

Quan Xie

List of Publications by Year in descending order

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112
papers

3,171
citations

147801

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175258

52
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112
all docs

112
docs citations

112
times ranked

1924
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Most common surfactants employed in chemical enhanced oil recovery. <i>Petroleum</i> , 2017, 3, 197-211. | 2.8 | 394 |
| 2 | Application of nanotechnology for enhancing oil recovery – A review. <i>Petroleum</i> , 2016, 2, 324-333. | 2.8 | 250 |
| 3 | Oil/water/rock wettability: Influencing factors and implications for low salinity water flooding in carbonate reservoirs. <i>Fuel</i> , 2018, 215, 171-177. | 6.4 | 124 |
| 4 | Extended DLVO-based estimates of surface force in low salinity water flooding. <i>Journal of Molecular Liquids</i> , 2016, 221, 658-665. | 4.9 | 114 |
| 5 | Ions tuning water flooding experiments and interpretation by thermodynamics of wettability. <i>Journal of Petroleum Science and Engineering</i> , 2014, 124, 350-358. | 4.2 | 100 |
| 6 | Toward a Fundamental Understanding of Geological Hydrogen Storage. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 3233-3253. | 3.7 | 96 |
| 7 | Geochemical reactions-induced hydrogen loss during underground hydrogen storage in sandstone reservoirs. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 19998-20009. | 7.1 | 95 |
| 8 | The low salinity effect at high temperatures. <i>Fuel</i> , 2017, 200, 419-426. | 6.4 | 84 |
| 9 | pH effect on wettability of oil/brine/carbonate system: Implications for low salinity water flooding. <i>Journal of Petroleum Science and Engineering</i> , 2018, 168, 419-425. | 4.2 | 68 |
| 10 | Investigation of moisture effect on methane adsorption capacity of shale samples. <i>Fuel</i> , 2018, 232, 323-332. | 6.4 | 67 |
| 11 | Low salinity water flooding in high acidic oil reservoirs: Impact of pH on wettability of carbonate reservoirs. <i>Journal of Molecular Liquids</i> , 2019, 281, 444-450. | 4.9 | 54 |
| 12 | Drivers of Low Salinity Effect in Carbonate Reservoirs. <i>Energy & Fuels</i> , 2017, 31, 8951-8958. | 5.1 | 53 |
| 13 | Fines migration during CO ₂ injection: Experimental results interpreted using surface forces. <i>International Journal of Greenhouse Gas Control</i> , 2017, 65, 32-39. | 4.6 | 52 |
| 14 | Electrostatic Origins of CO ₂ -Increased Hydrophilicity in Carbonate Reservoirs. <i>Scientific Reports</i> , 2018, 8, 17691. | 3.3 | 49 |
| 15 | Effect of electrical double layer and ion exchange on low salinity EOR in a pH controlled system. <i>Journal of Petroleum Science and Engineering</i> , 2019, 174, 418-424. | 4.2 | 49 |
| 16 | Effect of multi-component ions exchange on low salinity EOR: Coupled geochemical simulation study. <i>Petroleum</i> , 2016, 2, 215-224. | 2.8 | 47 |
| 17 | Effect of specific functional groups on oil adhesion from mica substrate: Implications for low salinity effect. <i>Journal of Industrial and Engineering Chemistry</i> , 2017, 56, 342-349. | 5.8 | 46 |
| 18 | Supercritical CO ₂ -Shale interaction induced natural fracture closure: Implications for scCO ₂ hydraulic fracturing in shales. <i>Fuel</i> , 2022, 313, 122682. | 6.4 | 40 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Impact of surface roughness on wettability of oil-brine-calcite system at sub-pore scale. Journal of Molecular Liquids, 2020, 299, 112107. | 4.9 | 39 |
| 20 | Hydrogen storage in Majiagou carbonate reservoir in China: Geochemical modelling on carbonate dissolution and hydrogen loss. International Journal of Hydrogen Energy, 2022, 47, 24861-24870. | 7.1 | 39 |
| 21 | Flood characteristic and fluid rock interactions of a supercritical CO ₂ , brine, rock system: South West Hub, Western Australia. International Journal of Greenhouse Gas Control, 2016, 54, 309-321. | 4.6 | 38 |
| 22 | Drivers of low salinity effect in sandstone reservoirs. Journal of Molecular Liquids, 2018, 250, 396-403. | 4.9 | 38 |
| 23 | Insights into the wettability alteration of CO ₂ -assisted EOR in carbonate reservoirs. Journal of Molecular Liquids, 2019, 279, 420-426. | 4.9 | 37 |
| 24 | Analytical modelling of wettability alteration-induced micro-fractures during hydraulic fracturing in tight oil reservoirs. Fuel, 2019, 249, 434-440. | 6.4 | 37 |
| 25 | Thermodynamic characterization of H ₂ -brine-shale wettability: Implications for hydrogen storage at subsurface. International Journal of Hydrogen Energy, 2022, 47, 22510-22521. | 7.1 | 37 |
| 26 | A pH-Resolved Wettability Alteration: Implications for CO ₂ -Assisted EOR in Carbonate Reservoirs. Energy & Fuels, 2017, 31, 13593-13599. | 5.1 | 36 |
| 27 | Characterization of the combined effect of high temperature and moisture on methane adsorption in shale gas reservoirs. Journal of Petroleum Science and Engineering, 2019, 182, 106353. | 4.2 | 36 |
| 28 | Geochemical controls on wettability alteration at pore-scale during low salinity water flooding in sandstone using X-ray micro computed tomography. Fuel, 2020, 271, 117675. | 6.4 | 36 |
| 29 | Hydrogen wettability in carbonate reservoirs: Implication for underground hydrogen storage from geochemical perspective. International Journal of Hydrogen Energy, 2022, 47, 25357-25366. | 7.1 | 34 |
| 30 | Drivers of pH increase and implications for low salinity effect in sandstone. Fuel, 2018, 218, 112-117. | 6.4 | 32 |
| 31 | Insight investigation of miscible SCCO ₂ Water Alternating Gas (WAG) injection performance in heterogeneous sandstone reservoirs. Journal of CO ₂ Utilization, 2018, 28, 255-263. | 6.8 | 32 |
| 32 | Wettability alteration induced water uptake in shale oil reservoirs: A geochemical interpretation for oil-brine-OM interaction during hydraulic fracturing. International Journal of Coal Geology, 2019, 213, 103277. | 5.0 | 31 |
| 33 | Excess H ⁺ Increases Hydrophilicity during CO ₂ -Assisted Enhanced Oil Recovery in Sandstone Reservoirs. Energy & Fuels, 2019, 33, 814-821. | 5.1 | 31 |
| 34 | Fiber-1, Not Fiber-2, Directly Mediates the Infection of the Pathogenic Serotype 4 Fowl Adenovirus via Its Shaft and Knob Domains. Journal of Virology, 2020, 94, . | 3.4 | 31 |
| 35 | Insights into immiscible supercritical CO ₂ EOR: An XCT scanner assisted flow behaviour in layered sandstone porous media. Journal of CO ₂ Utilization, 2019, 32, 187-195. | 6.8 | 29 |
| 36 | A review of chemical-assisted minimum miscibility pressure reduction in CO ₂ injection for enhanced oil recovery. Petroleum, 2021, 7, 245-253. | 2.8 | 29 |

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|----|--|-----|-----------|
| 37 | Detecting pH and Ca ²⁺ increase during low salinity waterflooding in carbonate reservoirs: Implications for wettability alteration process. <i>Journal of Molecular Liquids</i> , 2020, 317, 114003. | 4.9 | 28 |
| 38 | Effect of the Fluid–Shale Interaction on Salinity: Implications for High-Salinity Flowback Water during Hydraulic Fracturing in Shales. <i>Energy & Fuels</i> , 2020, 34, 3031-3040. | 5.1 | 27 |
| 39 | Role of ion exchange, surface complexation, and albite dissolution in low salinity water flooding in sandstone. <i>Journal of Petroleum Science and Engineering</i> , 2019, 176, 126-131. | 4.2 | 25 |
| 40 | Domain in Fiber-2 interacted with KPNA3/4 significantly affects the replication and pathogenicity of the highly pathogenic FAdV-4. <i>Virulence</i> , 2021, 12, 754-765. | 4.4 | 25 |
| 41 | Influence of Surface Roughness on the Contact Angle due to Calcite Dissolution in an Oil–Brine–Calcite System: A Nanoscale Analysis Using Atomic Force Microscopy and Geochemical Modeling. <i>Energy & Fuels</i> , 2019, 33, 4219-4224. | 5.1 | 24 |
| 42 | Distribution of adsorbed water in shale: An experimental study on isolated kerogen and bulk shale samples. <i>Journal of Petroleum Science and Engineering</i> , 2020, 187, 106858. | 4.2 | 23 |
| 43 | The effects of temperature and acid number of crude oil on the wettability of acid volcanic reservoir rock from the Hailar Oilfield. <i>Petroleum Science</i> , 2010, 7, 93-99. | 4.9 | 22 |
| 44 | A novel fiber-2-edited live attenuated vaccine candidate against the highly pathogenic serotype 4 fowl adenovirus. <i>Veterinary Research</i> , 2021, 52, 35. | 3.0 | 22 |
| 45 | Influence of Permeability Heterogeneity on Miscible CO ₂ Flooding Efficiency in Sandstone Reservoirs: An Experimental Investigation. <i>Transport in Porous Media</i> , 2018, 125, 341-356. | 2.6 | 21 |
| 46 | Synergetic effect between in-situ mobility control and micro-displacement for chemical enhanced oil recovery (CEOR) of a surface-active nanofluid. <i>Journal of Petroleum Science and Engineering</i> , 2021, 205, 108983. | 4.2 | 21 |
| 47 | Interpreting Water Uptake by Shale with Ion Exchange, Surface Complexation, and Disjoining Pressure. <i>Energy & Fuels</i> , 2019, 33, 8250-8258. | 5.1 | 20 |
| 48 | The Effect of Stress and Pore Pressure on Formation Permeability of Ultra-Low-Permeability Reservoir. <i>Petroleum Science and Technology</i> , 2012, 30, 1221-1231. | 1.5 | 18 |
| 49 | Low Salinity Waterflooding in Low Permeability Sandstone: Coreflood Experiments and Interpretation by Thermodynamics and Simulation. , 2015, , . | | 18 |
| 50 | A recombination efficiently increases the pathogenesis of the novel K subgroup of avian leukosis virus. <i>Veterinary Microbiology</i> , 2019, 231, 214-217. | 1.9 | 18 |
| 51 | Drivers of Wettability Alteration for Oil/Brine/Kaolinite System: Implications for Hydraulic Fracturing Fluids Uptake in Shale Rocks. <i>Energies</i> , 2018, 11, 1666. | 3.1 | 16 |
| 52 | Co-infection of vMDV with multiple subgroups of avian leukosis viruses in indigenous chicken flocks in China. <i>BMC Veterinary Research</i> , 2019, 15, 288. | 1.9 | 16 |
| 53 | Role of Basal-Charged Clays in Low Salinity Effect in Sandstone Reservoirs: Adhesion Force on Muscovite using Atomic Force Microscope. <i>Energy & Fuels</i> , 2019, 33, 756-764. | 5.1 | 16 |
| 54 | FAdV-4 without <i>Fiber-2</i> Is a Highly Attenuated and Protective Vaccine Candidate. <i>Microbiology Spectrum</i> , 2022, 10, e0143621. | 3.0 | 16 |

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|----|---|-----|-----------|
| 55 | Electrostatic characterization of -NH ₄ ⁺ -brine-kaolinite system: Implications for low salinity waterflooding in sandstone reservoirs. <i>Journal of Petroleum Science and Engineering</i> , 2019, 179, 539-545. | 4.2 | 15 |
| 56 | Gp37 Regulates the Pathogenesis of Avian Leukosis Virus Subgroup J via Its C Terminus. <i>Journal of Virology</i> , 2020, 94, . | 3.4 | 15 |
| 57 | A Novel Recombinant FAdV-4 Virus with Fiber of FAdV-8b Provides Efficient Protection against Both FAdV-4 and FAdV-8b. <i>Viruses</i> , 2022, 14, 376. | 3.3 | 15 |
| 58 | Investigation of imbibition areas during well shut-in based on mercury injection experiment and BP neural network. <i>Fuel</i> , 2019, 254, 115621. | 6.4 | 14 |
| 59 | OASL Triggered by Novel Goose Astrovirus via ORF2 Restricts Its Replication. <i>Journal of Virology</i> , 2020, 94, . | 3.4 | 14 |
| 60 | Role of brine composition on rock surface energy and its implications for subcritical crack growth in calcite. <i>Journal of Molecular Liquids</i> , 2020, 303, 112638. | 4.9 | 14 |
| 61 | Experimental study of CO ₂ huff-n-puff in a tight conglomerate reservoir using true triaxial stress cell core fracturing and displacement system: A case study. <i>Journal of Petroleum Science and Engineering</i> , 2021, 199, 108298. | 4.2 | 14 |
| 62 | Effects of oligomers dissolved in CO ₂ or associated gas on IFT and miscibility pressure with a gas-light crude oil system. <i>Journal of Petroleum Science and Engineering</i> , 2019, 181, 106210. | 4.2 | 13 |
| 63 | Wetting Behavior of Shale Rocks and Its Relationship to Oil Composition. <i>Energy & Fuels</i> , 2019, 33, 12270-12277. | 5.1 | 12 |
| 64 | Response of Non-Polar Oil Component on Low Salinity Effect in Carbonate Reservoirs: Adhesion Force Measurement Using Atomic Force Microscopy. <i>Energies</i> , 2020, 13, 77. | 3.1 | 12 |
| 65 | Aggregation Behavior of Amphiphilic PAMAM-Based Hyperbranched Polymer in the Presence of Conventional Small Molecular Surfactants. <i>Advances in Chemical Engineering and Science</i> , 2013, 03, 11-18. | 0.5 | 12 |
| 66 | An Experimental Investigation of Immiscible-CO ₂ -Flooding Efficiency in Sandstone Reservoirs: Influence of Permeability Heterogeneity. <i>SPE Reservoir Evaluation and Engineering</i> , 2019, 22, 990-997. | 1.8 | 11 |
| 67 | Interpreting micromechanics of fluid-shale interactions with geochemical modelling and disjoining pressure: Implications for calcite-rich and quartz-rich shales. <i>Journal of Molecular Liquids</i> , 2020, 319, 114117. | 4.9 | 11 |
| 68 | Isolation and phylogenetic analysis of goose astrovirus type 1 from goslings with gout in Jiangxi province, China. <i>Poultry Science</i> , 2022, 101, 101800. | 3.4 | 11 |
| 69 | Effect of fluid-shale interactions on shales micromechanics: Nanoindentation experiments and interpretation from geochemical perspective. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 101, 104545. | 4.4 | 11 |
| 70 | Potential Evaluation of Ion Tuning Waterflooding for a Tight Oil Reservoir in Jiyuan OilField: Experiments and Reservoir Simulation Results. , 2015, , . | | 10 |
| 71 | Effective Mechanisms to Relate Initial Rock Permeability to Outcome of Relative Permeability Modification. <i>Energies</i> , 2019, 12, 4688. | 3.1 | 10 |
| 72 | Insights into the nano-structure of oil-brine-kaolinite interfaces: Molecular dynamics and implications for enhanced oil recovery. <i>Applied Clay Science</i> , 2021, 211, 106203. | 5.2 | 10 |

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|----|---|-----|-----------|
| 73 | Low-Salinity-Assisted Cationic Polyacrylamide Water Shutoff in Low-Permeability Sandstone Gas Reservoirs. <i>Energy & Fuels</i> , 2020, 34, 5524-5536. | 5.1 | 9 |
| 74 | Chemical-assisted minimum miscibility pressure reduction between oil and methane. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 108094. | 4.2 | 9 |
| 75 | A novel linear epitope crossing Group 1 and Group 2 influenza A viruses located in the helix A of HA2 derived from H7N9. <i>Veterinary Microbiology</i> , 2019, 228, 39-44. | 1.9 | 8 |
| 76 | Synergistic pathogenesis of chicken infectious anemia virus and J subgroup of avian leukosis virus. <i>Poultry Science</i> , 2021, 100, 101468. | 3.4 | 8 |
| 77 | Integral effects of initial fluids configuration and wettability alteration on remaining saturation: characterization with X-ray micro-computed tomography. <i>Fuel</i> , 2021, 306, 121717. | 6.4 | 8 |
| 78 | New Approach to Alternating Thickened–Unthickened Gas Flooding for Enhanced Oil Recovery. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 14637-14647. | 3.7 | 7 |
| 79 | An Experimental Investigation of Immiscible CO ₂ Flooding Efficiency in Sandstone Reservoirs: Influence of Permeability Heterogeneity. , 2018, , . | | 7 |
| 80 | A chicken liver cell line efficiently supports the replication of ALV-J possibly through its high level viral receptor and efficient protein expression system. <i>Veterinary Research</i> , 2018, 49, 41. | 3.0 | 7 |
| 81 | Alcohol-Assisted Waterflooding in Carbonate Reservoirs. <i>Energy & Fuels</i> , 2019, 33, 10651-10658. | 5.1 | 7 |
| 82 | Fluid–Fluid Interfacial Effects in Multiphase Flow during Carbonated Waterflooding in Sandstone: Application of X-ray Microcomputed Tomography and Molecular Dynamics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 5731-5740. | 8.0 | 7 |
| 83 | Identification of three novel B cell epitopes in ORF2 protein of the emerging goose astrovirus and their application. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 855-863. | 3.6 | 7 |
| 84 | Quantitative determination of abandonment pressure for CO ₂ storage in depleted shale gas reservoirs by free-simulator approach. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 36, 519-539. | 4.4 | 6 |
| 85 | Influence of pH on Acidic Oil–Brine–Carbonate Adhesion Using Atomic Force Microscopy. <i>Energy & Fuels</i> , 2020, 34, 13750-13758. | 5.1 | 6 |
| 86 | Direct Evidence of Salinity and pH Effects on the Interfacial Interactions of Asphaltene-Brine-Silica Systems. <i>Molecules</i> , 2020, 25, 1214. | 3.8 | 6 |
| 87 | Wettability alteration using benzoxazine resin: A remedy for water blockage in sandstone gas reservoirs. <i>Fuel</i> , 2021, 291, 120189. | 6.4 | 6 |
| 88 | Novel preformed gel particles with controllable density and its implications for EOR in fractured-vuggy carbonated reservoirs. <i>Journal of Petroleum Science and Engineering</i> , 2021, 205, 108903. | 4.2 | 6 |
| 89 | Identification of novel B cell epitopes in the fiber protein of serotype 8 Fowl adenovirus. <i>AMB Express</i> , 2019, 9, 172. | 3.0 | 6 |
| 90 | Carbonated waterflooding in carbonate reservoirs: Experimental evaluation and geochemical interpretation. <i>Journal of Molecular Liquids</i> , 2020, 308, 113055. | 4.9 | 5 |

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|-----|--|-----|-----------|
| 91 | Geochemical insights for CO ₂ huff-n-puff process in shale oil reservoirs. <i>Journal of Molecular Liquids</i> , 2020, 307, 112992. | 4.9 | 5 |
| 92 | Evaluation of the Potential of Low Salinity Water Flooding in the High Temperature and High Salinity Dong-He-Tang Reservoir in the Tarim Oilfield, China: Experimental and Reservoir Simulation Results. , 2016, , . | | 4 |
| 93 | The Effects of Crossflow and Permeability Variation on Different Miscible CO ₂ injection Schemes Performance in Layered Sandstone Porous Media. , 2019, , . | | 4 |
| 94 | The tyrosine phosphatase SHP-2 dephosphorylated by ALV-J via its Env efficiently promotes ALV-J replication. <i>Virulence</i> , 2021, 12, 1721-1731. | 4.4 | 4 |
| 95 | Development of colloidal gold-based test strip for rapid detection of serotype 4 fowl adenovirus. <i>Journal of Virological Methods</i> , 2021, 296, 114231. | 2.1 | 4 |
| 96 | Effect of Functional Groups on Chemical-Assisted MMP Reduction of a Methane-Oil System. <i>Energy & Fuels</i> , 2021, 35, 14519-14526. | 5.1 | 3 |
| 97 | Electrostatic Characterization of the $\sim\text{COOH}$ Brine-Clay System: Implications for Wettability Alteration during Low Salinity Waterflooding in Sandstone Reservoirs. <i>Energy & Fuels</i> , 2021, 35, 16599-16606. | 5.1 | 3 |
| 98 | Effect of reservoir pressure and total organic content on adsorbed gas production in shale reservoirs: a numerical modelling study. <i>Arabian Journal of Geosciences</i> , 2022, 15, 1. | 1.3 | 3 |
| 99 | Effect of Shale Anisotropy on Hydration and Its Implications for Water Uptake. <i>Energies</i> , 2019, 12, 4225. | 3.1 | 2 |
| 100 | An efficient fiber-based ELISA for detection of antibody against fowl adenovirus serotypes 7 and 8. <i>Journal of Veterinary Diagnostic Investigation</i> , 2020, 32, 444-449. | 1.1 | 2 |
| 101 | Wettability alteration process at pore-scale during engineered waterflooding using computational fluid dynamics. <i>Modeling Earth Systems and Environment</i> , 2022, 8, 4219-4227. | 3.4 | 2 |
| 102 | Source Mechanism and Stress Inversion for Hydraulic Fracturing Induced Microseismicity in Glutenite Reservoir. , 2020, , . | | 1 |
| 103 | pH effect on wettability of NH_4^+ -brine-muscovite system: Implications for low salinity effect in sandstone reservoirs. <i>Journal of Molecular Liquids</i> , 2021, 325, 115049. | 4.9 | 1 |
| 104 | An efficient peptide-based ELISA for differentiating fowl adenovirus NH_4^+ -infected chickens from vaccinated chickens. <i>Journal of Veterinary Diagnostic Investigation</i> , 2021, 33, 762-766. | 1.1 | 1 |
| 105 | Effect of Pyrite Oxidation on Flowback Water Properties During Hydraulic Fracturing in Calcite-Rich Shales. , 2020, , . | | 1 |
| 106 | X-Ray Computed Tomography Assisted Investigation of Flow Behaviour of Miscible CO ₂ to Enhance Oil Recovery in Layered Sandstone Porous Media. , 2022, , . | | 1 |
| 107 | Effect of fluid saturation and salinity on sandstone rock weakening: experimental investigations and interpretations from physicochemical perspective. <i>Acta Geotechnica</i> , 2023, 18, 171-186. | 5.7 | 1 |
| 108 | Evaluation of Miscible CO ₂ WAG/Sandstone Interactions: Emphasis on the Effect of Permeability Heterogeneity and Clay Mineral Content. , 2019, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | 1-Pentanol-Assisted Waterflooding in High Salinity Brine up to 140°C in Carbonate Reservoirs. Energy & Fuels, 2020, 34, 12215-12224. | 5.1 | 0 |
| 110 | Cytogenetic identification of wheat-Psathyrostachys huashanica amphiploid \tilde{A} -triticale progenies for English grain aphid resistance. Scientia Agricola, 2013, 70, 161-166. | 1.2 | 0 |
| 111 | Effect of Crossflow and Heterogeneity on CO2 Behaviour in Sandstone Oil Reservoirs. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 112 | Impact of Mode I and Mode II Fractures on Fracture-Gas Permeability in Shale: An Experimental Study. IOP Conference Series: Earth and Environmental Science, 2020, 570, 032010. | 0.3 | 0 |