

# Muhammad Arif

## List of Publications by Year in descending order

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Version: 2024-02-01

54  
papers

2,379  
citations

201385

27  
h-index

223531

46  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1168  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of pressure and temperature on CO <sub>2</sub> brine mica contact angles and CO <sub>2</sub> brine interfacial tension: Implications for carbon geo-sequestration. <i>Journal of Colloid and Interface Science</i> , 2016, 462, 208-215.	5.0	190
2	Wettability of rock/CO <sub>2</sub> /brine and rock/oil/CO <sub>2</sub> -enriched-brine systems: Critical parametric analysis and future outlook. <i>Advances in Colloid and Interface Science</i> , 2019, 268, 91-113.	7.0	138
3	Wettability of nanofluid-modified oil-wet calcite at reservoir conditions. <i>Fuel</i> , 2018, 211, 405-414.	3.4	116
4	CO <sub>2</sub> storage in carbonates: Wettability of calcite. <i>International Journal of Greenhouse Gas Control</i> , 2017, 62, 113-121.	2.3	108
5	Influence of shale total organic content on CO <sub>2</sub> geo-storage potential. <i>Geophysical Research Letters</i> , 2017, 44, 8769-8775.	1.5	107
6	Solid/CO <sub>2</sub> and solid/water interfacial tensions as a function of pressure, temperature, salinity and mineral type: Implications for CO <sub>2</sub> wettability and CO <sub>2</sub> geo-storage. <i>International Journal of Greenhouse Gas Control</i> , 2016, 53, 263-273.	2.3	103
7	Organic acid concentration thresholds for ageing of carbonate minerals: Implications for CO <sub>2</sub> trapping/storage. <i>Journal of Colloid and Interface Science</i> , 2019, 534, 88-94.	5.0	91
8	CO <sub>2</sub> -wettability of low to high rank coal seams: Implications for carbon sequestration and enhanced methane recovery. <i>Fuel</i> , 2016, 181, 680-689.	3.4	89
9	Stabilising nanofluids in saline environments. <i>Journal of Colloid and Interface Science</i> , 2017, 508, 222-229.	5.0	88
10	CO <sub>2</sub> -wettability of sandstones exposed to traces of organic acids: Implications for CO <sub>2</sub> geo-storage. <i>International Journal of Greenhouse Gas Control</i> , 2019, 83, 61-68.	2.3	88
11	Structural trapping capacity of oil-wet caprock as a function of pressure, temperature and salinity. <i>International Journal of Greenhouse Gas Control</i> , 2016, 50, 112-120.	2.3	84
12	A new method for TOC estimation in tight shale gas reservoirs. <i>International Journal of Coal Geology</i> , 2017, 179, 269-277.	1.9	76
13	Influence of tailor-made TiO <sub>2</sub> /API bentonite nanocomposite on drilling mud performance: Towards enhanced drilling operations. <i>Applied Clay Science</i> , 2020, 199, 105862.	2.6	76
14	Shale Wettability: Data Sets, Challenges, and Outlook. <i>Energy &amp; Fuels</i> , 2021, 35, 2965-2980.	2.5	76
15	X-ray tomography imaging of shale microstructures: A review in the context of multiscale correlative imaging. <i>International Journal of Coal Geology</i> , 2021, 233, 103641.	1.9	69
16	Influence of surface chemistry on interfacial properties of low to high rank coal seams. <i>Fuel</i> , 2017, 194, 211-221.	3.4	63
17	Effect of humic acid on CO <sub>2</sub> -wettability in sandstone formation. <i>Journal of Colloid and Interface Science</i> , 2021, 588, 315-325.	5.0	63
18	Wettability of nano-treated calcite/CO <sub>2</sub> /brine systems: Implication for enhanced CO <sub>2</sub> storage potential. <i>International Journal of Greenhouse Gas Control</i> , 2017, 66, 97-105.	2.3	50

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19	Experimental investigation of carbonate wettability as a function of mineralogical and thermo-physical conditions. <i>Fuel</i> , 2020, 264, 116846.	3.4	49
20	Electrochemical investigation of the effect of temperature, salinity and salt type on brine/mineral interfacial properties. <i>International Journal of Greenhouse Gas Control</i> , 2017, 59, 136-147.	2.3	48
21	Hydrogen storage potential of coals as a function of pressure, temperature, and rank. <i>Journal of Colloid and Interface Science</i> , 2022, 620, 86-93.	5.0	47
22	A novel hybrid method for gas hydrate filling modes identification via digital rock. <i>Marine and Petroleum Geology</i> , 2020, 115, 104255.	1.5	46
23	CO <sub>2</sub> geo-storage capacity enhancement via nanofluid priming. <i>International Journal of Greenhouse Gas Control</i> , 2017, 63, 20-25.	2.3	39
24	Porosity estimation in kerogen-bearing shale gas reservoirs. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 52, 575-581.	2.1	37
25	Different Approaches Used for Modeling and Simulation of Polymer Electrolyte Membrane Fuel Cells: A Review. <i>Energy &amp; Fuels</i> , 2020, 34, 11897-11915.	2.5	31
26	Influence of pore structural properties on gas hydrate saturation and permeability: A coupled pore-scale modelling and X-ray computed tomography method. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 88, 103805.	2.1	31
27	Mineralogy and pore topology analysis during matrix acidizing of tight sandstone and dolomite formations using chelating agents. <i>Journal of Petroleum Science and Engineering</i> , 2018, 167, 869-876.	2.1	30
28	Fluid-rock interactions and its implications on EOR: Critical analysis, experimental techniques and knowledge gaps. <i>Energy Reports</i> , 2022, 8, 6355-6395.	2.5	30
29	A systematic review of Anhydrite-Bearing Reservoirs: EOR Perspective, CO <sub>2</sub> -Geo-storage and future research. <i>Fuel</i> , 2022, 320, 123942.	3.4	27
30	Neutron scattering: A subsurface application review. <i>Earth-Science Reviews</i> , 2021, 221, 103755.	4.0	26
31	Coal fines migration: A holistic review of influencing factors. <i>Advances in Colloid and Interface Science</i> , 2022, 301, 102595.	7.0	22
32	Carbonate rock mechanical response to CO <sub>2</sub> flooding evaluated by a combined X-ray computed tomography – DEM method. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 84, 103675.	2.1	21
33	Influence of Miscible CO <sub>2</sub> Flooding on Wettability and Asphaltene Precipitation in Indiana Lime Stone. , 2017, , .		20
34	Influence of Hydrophobicity and Porosity of the Gas Diffusion Layer on Mass Transport Losses in PEM Fuel Cells: A Simulation Study Supported by Experiments. <i>Energy &amp; Fuels</i> , 2020, 34, 13010-13022.	2.5	20
35	Influence of gas hydrate saturation and pore habits on gas relative permeability in gas hydrate-bearing sediments: Theory, experiment and case study. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 95, 104171.	2.1	19
36	Impact of Solid Surface Energy on Wettability of CO <sub>2</sub> -brine-Mineral Systems as a Function of Pressure, Temperature and Salinity. <i>Energy Procedia</i> , 2017, 114, 4832-4842.	1.8	17

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37	Wettability Alteration of Carbonate Rocks via Nanoparticle-Anionic Surfactant Flooding at Reservoirs Conditions. , 2017, , .		17
38	A Multiscale Investigation of Cross-Linked Polymer Gel Injection in Sandstone Gas Reservoirs: Implications for Water Shutoff Treatment. Energy & Fuels, 2020, 34, 14046-14057.	2.5	17
39	Investigation of change in different properties of sandstone and dolomite samples during matrix acidizing using chelating agents. Journal of Petroleum Exploration and Production, 2019, 9, 2793-2809.	1.2	16
40	Influence of Heterogeneity on Carbonate Permeability Upscaling: A Renormalization Approach Coupled with the Pore Network Model. Energy & Fuels, 2022, 36, 3003-3015.	2.5	16
41	Simulating Coal Permeability Change as a Function of Effective Stress Using a Microscale Digital Rock Model. Energy & Fuels, 2021, 35, 8756-8762.	2.5	14
42	CO2 Wettability of Shales and Coals as a Function of Pressure, Temperature and Rank: Implications for CO2 Sequestration and Enhanced Methane Recovery. , 2016, , .		9
43	Low-Salinity-Assisted Cationic Polyacrylamide Water Shutoff in Low-Permeability Sandstone Gas Reservoirs. Energy & Fuels, 2020, 34, 5524-5536.	2.5	9
44	Rock/Fluid/Polymer Interaction Mechanisms: Implications for Water Shut-off Treatment. Energy & Fuels, 2021, 35, 12809-12827.	2.5	9
45	Effect of Native Reservoir State and Oilfield Operations on Clay Mineral Surface Chemistry. Molecules, 2022, 27, 1739.	1.7	7
46	Development of Hybrid Drilling Fluid and Enzymeâ€“Acid Precursor-Based Clean-Up Fluid for Wells Drilled with Calcium Carbonate-Based Drilling Fluids. ACS Omega, 2020, 5, 25984-25992.	1.6	6
47	Experimental and numerical investigation on the dynamic damage behavior of gas-bearing coal. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2022, 8, 1.	1.3	6
48	Wettability of Shale/Oil/Brine Systems: A New Physicochemical and Imaging Approach. , 2022, , .		5
49	Investigation of Surface Charge at the Mineral/Brine Interface: Implications for Wettability Alteration. Frontiers in Materials, 2022, 9, .	1.2	4
50	An Alternative Approach for Well Test Analysis and Production Performance in Tight Gas Reservoirs Considering Stress Dependent Permeability. , 2012, , .		3
51	Impact of prolonged waterâ€“gas flow on the performance of polyacrylamide. Journal of Applied Polymer Science, 2022, 139, .	1.3	3
52	Efficient Polymer Scattering Layer Fabrication and their Application in Electrical Properties Enhancement of Perovskite/Silicon Tandem Solar Cells. Key Engineering Materials, 0, 778, 283-289.	0.4	2
53	Characterization of Elastic Properties of Lacustrine Shale Reservoir Using Well Logging and Core Analysis. , 2016, , .		1
54	Higher State Trellis Coded Modulation for Asymmetric Digital Subscriber Transceivers. , 2006, , .		0