David A Dicarlo

List of Publications by Year
in descending order

62 papers	1,699 citations	279487 23 h-index	301761 39 g-index
62 all docs	62 docs citations	62 times ranked	1358 citing authors

#	Article	IF	Citations
1	Monitoring methane emissions from oil and gas operations^{â€¡}. Optics Express, 2022, 30, 24326.	1.7	5
2	Monitoring Methane Emissions from Oil and Gas Operations. , 2022, 1, .		19
3	A Simple Scaling Approach to the Spontaneous Clearing Time of Water Block. Transport in Porous Media, 2021, 137, 1-19.	1.2	3
4	The effect of vug distribution on particle straining in permeable media. Journal of Hydrology, 2020, 580, 124306.	2.3	4
5	Hydrate is a Nonwetting Phase in Porous Media. Geophysical Research Letters, 2020, 47, e2020GL089289.	1.5	12
6	Measurements of Three-Phase Relative Permeability as a Function of Fluid Composition. , 2020, , .		3
7	Experimental study on the formation damage caused by gas fracturing fluids. Journal of Petroleum Science and Engineering, 2020, 192, 107254.	2.1	5
8	Gas Flow by Invasion Percolation Through the Hydrate Stability Zone. Geophysical Research Letters, 2020, 47, e2019GL084380.	1.5	5
9	The Extremum Condition of the Local Volumetric Flux for Compositional Displacements. Transport in Porous Media, 2019, 129, 941-953.	1.2	3
10	Nitrogenâ€Driven Chromatographic Separation During Gas Injection Into Hydrateâ€Bearing Sediments. Water Resources Research, 2019, 55, 6673-6691.	1.7	6
11	The Effect of Vuggy Porosity on Straining in Porous Media. SPE Journal, 2019, 24, 1164-1178.	1.7	9
12	Mimicking Geologic Depositional Fabrics for Multiphase Flow Experiments. Water Resources Research, 2019, 55, 9623-9638.	1.7	18
13	Computed-Tomography Measurements of Water Block in Low-Permeability Rocks: Scaling and Remedying Production Impairment. SPE Journal, 2018, 23, 762-771.	1.7	38
14	Effect of Gas Flow Rate on Hydrate Formation Within the Hydrate Stability Zone. Journal of Geophysical Research: Solid Earth, 2018, 123, 6263-6276.	1.4	13
15	Effect of Dispersion on Solutal Convection in Porous Media. Geophysical Research Letters, 2018, 45, 9690-9698.	1.5	46
16	A two-site filtration model for silica nanoaggregate mobility in porous media under high salinity conditions. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	3
17	Experimental Investigation of Gas Flow and Hydrate Formation Within the Hydrate Stability Zone. Journal of Geophysical Research: Solid Earth, 2018, 123, 5350-5371.	1.4	27
18	Measurements of CO₂â€brine relative permeability in Berea sandstone using pressure taps and a long core. , 2017, 7, 370-382.		13

#	Article	IF	Citations
19	Enhancing Hydrocarbon Permeability After Hydraulic Fracturing: Laboratory Evaluations of Shut-Ins and Surfactant Additives. SPE Journal, 2017, 22, 1011-1023.	1.7	76
20	Water Blocks in Tight Formations: The Role of Matrix/Fracture Interaction in Hydrocarbon-Permeability Reduction and Its Implications in the Use of Enhanced Oil Recovery Techniques. SPE Journal, 2017, 22, 1393-1401.	1.7	64
21	Carbon Dioxide-in-Brine Foams at High Temperatures and Extreme Salinities Stabilized with Silica Nanoparticles. Energy & Fuels, 2017, 31, 10680-10690.	2.5	47
22	Study of formation damage caused by retention of bi-dispersed particles using combined pore-scale simulations and particle flooding experiments. Journal of Petroleum Science and Engineering, 2017, 158, 293-308.	2.1	28
23	Subsurface injection of combustion power plant effluent as a solidâ€phase carbon dioxide storage strategy. Geophysical Research Letters, 2017, 44, 5521-5530.	1.5	6
24	Flow physics of how surfactants can reduce water blocking caused by hydraulic fracturing in low permeability reservoirs. Journal of Petroleum Science and Engineering, 2017, 157, 631-642.	2.1	43
25	Steadyâ€state supercritical <scp>CO</scp>₂ and brine relative permeability in <scp>B</scp>erea sandstone at different temperature and pressure conditions. Water Resources Research, 2017, 53, 6312-6321.	1.7	15
26	Comparison of Darcy's law and invasion percolation simulations with buoyancy-driven CO2-brine multiphase flow in a heterogeneous sandstone core. Journal of Petroleum Science and Engineering, 2017, 155, 54-62.	2.1	25
27	Foam Generation Hysteresis in Porous Media: Experiments and New Insights. Transport in Porous Media, 2017, 116, 687-703.	1.2	23
28	A new unsteady-state method of determining two-phase relative permeability illustrated by CO2-brine primary drainage in berea sandstone. Advances in Water Resources, 2016, 96, 251-265.	1.7	26
29	An extended JBN method of determining unsteady-state two-phase relative permeability. Water Resources Research, 2016, 52, 8374-8383.	1.7	36
30	Impact of gravity on hydrate saturation in gasâ€rich environments. Water Resources Research, 2016, 52, 1265-1285.	1.7	4
31	Nanoparticle-Stabilized Emulsions for Improved Mobility Control for Adverse-mobility Waterflooding. , 2016, , .		17
32	Three-Phase Oil Relative Permeability in Water-Wet Media: A Comprehensive Study. Transport in Porous Media, 2016, 112, 665-687.	1.2	15
33	Size-dependent properties of silica nanoparticles for Pickering stabilization of emulsions and foams. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	129
34	Quantifying hydrate solidification front advancing using method of characteristics. Journal of Geophysical Research: Solid Earth, 2015, 120, 6681-6697.	1.4	15
35	The Applicability of Surfactant-Based EOR Technique to Enhance the Productivity in Tight Formations. , 2015, , .		7
36	When Less Flowback Is More: A Mechanism of Permeability Damage and its Implications on the Application of EOR Techniques. , 2015, , .		8

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37	Multi-Scale Evaluation of Nanoparticle-Stabilized CO2-in-Water Foams: From the Benchtop to the Field. , 2015, , .		16
38	The effect of saturation path on threeâ€phase relative permeability. Water Resources Research, 2015, 51, 9141-9164.	1.7	30
39	Aggregation of silica nanoparticles and its impact on particle mobility under high-salinity conditions. Journal of Petroleum Science and Engineering, 2015, 133, 376-383.	2.1	62
40	Prediction of empirical properties using direct pore-scale simulation of straining through 3D microtomography images of porous media. Journal of Hydrology, 2015, 529, 768-778.	2.3	45
41	Capillary pressure overshoot for unstable wetting fronts is explained by Hoffman's velocityâ€dependent contactâ€angle relationship. Water Resources Research, 2014, 50, 5290-5297.	1.7	16
42	Unified Model of Drainage and Imbibition in 3D Fractionally Wet Porous Media. Transport in Porous Media, 2013, 99, 581-611.	1.2	6
43	Stability of gravityâ€driven multiphase flow in porous media: 40 Years of advancements. Water Resources Research, 2013, 49, 4531-4544.	1.7	81
44	Pore scale consideration in unstable gravity driven finger flow. Water Resources Research, 2013, 49, 7815-7819.	1.7	15
45	Prediction of three-phase saturation profiles from two-phase capillary pressure curves as a function of wettability. International Journal of Oil, Gas and Coal Technology, 2012, 5, 123.	0.1	2
46	Fractional Flow Approach to Saturation Overshoot. Transport in Porous Media, 2012, 91, 955-971.	1.2	15
47	The Effect of Contact Angle on Saturation Overshoot. Vadose Zone Journal, 2011, 10, 466-468.	1.3	8
48	Permeability Estimation of Damaged Formations Near Wellbore. , 2011, , .		3
49	Tomographic measurements of pore filling at infiltration fronts. Advances in Water Resources, 2010, 33, 485-492.	1.7	11
50	Can Continuum Extensions to Multiphase Flow Models Describe Preferential Flow?. Vadose Zone Journal, 2010, 9, 268-277.	1.3	19
51	Mechanisms of Capillaryâ€Controlled Immiscible Fluid Flow in Fractionally Wet Porous Media. Vadose Zone Journal, 2010, 9, 610-623.	1.3	12
52	Comment on â€œA phase field model of unsaturated flowâ€• by L. Cuetoâ€Felgueroso and R. Juanes. Water Resources Research, 2010, 46, .	1.7	3
53	The Transition between Sharp and Diffusive Wetting Fronts as a Function of Imbibing Fluid Properties. Vadose Zone Journal, 2010, 9, 588-596.	1.3	11
54	Nonmonotonic traveling wave solutions of infiltration into porous media. Water Resources Research, 2008, 44, .	1.7	37

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55	Capillary pressure overshoot as a function of imbibition flux and initial water content. Water Resources Research, 2007, 43, .	1.7	45
56	Compositional gravity drainage 1. Equilibrium solutions and controlling Bond numbers for a two-phase, three-component system. Transport in Porous Media, 2007, 69, 13-32.	1.2	3
57	Compositional gravity drainage 2: experimental measurements using an analog system. Transport in Porous Media, 2007, 69, 159-174.	1.2	12
58	Quantitative network model predictions of saturation behind infiltration fronts and comparison with experiments. Water Resources Research, 2006, 42, .	1.7	13
59	Modeling observed saturation overshoot with continuum additions to standard unsaturated theory. Advances in Water Resources, 2005, 28, 1021-1027.	1.7	38
60	Experimental measurements of saturation overshoot on infiltration. Water Resources Research, 2004, 40, .	1.7	124
61	The Effect of Wettability on Three-Phase Relative Permeability. Transport in Porous Media, 2000, 39, 347-366.	1.2	76
62	Preferential Flow in Waterâ€Repellent Sands. Soil Science Society of America Journal, 1998, 62, 1185-1190.	1.2	180