

# Chengpeng Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

22  
papers

528  
citations

623188

14  
h-index

676716

22  
g-index

22  
all docs

22  
docs citations

22  
times ranked

284  
citing authors

| #  | ARTICLE                                                                                                                                                                                                                                                             | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Permeability enhancement and porosity change of coal by liquid carbon dioxide phase change fracturing. <i>Engineering Geology</i> , 2021, 287, 106106.                                                                                                              | 2.9 | 60        |
| 2  | Experimental investigation on the influence of sub- and super-critical CO <sub>2</sub> saturation time on the permeability of fractured shale. <i>Energy</i> , 2020, 191, 116574.                                                                                   | 4.5 | 50        |
| 3  | Application of nanoindentation technology in rocks: a review. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2020, 6, 1.                                                                                                                     | 1.3 | 48        |
| 4  | Mineral dissolution and pore alteration of coal induced by interactions with supercritical CO <sub>2</sub> . <i>Energy</i> , 2022, 248, 123627.                                                                                                                     | 4.5 | 48        |
| 5  | Influence of Water Saturation on the Mechanical Behaviour of Low-Permeability Reservoir Rocks. <i>Energies</i> , 2017, 10, 236.                                                                                                                                     | 1.6 | 46        |
| 6  | Characteristics of Clay-Abundant Shale Formations: Use of CO <sub>2</sub> for Production Enhancement. <i>Energies</i> , 2017, 10, 1887.                                                                                                                             | 1.6 | 36        |
| 7  | Microstructure and mechanical properties alterations in shale treated via CO <sub>2</sub> /CO <sub>2</sub> -water exposure. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 108088.                                                                | 2.1 | 32        |
| 8  | Adsorption Characteristics and Thermodynamic Analysis of CH <sub>4</sub> and CO <sub>2</sub> on Continental and Marine Shale. <i>Transport in Porous Media</i> , 2021, 140, 763-788.                                                                                | 1.2 | 25        |
| 9  | Chemical-mechanical coupling effects on the permeability of shale subjected to supercritical CO <sub>2</sub> -water exposure. <i>Energy</i> , 2022, 248, 123591.                                                                                                    | 4.5 | 24        |
| 10 | Effect of sub-/super-critical CO <sub>2</sub> and brine exposure on the mechanical and acoustic emission characteristics of shale. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 90, 103921.                                                        | 2.1 | 21        |
| 11 | Uncovering the creep deformation mechanism of rock-forming minerals using nanoindentation. <i>International Journal of Mining Science and Technology</i> , 2022, 32, 283-294.                                                                                       | 4.6 | 21        |
| 12 | Mechanical response and mineral dissolution of anthracite induced by supercritical CO <sub>2</sub> saturation: Influence of saturation time. <i>Fuel</i> , 2022, 319, 123759.                                                                                       | 3.4 | 20        |
| 13 | Gas adsorption characteristics changes in shale after supercritical CO <sub>2</sub> -water exposure at different pressures and temperatures. <i>Fuel</i> , 2022, 310, 122260.                                                                                       | 3.4 | 19        |
| 14 | Effects of temperature and grain size on the mechanical properties of polycrystalline quartz. <i>Computational Materials Science</i> , 2021, 188, 110138.                                                                                                           | 1.4 | 15        |
| 15 | Mechanical properties of $\alpha$ -quartz using nanoindentation tests and molecular dynamics simulations. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2021, 147, 104878.                                                                  | 2.6 | 15        |
| 16 | Experimental Study of Matrix Permeability of Gas Shale: An Application to CO <sub>2</sub> -Based Shale Fracturing. <i>Energies</i> , 2018, 11, 702.                                                                                                                 | 1.6 | 14        |
| 17 | Experimental evaluation of gas flow characteristics in fractured siltstone under various reservoir and injection conditions: an application to CO <sub>2</sub> -based fracturing. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2020, 6, 1. | 1.3 | 11        |
| 18 | The Role of Pore Pressure on the Mechanical Behavior of Coal Under Undrained Cyclic Triaxial Loading. <i>Rock Mechanics and Rock Engineering</i> , 2022, 55, 1375-1392.                                                                                             | 2.6 | 9         |

| #  | ARTICLE                                                                                                                                                                                                                                                                      | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Numerical simulation on the deformation characteristics of borehole failure in gas-bearing coal seams considering the effective stress principle under complicated stress path conditions. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2022, 8, 1. | 1.3 | 6         |
| 20 | The influence of particle size on the long-term electrochemical corrosion behavior of pipeline steel in a corrosive soil environment. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2017, 68, 846-857.                                                         | 0.8 | 3         |
| 21 | Comparison of CO2 Flow Behavior through Intact Siltstone Sample under Tri-Axial Steady-State and Transient Flow Conditions. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1092.                                                                                           | 1.3 | 3         |
| 22 | Experimental and Theoretical Study on Comparisons of Some Gas Permeability Test Methods for Tight Rocks. <i>Rock Mechanics and Rock Engineering</i> , 2022, 55, 3153-3169.                                                                                                   | 2.6 | 2         |