilation systems using tracer gas and CFD in an underground mine. Safety Science, 2015, 74, 140-149. | 2.6 | 37 |
| 16 | Numerical study of diesel particulate matter distribution in an underground mine isolated zone. Powder Technology, 2018, 339, 947-957. | 2.1 | 36 |
| 17 | Comparison of underground mine DPM simulation using discrete phase and continuous phase models. Chemical Engineering Research and Design, 2019, 127, 45-55. | 2.7 | 36 |
| 18 | Experimental study on effective microwave heating/fracturing of coal with various dielectric property and water saturation. Fuel Processing Technology, 2020, 202, 106378. | 3.7 | 36 |

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|---|---|---|---|
| 19 | The development of an optimized evaluation system for improving coal dust suppression efficiency using aqueous solution sprays. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 602, 125104. | 2.3 | 35 |
| 20 | Time Effect of Water Injection on the Mechanical Properties of Coal and Its Application in Rockburst Prevention in Mining. Energies, 2017, 10, 1783. | 1.6 | 32 |
| 21 | The development of microstructure of coal by microwave irradiation stimulation. Journal of Natural Gas Science and Engineering, 2019, 66, 86-95. | 2.1 | 31 |
| 22 | Numerical study on DPM dispersion and distribution in an underground development face based on dynamic mesh. International Journal of Mining Science and Technology, 2020, 30, 471-475. | 4.6 | 31 |
| 23 | Comparison of the coal dust suppression performance of surfactants using static test and dynamic test. Journal of Cleaner Production, 2021, 328, 129633. | 4.6 | 30 |
| 24 | Experimental investigation on variation of physical properties of coal samples subjected to microwave irradiation. Journal of Applied Geophysics, 2018, 150, 118-125. | 0.9 | 27 |
| 25 | Calibration of Mine Ventilation Network Models Using the Non-Linear Optimization Algorithm. Energies, 2018, 11, 31. | 1.6 | 26 |
| 26 | Improving coal powder wettability using electrolyte assisted surfactant solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 613, 126042. | 2.3 | 26 |
| 27 | Effects of Freezing and Thawing Cycle on Mechanical Properties and Stability of Soft Rock Slope. Advances in Materials Science and Engineering, 2017, 2017, 1-10. | 1.0 | 20 |
| 28 | Study on Safety Control of Composite Roof in Deep Roadway Based on Energy Balance Theory. Sustainability, 2019, 11, 3688. | 1.6 | 19 |
| 29 | Effect of polymer stabilizers' viscosity on red sand structure strength and dust pollution resistance. Powder Technology, 2019, 352, 117-125. | 2.1 | 19 |
| 30 | Evolution of Shale Microstructure under Microwave Irradiation Stimulation. Energy & Fuels, 2018, 32, 11467-11476. | 2.5 | 18 |
| 31 | Effect of synthetic and natural polymers on reducing bauxite residue dust pollution. Environmental Technology (United Kingdom), 2020, 41, 556-565. | 1.2 | 18 |
| 32 | Numerical investigation of diesel particulate matter dispersion in an underground development face during key mining activities. Advanced Powder Technology, 2020, 31, 3882-3896. | 2.0 | 18 |
| 33 | Changes on methane concentration after CO2 injection in a longwall gob: A case study. Journal of Natural Gas Science and Engineering, 2016, 29, 550-558. | 2.1 | 17 |
| 34 | Effective utilization of tracer gas in characterization of underground mine ventilation networks. Chemical Engineering Research and Design, 2016, 99, 1-10. | 2.7 | 16 |
| 35 | Evolution Law of Adsorption and Desorption Characteristics of CH<sub>4</sub> in Coal Masses during Coalbed Methane Extraction. Energy & Fuels, 2018, 32, 10540-10548. | 2.5 | 16 |
| 36 | Lignosulfonate Treating Bauxite Residue Dust Pollution: Enhancement of Mechanical Properties and Wind Erosion Behavior. Water, Air, and Soil Pollution, 2018, 229, 1. | 1.1 | 16 |

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|---|---|---|---|
| 37 | Numerical study of coal dust behaviors and experimental investigation on coal dust suppression efficiency of surfactant solution by using wind tunnel tests. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2021, 43, 2173-2188. | 1.2 | 14 |
| 38 | Influence of bubble approach velocity on liquid film drainage between a bubble and a spherical particle. Powder Technology, 2018, 338, 140-144. | 2.1 | 11 |
| 39 | Measurement and simulation study on effective drainage radius of borehole along coal seam. Energy Exploration and Exploitation, 2019, 37, 1657-1679. | 1.1 | 10 |
| 40 | Study on the Effect of Iron-Based Deoxidizing Inhibitors for Coal Spontaneous Combustion Prevention. Energies, 2018, 11, 789. | 1.6 | 9 |
| 41 | Permeability Evolution and Particle Size Distribution of Saturated Crushed Sandstone under Compression. Geofluids, 2018, 2018, 1-12. | 0.3 | 9 |
| 42 | Computational Fluid Dynamic Simulation of Inhaled Radon Dilution by Auxiliary Ventilation in a Stone-Coal Mine Laneway and Dosage Assessment of Miners. Processes, 2019, 7, 515. | 1.3 | 9 |
| 43 | Investigation of agglomerating and wetting behaviour during coal dust suppression via the synergistic application of hydrocarbon and short-chain-fluorocarbon surfactants in the presence of electrolytes. Powder Technology, 2022, 404, 117518. | 2.1 | 8 |
| 44 | Characterization of red sand dust pollution control performance via static and dynamic laboratorial experiments when applying polymer stabilizers. Environmental Science and Pollution Research, 2021, 28, 34937-34952. | 2.7 | 7 |
| 45 | Microscopic Diffusion Characteristics of Linear Alkylbenzene Sulfonates on the Surface of Anthracite: The Influence of Different Attachment Sites of Benzene Ring in the Backbone. Minerals (Basel, Switzerland), 2021, 11, 1045. | 0.8 | 7 |
| 46 | Physical chemical characterization of thermally and aqueous solution treated maize stalk stem ash and its potential use in a cementing system. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, 42, 930-941. | 1.2 | 5 |
| 47 | Influence of the Branched Structure of Polyoxyethylene Units in Nonionic Surfactants on the Wettability of Anthracite: A Combined Modeling and Experimental Study. Adsorption Science and Technology, 2022, 2022, . | 1.5 | 5 |
| 48 | Influence of leakage of air hole on flow and heat transfer in recuperator. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2023, 45, 3931-3947. | 1.2 | 4 |
| 49 | Treatment of bauxite residue dust pollution by improving structural stability via application of synthetic and natural polymers. Journal of Central South University, 2019, 26, 440-448. | 1.2 | 4 |
| 50 | Study on Adsorption Characteristics of Sulfonate Gemini Surfactant on Lignite Surface. Minerals (Basel, Switzerland), 2021, 11, 1401. | 0.8 | 4 |
| 51 | Experimental evaluation of the surfactant adsorptions performance on coal particles with different properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 648, 129408. | 2.3 | 4 |
| 52 | Impact of Coalbed Incidence Angle on Methane Enrichment Zone in Longwall Gob. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 | 0.8 | 3 |
| 53 | Reduction of Airborne Bauxite Residue Dust Pollution by Enhancing the Structural Stability via the Application of Non-traditional Stabilizers. Water, Air, and Soil Pollution, 2021, 232, 1. | 1.1 | 3 |
| 54 | Effects of Loading Rate on Gas Seepage and Temperature in Coal and Its Potential for Coal-Gas Disaster Early-Warning. Energies, 2017, 10, 1246. | 1.6 | 2 |

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|---|---|---|---|
| 55 | A mine main fans switchover system with lower air flow volatility based on improved particle swarm optimization algorithm. Advances in Mechanical Engineering, 2019, 11, 168781401982928. | 0.8 | 2 |
| 56 | Laboratory studies on remote method to assess the damage in underground mines after an emergency. Chemical Engineering Research and Design, 2021, 148, 1337-1345. | 2.7 | 2 |
| 57 | Wettability alteration process at pore-scale during engineered waterflooding using computational fluid dynamics. Modeling Earth Systems and Environment, 2022, 8, 4219-4227. | 1.9 | 2 |
| 58 | Focus Energy Determination of Mining Microseisms Using Residual Seismic Wave Attenuation in Deep Coal Mining. Shock and Vibration, 2018, 2018, 1-13. | 0.3 | 1 |
| 59 | Effect of Synergistic Aging on Bauxite Residue Dust Reduction Performance via the Application of Colloids, an Orthogonal Design-Based Study. Polymers, 2021, 13, 1986. | 2.0 | 1 |