

Matthew B Myers

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5214666/publications.pdf>

Version: 2024-02-01

88
papers

3,063
citations

186265

28
h-index

161849

54
g-index

91
all docs

91
docs citations

91
times ranked

4069
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of bedding direction on brine imbibition in Lower Shaximiao tight sandstone: An NMR analysis. Journal of Petroleum Science and Engineering, 2022, 210, 110006.	4.2	7
2	Migration of carbon dioxide in sandstone under various pressure/temperature conditions: From experiment to simulation. , 2022, 12, 233-248.		3
3	Chem/Bio Sensors for Marine Applications. , 2022, , .		0
4	X-Ray Computed Tomography Assisted Investigation of Flow Behaviour of Miscible CO ₂ to Enhance Oil Recovery in Layered Sandstone Porous Media. , 2022, , .		1
5	The effects of porosity and permeability changes on simulated supercritical CO ₂ migration front in tight glutenite under different effective confining pressures from 1.5 MPa to 21.5 MPa. , 2021, 11, 19-36.		5
6	Next generation amino acid technology for CO ₂ capture. Journal of Materials Chemistry A, 2021, 9, 1692-1704.	10.3	27
7	Chemical-assisted minimum miscibility pressure reduction between oil and methane. Journal of Petroleum Science and Engineering, 2021, 196, 108094.	4.2	9
8	Experimental and numerical investigation of supercritical CO ₂ migration in sandstone with multiple clay interlayers. International Journal of Greenhouse Gas Control, 2021, 104, 103194.	4.6	7
9	Further Insights into the Performance of Silylated Polyacrylamide-Based Relative Permeability Modifiers in Carbonate Reservoirs and Influencing Factors. ACS Omega, 2021, 6, 13671-13683.	3.5	6
10	Wettability alteration using benzoxazine resin: A remedy for water blockage in sandstone gas reservoirs. Fuel, 2021, 291, 120189.	6.4	6
11	Poly(2-hydroxyethyl methacrylate) Hydrogels Doped with Gold Nanoparticles for Surface-Enhanced Raman Spectroscopy. ACS Applied Nano Materials, 2021, 4, 5577-5589.	5.0	2
12	Rock/Fluid/Polymer Interaction Mechanisms: Implications for Water Shut-off Treatment. Energy & Fuels, 2021, 35, 12809-12827.	5.1	9
13	Poly(2-hydroxyethyl methacrylate) hydrogels doped with copper nanoparticles. Journal of Nanoparticle Research, 2021, 23, 1.	1.9	1
14	Effect of Functional Groups on Chemical-Assisted MMP Reduction of a Methane-Oil System. Energy & Fuels, 2021, 35, 14519-14526.	5.1	3
15	Dynamic Pressure/Temperature Behaviour of GaN-Based Chemical Sensors. IEEE Sensors Journal, 2021, 21, 18877-18886.	4.7	3
16	Amine-Infused Hydrogels with Nonaqueous Solvents: Facile Platforms to Control CO ₂ Capture Performance. Industrial & Engineering Chemistry Research, 2021, 60, 14758-14767.	3.7	7
17	Migration and storage characteristics of supercritical CO ₂ in anisotropic sandstones with clay interlayers based on X-CT experiments. Journal of Hydrology, 2020, 580, 124239.	5.4	33
18	Modifying the Wettability of Sandstones Using Nonfluorinated Silylation: To Minimize the Water Blockage Effect. Energy & Fuels, 2020, 34, 709-719.	5.1	9

#	ARTICLE	IF	CITATIONS
19	A controlled CO ₂ release experiment in a fault zone at the In-Situ Laboratory in Western Australia. International Journal of Greenhouse Gas Control, 2020, 99, 103100.	4.6	19
20	Mechanistic Aspects of Polymeric Relative Permeability Modifier Adsorption onto Carbonate Rocks. Energy & Fuels, 2020, 34, 12065-12077.	5.1	8
21	Flow behavior characteristics and residual trapping of supercritical carbon dioxide in tight glutenite by MRI experiments. Journal of Natural Gas Science and Engineering, 2020, 83, 103540.	4.4	21
22	Effects of CO ₂ -Saturated Brine on the Injectivity and Integrity of Chalk Reservoirs. Transport in Porous Media, 2020, 135, 735-751.	2.6	8
23	CSIRO In-Situ Lab: A multi-pronged approach to surface gas and groundwater monitoring at geological CO ₂ storage sites. Chemical Geology, 2020, 545, 119642.	3.3	7
24	Direct air capture (DAC) of CO ₂ using polyethylenimine (PEI) – a scalable strategy. Chemical Communications, 2020, 56, 7151-7154.	4.1	23
25	Carbonated waterflooding in carbonate reservoirs: Experimental evaluation and geochemical interpretation. Journal of Molecular Liquids, 2020, 308, 113055.	4.9	5
26	Recent progress in sensing nitrate, nitrite, phosphate, and ammonium in aquatic environment. Chemosphere, 2020, 259, 127492.	8.2	98
27	Changing Sandstone Rock Wettability with Supercritical CO ₂ -Based Silylation. Energy & Fuels, 2020, 34, 2015-2027.	5.1	7
28	Poly(2-Hydroxyethyl Methacrylate) Sponges Doped with Ag Nanoparticles as Antibacterial Agents. ACS Applied Nano Materials, 2020, 3, 1630-1639.	5.0	19
29	Application of nuclear magnetic resonance technology to carbon capture, utilization and storage: A review. Journal of Rock Mechanics and Geotechnical Engineering, 2019, 11, 892-908.	8.1	46
30	Polyethylenimine – An Emerging Material for Efficient Carbon Removal. ACS Applied Materials & Interfaces, 2019, 11, 26770-26780.	8.0	11
31	Block Copolymer-Coated ATR-FTIR Spectroscopic Sensors for Monitoring Hydrocarbons in Aquatic Environments at High Temperature and Pressure. ACS Applied Polymer Materials, 2019, 1, 2149-2156.	4.4	4
32	Effects of oligomers dissolved in CO ₂ or associated gas on IFT and miscibility pressure with a gas-light crude oil system. Journal of Petroleum Science and Engineering, 2019, 181, 106210.	4.2	13
33	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
34	Role of GaN cap layer for reference electrode free AlGaN/GaN-based pH sensors. Sensors and Actuators B: Chemical, 2019, 287, 250-257.	7.8	16
35	An experimental investigation into quantifying CO ₂ leakage in aqueous environments using chemical tracers. Chemical Geology, 2019, 511, 91-99.	3.3	9
36	Using IR-based sensors to monitor fugitive greenhouse gas emissions in the Australian context. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
37	An experimental study for carbonate reservoirs on the impact of CO ₂ -EOR on petrophysics and oil recovery. <i>Fuel</i> , 2019, 235, 1019-1038.	6.4	50
38	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
39	Surface Monitoring Strategies at CO ₂ Storage Sites. <i>Environmental Science and Engineering</i> , 2019, , 138-143.	0.2	1
40	Mid-infrared sensor for hydrocarbon monitoring: the influence of salinity, matrix and aging on hydrocarbon-polymer partitioning. <i>Analytical Methods</i> , 2018, 10, 1516-1522.	2.7	9
41	Experimental Evaluations of Polymeric Solubility and Thickeners for Supercritical CO ₂ at High Temperatures for Enhanced Oil Recovery. <i>Energy & Fuels</i> , 2018, 32, 1600-1611.	5.1	36
42	Complex Brillouin Optical Time-Domain Analysis. <i>Journal of Lightwave Technology</i> , 2018, 36, 1840-1850.	4.6	8
43	XPS/NEXAFS spectroscopic and conductance studies of glycine on AlGaIn/GaN transistor devices. <i>Applied Surface Science</i> , 2018, 435, 23-30.	6.1	6
44	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
45	Insight investigation of miscible SCCO ₂ Water Alternating Gas (WAG) injection performance in heterogeneous sandstone reservoirs. <i>Journal of CO₂ Utilization</i> , 2018, 28, 255-263.	6.8	32
46	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
47	Description of ionophore-doped membranes with a blocked interface. <i>Sensors and Actuators B: Chemical</i> , 2017, 250, 499-508.	7.8	16
48	Calixarene-polymer hybrid film for selective detection of hydrocarbons in water. <i>New Journal of Chemistry</i> , 2017, 41, 6195-6202.	2.8	8
49	Ca ²⁺ detection utilising AlGaIn/GaN transistors with ion-selective polymer membranes. <i>Analytica Chimica Acta</i> , 2017, 987, 105-110.	5.4	36
50	The Effect of Pressure and Temperature on Mid-Infrared Sensing of Dissolved Hydrocarbons in Water. <i>Analytical Chemistry</i> , 2017, 89, 13391-13397.	6.5	14
51	The impact of partition coefficient data on the interpretation of chemical tracer behaviour in carbon geosequestration projects. <i>Chemical Geology</i> , 2017, 465, 52-63.	3.3	4
52	Complex domain Brillouin frequency estimation for distributed fiber sensing. , 2017, , .		0
53	Baseline characterisation and monitoring protocols for development of shale and tight gas resources, northern Perth Basin. <i>APPEA Journal</i> , 2017, 57, 64.	0.2	2
54	Calixarene-Poly(methyl methacrylate) composites for ATR-IR sensing of water dissolved aromatic compounds. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
55	Mercury(II) selective sensors based on AlGaIn/GaN transistors. <i>Analytica Chimica Acta</i> , 2016, 943, 1-7.	5.4	71
56	Portable Mid-Infrared Sensor System for Monitoring CO ₂ and CH ₄ at High Pressure in Geosequestration Scenarios. <i>ACS Sensors</i> , 2016, 1, 413-419.	7.8	24
57	Mid-Infrared Spectroscopic Method for the Identification and Quantification of Dissolved Oil Components in Marine Environments. <i>Analytical Chemistry</i> , 2015, 87, 12306-12312.	6.5	30
58	Field measurement of residual carbon dioxide saturation using reactive ester tracers. <i>Chemical Geology</i> , 2015, 399, 20-29.	3.3	12
59	Temperature sensitivity of reactive ester tracers for measuring CO ₂ residual trapping capacity. <i>Chemical Geology</i> , 2015, 399, 30-35.	3.3	0
60	An investigation into signal stability during measurement of AlGaIn/GaN transistor-based chemical sensors. , 2014, , .		0
61	Charging mechanism of AlGaIn/GaN open-gate pH sensor and electrolyte interface. , 2014, , .		3
62	Synchrotron-based XPS studies of AlGaIn and GaN surface chemistry and its relationship to ion sensor behaviour. <i>Applied Surface Science</i> , 2014, 314, 850-857.	6.1	35
63	Performance of graphene, carbon nanotube, and gold nanoparticle chemiresistor sensors for the detection of petroleum hydrocarbons in water. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	29
64	Pore size dynamics in interpenetrated metal organic frameworks for selective sensing of aromatic compounds. <i>Analytica Chimica Acta</i> , 2014, 819, 78-81.	5.4	18
65	Development of a plasticizer-poly(methyl methacrylate) membrane for sensing petroleum hydrocarbons in water. <i>Sensors and Actuators B: Chemical</i> , 2014, 193, 70-77.	7.8	11
66	A mid-infrared sensor for the determination of perfluorocarbon-based compounds in aquatic systems for geosequestration purposes. <i>Talanta</i> , 2014, 130, 527-535.	5.5	18
67	Fingerprinting Oils in Water via Their Dissolved VOC Pattern Using Mid-Infrared Sensors. <i>Analytical Chemistry</i> , 2014, 86, 9512-9517.	6.5	36
68	Chemical Tracers for the Offshore Determination of Residual Oil Saturation. , 2014, , .		0
69	Tracers " Past, present and future applications in CO ₂ geosequestration. <i>Applied Geochemistry</i> , 2013, 30, 125-135.	3.0	62
70	Nitrate ion detection using AlGaIn/GaN heterostructure-based devices without a reference electrode. <i>Sensors and Actuators B: Chemical</i> , 2013, 181, 301-305.	7.8	37
71	Direct quantification of aromatic hydrocarbons in geochemical fluids with a mid-infrared attenuated total reflection sensor. <i>Organic Geochemistry</i> , 2013, 55, 63-71.	1.8	33
72	Optimisation studies for AlGaIn/GaN-based nitrate sensors. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
73	Method for the determination of residual carbon dioxide saturation using reactive ester tracers. <i>Applied Geochemistry</i> , 2012, 27, 2148-2156.	3.0	17
74	Using Plasticizers to Control the Hydrocarbon Selectivity of a Poly(Methyl Methacrylate)-Coated Quartz Crystal Microbalance Sensor. <i>Analytical Chemistry</i> , 2012, 84, 8564-8570.	6.5	27
75	The impact of water and hydrocarbon concentration on the sensitivity of a polymer-based quartz crystal microbalance sensor for organic compounds. <i>Analytica Chimica Acta</i> , 2011, 703, 70-79.	5.4	14
76	Modifying the response of a polymer-based quartz crystal microbalance hydrocarbon sensor with functionalized carbon nanotubes. <i>Talanta</i> , 2011, 85, 1648-1657.	5.5	34
77	Functionalized graphene as an aqueous phase chemiresistor sensing material. <i>Sensors and Actuators B: Chemical</i> , 2011, 155, 154-158.	7.8	45
78	Photoresponsive nanoscale columnar transistors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 691-696.	7.1	94
79	Mid-Infrared Sensing of Organic Pollutants in Aqueous Environments. <i>Sensors</i> , 2009, 9, 6232-6253.	3.8	49
80	Improvements to ATR-FTIR based chemical sensors for the detection of organic contaminants dissolved in water. , 2009, , .		2
81	Forming Aromatic Hemispheres on Transitionâ€Metal Surfaces. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 7891-7895.	13.8	76
82	Chemoresponsive monolayer transistors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11452-11456.	7.1	141
83	Molecular Wires from Contorted Aromatic Compounds. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 7390-7394.	13.8	293
84	Formation of Catalytic Metal-Molecule Contacts. <i>Science</i> , 2005, 309, 591-594.	12.6	69
85	Magnetite Fe ₃ O ₄ Nanocrystals:Â Spectroscopic Observation of Aqueous Oxidation Kineticsâ€. <i>Journal of Physical Chemistry B</i> , 2003, 107, 7501-7506.	2.6	344
86	Phosphines: Nucleophilic organic catalysts for the controlled ring-opening polymerization of lactides. <i>Journal of Polymer Science Part A</i> , 2002, 40, 844-851.	2.3	141
87	First Example of N-Heterocyclic Carbenes as Catalysts for Living Polymerization:â€% Organocatalytic Ring-Opening Polymerization of Cyclic Esters. <i>Journal of the American Chemical Society</i> , 2002, 124, 914-915.	13.7	443
88	Impacts of Limestone Vertical Permeability Heterogeneity on Fluidâ€Rock Interaction During CCS. <i>Transport in Porous Media</i> , 0, , 1.	2.6	2