

# Geoff Maitland

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

94 papers	5,542 citations	38 h-index	73 g-index
97 ext. papers	6,598 ext. citations	5.1 avg, IF	5.74 L-index

#	Paper	IF	Citations
94	Hybrid Pore-Scale Adsorption Model for CO <sub>2</sub> and CH <sub>4</sub> Storage in Shale. <i>Energy &amp; Fuels</i> , <b>2022</b> , 36, 3443-3456	4.1	0
93	Phase Behaviour of Methane Hydrates in Confined Media. <i>Crystals</i> , <b>2021</b> , 11, 201	2.3	1
92	Pressurized In Situ CO <sub>2</sub> Capture from Biomass Combustion via the Calcium Looping Process in a Spout-Fluidized-Bed Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 8571-8580	3.9	2
91	Relationship between wetting and capillary pressure in a crude oil/brine/rock system: From nano-scale to core-scale. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 562, 159-169	9.3	38
90	Supercritical adsorption in micro- and meso-porous carbons and its utilisation for textural characterisation. <i>Microporous and Mesoporous Materials</i> , <b>2020</b> , 308, 110537	5.3	10
89	Extension of Vibrating-Wire Viscometry to Electrically Conducting Fluids and Measurements of Viscosity and Density of Brines with Dissolved CO <sub>2</sub> at Reservoir Conditions. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2019</b> , 64, 3831-3847	2.8	3
88	Carbon capture and storage (CCS): the way forward. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 1062-1136	15.4	1368
87	Pressurized calcium looping in the presence of steam in a spout-fluidized-bed reactor with DFT analysis. <i>Fuel Processing Technology</i> , <b>2018</b> , 169, 24-41	7.2	28
86	Interfacial tensions of (H <sub>2</sub> O + H <sub>2</sub> ) and (H <sub>2</sub> O + CO <sub>2</sub> + H <sub>2</sub> ) systems at temperatures of (298-448) K and pressures up to 45 MPa. <i>Fluid Phase Equilibria</i> , <b>2018</b> , 475, 37-44	2.5	15
85	The pH of CO <sub>2</sub> -saturated aqueous NaCl and NaHCO <sub>3</sub> solutions at temperatures between 308 K and 373 K at pressures up to 15 MPa. <i>Fluid Phase Equilibria</i> , <b>2018</b> , 458, 253-263	2.5	15
84	Correction to Interfacial Tension of (Brines + CO <sub>2</sub> ): (0.864 NaCl + 0.136 KCl) at Temperatures between (298 and 448) K, Pressures between (2 and 50) MPa, and Total Molalities of (1 to 5) mol/kg. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2018</b> , 63, 2333-2334	2.8	1
83	Phase Behavior of the System (Carbon Dioxide + n-Heptane + Methylbenzene): A Comparison between Experimental Data and SAFT- $\epsilon$ Mie Predictions. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2017</b> , 62, 2826-2836	2.8	9
82	The role of CO <sub>2</sub> capture and utilization in mitigating climate change. <i>Nature Climate Change</i> , <b>2017</b> , 7, 243-249	21.4	436
81	Interfacial tensions of the (CO <sub>2</sub> + N <sub>2</sub> + H <sub>2</sub> O) system at temperatures of (298 to 448) K and pressures up to 40 MPa. <i>Journal of Chemical Thermodynamics</i> , <b>2016</b> , 93, 392-403	2.9	31
80	Interfacial tensions of systems comprising water, carbon dioxide and diluent gases at high pressures: Experimental measurements and modelling with SAFT-VR Mie and square-gradient theory. <i>Fluid Phase Equilibria</i> , <b>2016</b> , 407, 159-176	2.5	37
79	Diffusion Coefficients of Carbon Dioxide in Eight Hydrocarbon Liquids at Temperatures between (298.15 and 423.15) K at Pressures up to 69 MPa. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2016</b> , 61, 3922-3932	2.8	15
78	Kinetics of carbonate mineral dissolution in CO <sub>2</sub> -acidified brines at storage reservoir conditions. <i>Faraday Discussions</i> , <b>2016</b> , 192, 545-560	3.6	15

77	Carbon Capture and Storage: concluding remarks. <i>Faraday Discussions</i> , <b>2016</b> , 192, 581-599	3.6	7
76	Demonstration of a two-stage aerobic/anaerobic chemostat for the enhanced production of hydrogen and biomass from unicellular nitrogen-fixing cyanobacterium. <i>Algal Research</i> , <b>2015</b> , 10, 189-205	5	11
75	Modelling of light and temperature influences on cyanobacterial growth and biohydrogen production. <i>Algal Research</i> , <b>2015</b> , 9, 263-274	5	40
74	Analysis of the cyanobacterial hydrogen photoproduction process via model identification and process simulation. <i>Chemical Engineering Science</i> , <b>2015</b> , 128, 130-146	4.4	21
73	Kinetics of calcite dissolution in CO <sub>2</sub> -saturated water at temperatures between (323 and 373) K and pressures up to 13.8 MPa. <i>Chemical Geology</i> , <b>2015</b> , 403, 74-85	4.2	62
72	Viscosity and Density of Aqueous Solutions of Carbon Dioxide at Temperatures from (274 to 449) K and at Pressures up to 100 MPa. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2015</b> , 60, 171-180	2.8	47
71	Phase equilibria of (CO <sub>2</sub> +butylbenzene) and (CO <sub>2</sub> +butylcyclohexane) at temperatures between (323.15 and 423.15)K and at pressures up to 21MPa. <i>Fluid Phase Equilibria</i> , <b>2015</b> , 387, 111-116	2.5	
70	Smectite clay-inorganic nanoparticle mixed suspensions: phase behaviour and rheology. <i>Soft Matter</i> , <b>2015</b> , 11, 222-36	3.6	53
69	Dynamic modelling of high biomass density cultivation and biohydrogen production in different scales of flat plate photobioreactors. <i>Biotechnology and Bioengineering</i> , <b>2015</b> , 112, 2429-38	4.9	26
68	Optimal Operation Strategy for Biohydrogen Production. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2015</b> , 54, 6334-6343	3.9	22
67	Experimental and Modeling Study of the Phase Behavior of (Heptane + Carbon Dioxide + Water) Mixtures. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2015</b> , 60, 3670-3681	2.8	19
66	New Experimental Data and Reference Models for the Viscosity and Density of Squalane. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2015</b> , 60, 137-150	2.8	38
65	Diffusion Coefficients of Carbon Dioxide in Brines Measured Using <sup>13</sup> C Pulsed-Field Gradient Nuclear Magnetic Resonance. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2015</b> , 60, 181-184	2.8	17
64	Experimental and modeling study of the phase behavior of synthetic crude oil + CO <sub>2</sub> . <i>Fluid Phase Equilibria</i> , <b>2014</b> , 365, 20-40	2.5	49
63	Diffusion Coefficients of CO <sub>2</sub> and N <sub>2</sub> in Water at Temperatures between 298.15 K and 423.15 K at Pressures up to 45 MPa. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2014</b> , 59, 519-525	2.8	113
62	Effects of light and temperature on the photoautotrophic growth and photoinhibition of nitrogen-fixing cyanobacterium <i>Cyanothece</i> sp. ATCC 51142. <i>Algal Research</i> , <b>2014</b> , 5, 103-111	5	33
61	Rheology modification of montmorillonite dispersions by colloidal silica. <i>Rheologica Acta</i> , <b>2014</b> , 53, 373-384	3.4	13
60	Experimental and modeling study of the phase behavior of (methane + CO <sub>2</sub> + water) mixtures. <i>Journal of Physical Chemistry B</i> , <b>2014</b> , 118, 14461-78	3.4	41

59	Molecular dynamics simulations of CO <sub>2</sub> and brine interfacial tension at high temperatures and pressures. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 5647-52	3.4	57
58	Solubility of carbon dioxide in aqueous blends of 2-amino-2-methyl-1-propanol and piperazine. <i>Chemical Engineering Science</i> , <b>2013</b> , 101, 851-864	4.4	36
57	Process and reactor design for biophotolytic hydrogen production. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 10783-94	3.6	27
56	Phase equilibria of (CO <sub>2</sub> + H <sub>2</sub> O + NaCl) and (CO <sub>2</sub> + H <sub>2</sub> O + KCl): Measurements and modeling. <i>Journal of Supercritical Fluids</i> , <b>2013</b> , 78, 78-88	4.2	33
55	The pH of CO <sub>2</sub> -saturated water at temperatures between 308 K and 423 K at pressures up to 15 MPa. <i>Journal of Supercritical Fluids</i> , <b>2013</b> , 82, 129-137	4.2	92
54	Measurement and modeling of the phase behavior of the (carbon dioxide + water) mixture at temperatures from 298.15 K to 448.15 K. <i>Journal of Supercritical Fluids</i> , <b>2013</b> , 73, 87-96	4.2	118
53	Densities of SrCl <sub>2</sub> (aq), Na <sub>2</sub> SO <sub>4</sub> (aq), NaHCO <sub>3</sub> (aq), and Two Synthetic Reservoir Brines at Temperatures between (298 and 473) K, Pressures up to 68.5 MPa, and Molalities up to 3 mol/kg. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2013</b> , 58, 402-412	2.8	14
52	A novel nutrient control method to deprive green algae of sulphur and initiate spontaneous hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 8988-9001	6.7	24
51	Effect of the Light Regime and Phototrophic Conditions on Growth of the H <sub>2</sub> -producing Green Alga <i>Chlamydomonas Reinhardtii</i> . <i>Energy Procedia</i> , <b>2012</b> , 29, 710-719	2.3	11
50	Interfacial Tension of (Brines + CO <sub>2</sub> ): CaCl <sub>2</sub> (aq), MgCl <sub>2</sub> (aq), and Na <sub>2</sub> SO <sub>4</sub> (aq) at Temperatures between (343 and 423) K, Pressures between (2 and 50) MPa, and Molalities of (0.5 to 5) mol/kg. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2012</b> , 57, 1369-1375	2.8	64
49	Densities of Aqueous MgCl <sub>2</sub> (aq), CaCl <sub>2</sub> (aq), KI(aq), NaCl(aq), KCl(aq), AlCl <sub>3</sub> (aq), and (0.964 NaCl + 0.136 KCl)(aq) at Temperatures Between (283 and 472) K, Pressures up to 68.5 MPa, and Molalities up to 6 mol/kg. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2012</b> , 57, 1288-1304	2.8	61
48	Solubility of carbon dioxide in aqueous solution of monoethanolamine or 2-amino-2-methyl-1-propanol: Experimental measurements and modelling. <i>International Journal of Greenhouse Gas Control</i> , <b>2012</b> , 6, 37-47	4.2	78
47	Interfacial Tension of (Brines + CO <sub>2</sub> ): (0.864 NaCl + 0.136 KCl) at Temperatures between (298 and 448) K, Pressures between (2 and 50) MPa, and Total Molalities of (1 to 5) mol/kg. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2012</b> , 57, 1078-1088	2.8	118
46	Carbon capture and storage: The way ahead. <i>Sustainable Technologies Systems &amp; Policies</i> , <b>2012</b> , 9		
45	Mutual Diffusion Coefficients of Aqueous KCl at High Pressures Measured by the Taylor Dispersion Method. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2011</b> , 56, 4840-4848	2.8	17
44	Interfacial Tension Measurements of the (H <sub>2</sub> O + n-Decane + CO <sub>2</sub> ) Ternary System at Elevated Pressures and Temperatures. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2011</b> , 56, 4900-4908	2.8	62
43	Parameters affecting the growth and hydrogen production of the green alga <i>Chlamydomonas reinhardtii</i> . <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 7872-7876	6.7	38
42	Design of a novel flat-plate photobioreactor system for green algal hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 6578-6591	6.7	52

41	Interfacial Tension Measurements of the (H <sub>2</sub> O + CO <sub>2</sub> ) System at Elevated Pressures and Temperatures□ <i>Journal of Chemical &amp; Engineering Data</i> , <b>2010</b> , 55, 4168-4175	2.8	165
40	Interfacial tension measurements and modelling of (carbon dioxide+n-alkane) and (carbon dioxide+water) binary mixtures at elevated pressures and temperatures. <i>Journal of Supercritical Fluids</i> , <b>2010</b> , 55, 743-754	4.2	102
39	Viscosity and Density of Carbon Dioxide + 2,6,10,15,19,23-Hexamethyltetracosane (Squalane)□ <i>Journal of Chemical &amp; Engineering Data</i> , <b>2009</b> , 54, 2436-2443	2.8	40
38	Rheology modification in mixed shape colloidal dispersions. Part II: mixtures. <i>Soft Matter</i> , <b>2008</b> , 4, 337-348	3.8	32
37	Rheology modification in mixed shape colloidal dispersions. Part I: pure components. <i>Soft Matter</i> , <b>2007</b> , 3, 1145-1162	3.6	65
36	Hydration of tricalcium aluminate (C3A) in the presence and absence of gypsum□ studied by Raman spectroscopy and X-ray diffraction. <i>Journal of Materials Chemistry</i> , <b>2006</b> , 16, 1263		121
35	Flow properties of freshly prepared ettringite suspensions in water at 25 degrees C. <i>Journal of Colloid and Interface Science</i> , <b>2006</b> , 294, 466-72	9.3	9
34	Synergistic Effects in Aqueous Solutions of Mixed Wormlike Micelles and Hydrophobically Modified Polymers. <i>Macromolecules</i> , <b>2005</b> , 38, 5271-5282	5.5	61
33	Giant micellar worms under shear: a rheological study using SANS. <i>Langmuir</i> , <b>2005</b> , 21, 6762-8	4	87
32	Generalized equation of state for square-well potentials of variable range. <i>Molecular Physics</i> , <b>2005</b> , 103, 129-139	1.7	53
31	An in situ synchrotron energy-dispersive diffraction study of the hydration of oilwell cement systems under high temperature/autoclave conditions up to 130 °C. <i>Cement and Concrete Research</i> , <b>2005</b> , 35, 2223-2232	10.3	20
30	Circulating pump for high-pressure and high-temperature applications. <i>Review of Scientific Instruments</i> , <b>2005</b> , 76, 105103	1.7	9
29	Mixed spherical and wormlike micelles: a contrast-matching study by small-angle neutron scattering. <i>Langmuir</i> , <b>2004</b> , 20, 9978-82	4	13
28	Impacting the length of wormlike micelles using mixed surfactant systems. <i>Langmuir</i> , <b>2004</b> , 20, 7984-90	4	46
27	Growth and scission energy of wormlike micelles formed by a cationic surfactant with long unsaturated tails. <i>Langmuir</i> , <b>2004</b> , 20, 9541-50	4	61
26	Prediction of the Salting-Out Effect of Strong Electrolytes on Water + Alkane Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 3809-3823	3.9	92
25	Rheology, Cryogenic Transmission Electron Spectroscopy, and Small-Angle Neutron Scattering of Highly Viscoelastic Wormlike Micellar Solutions. <i>Langmuir</i> , <b>2003</b> , 19, 8536-8541	4	162
24	Molecular design of responsive fluids: molecular dynamics studies of viscoelastic surfactant solutions. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 9413-9430	1.8	25

23	Ageing of oilfield cement at high humidity: a combined FEG-ESEM and Raman microscopic investigation. <i>Journal of Materials Chemistry</i> , <b>2002</b> , 12, 3105-3112		50
22	Oil and gas production. <i>Current Opinion in Colloid and Interface Science</i> , <b>2000</b> , 5, 301-311	7.6	163
21	Electro-optic birefringence and scattering of concentrated solutions of ethylcellulose. <i>Angewandte Makromolekulare Chemie</i> , <b>1999</b> , 268, 1-12		
20	The Road Ahead to Real-Time Oil and Gas Reservoir Management. <i>Chemical Engineering Research and Design</i> , <b>1998</b> , 76, 539-552	5.5	8
19	Fourier Transform Infrared Spectroscopic Techniques to Investigate Surface Hydration Processes on Bentonite. <i>Journal of Colloid and Interface Science</i> , <b>1995</b> , 176, 308-317	9.3	28
18	Depth Filtration of Clay in Rock Cores Observed by One-Dimensional <sup>1</sup> H NMR Imaging. <i>Journal of Colloid and Interface Science</i> , <b>1993</b> , 156, 253-255	9.3	19
17	Effects of chain flexibility on polymer solution dynamics. <i>Journal of the Chemical Society, Faraday Transactions</i> , <b>1992</b> , 88, 1803		3
16	A comparison between calculated and experimental transport coefficients of binary gaseous mixtures N <sub>2</sub> -He, Ne and Ar. <i>Molecular Physics</i> , <b>1987</b> , 62, 875-896	1.7	20
15	An essentially exact evaluation of transport cross-sections for a model of the helium-nitrogen interaction. <i>Molecular Physics</i> , <b>1987</b> , 61, 359-387	1.7	50
14	Transient hot-wire measurements of the thermal conductivity of gases at elevated temperatures. <i>International Journal of Thermophysics</i> , <b>1986</b> , 7, 245-258	2.1	24
13	Correlation of the zero-density viscosity of polyatomic gases. <i>International Journal of Thermophysics</i> , <b>1986</b> , 7, 553-562	2.1	2
12	Thermal conductivity of benzene and cyclohexane in the temperature range 360°C at pressures up to 0.33 GPa. <i>International Journal of Thermophysics</i> , <b>1984</b> , 5, 351-365	2.1	23
11	The Thermal Conductivity of n-Hexane and n-Octane at Pressures up to 0.64 GPa in the Temperature Range 340°C. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , <b>1984</b> , 88, 32-36		36
10	Thermal conductivity of toluene in the temperature range 350°C at pressures up to 600 MPa. <i>International Journal of Thermophysics</i> , <b>1983</b> , 4, 311-327	2.1	58
9	Thermal conductivity of polyatomic gases at low density. <i>Journal of the Chemical Society Faraday Transactions I</i> , <b>1983</b> , 79, 163		14
8	The Thermal Conductivity of Argon, Nitrogen and Carbon Monoxide in the Temperature Range 300-430 K at Pressures up to 10 MPa. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , <b>1983</b> , 87, 657-663		33
7	Second-order approximations for the transport properties of dilute polyatomic gases. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , <b>1983</b> , 79, 1425		28
6	Influence of Flexibility on the Properties of Chain Molecules. <i>Advances in Chemistry Series</i> , <b>1983</b> , 469-485		6

5	Viscosities of binary gas mixtures at high temperatures. <i>Journal of the Chemical Society Faraday Transactions I</i> , <b>1974</b> , 70, 1191		46
4	The forces between simple molecules. <i>Chemical Society Reviews</i> , <b>1973</b> , 2, 181	58.5	39
3	Critical reassessment of viscosities of 11 common gases. <i>Journal of Chemical &amp; Engineering Data</i> , <b>1972</b> , 17, 150-156	2.8	141
2	High temperature viscosities and intermolecular forces of quasi-spherical molecules. <i>Transactions of the Faraday Society</i> , <b>1970</b> , 66, 1955		36
1	La viscosité de CO <sub>2</sub> entre 293 °K ET 1 500 °K. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , <b>1970</b> , 67, 631-632		9