

Lynn F Gladden

List of Publications by Citations

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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.

206 papers	6,646 citations	43 h-index	72 g-index
230 ext. papers	7,382 ext. citations	4.3 avg, IF	5.96 L-index

#	Paper	IF	Citations
206	Glycerol eutectics as sustainable solvent systems. <i>Green Chemistry</i> , 2011 , 13, 82-90	10	539
205	Fast multidimensional NMR spectroscopy using compressed sensing. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 6548-51	16.4	197
204	Low-field permanent magnets for industrial process and quality control. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2014 , 76, 1-60	10.4	182
203	Flow and dispersion in porous media: Lattice-Boltzmann and NMR studies. <i>AIChE Journal</i> , 1999 , 45, 1845-1854	3.15	170
202	Molecular and ionic diffusion in aqueous - deep eutectic solvent mixtures: probing inter-molecular interactions using PFG NMR. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 15297-15304	3.6	158
201	Granular temperature: Comparison of Magnetic Resonance measurements with Discrete Element Model simulations. <i>Powder Technology</i> , 2008 , 184, 241-253	5.2	144
200	Structure-flow correlations in packed beds. <i>Chemical Engineering Science</i> , 1998 , 53, 2117-2128	4.4	126
199	Solvent effects in the hydrogenation of 2-butanone. <i>Journal of Catalysis</i> , 2012 , 289, 30-41	7.3	119
198	Magnetic resonance imaging in laboratory petrophysical core analysis. <i>Physics Reports</i> , 2013 , 526, 165-225	27.7	111
197	Nuclear magnetic resonance relaxation and diffusion in the presence of internal gradients: the effect of magnetic field strength. <i>Physical Review E</i> , 2010 , 81, 026101	2.4	111
196	Neutron diffraction, NMR and molecular dynamics study of glucose dissolved in the ionic liquid 1-ethyl-3-methylimidazolium acetate. <i>Chemical Science</i> , 2011 , 2, 1594	9.4	110
195	Numerical estimation of relaxation and diffusion distributions in two dimensions. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2012 , 62, 34-50	10.4	108
194	Magnetic resonance imaging of liquid flow and pore structure within packed beds. <i>Chemical Engineering Science</i> , 1997 , 52, 2239-2250	4.4	106
193	Magnetic resonance imaging as a quantitative probe of gas-liquid distribution and wetting efficiency in trickle-bed reactors. <i>Chemical Engineering Science</i> , 2001 , 56, 2615-2628	4.4	97
192	Single- and two-phase flow in fixed-bed reactors: MRI flow visualisation and lattice-Boltzmann simulations. <i>Chemical Engineering Science</i> , 2001 , 56, 523-529	4.4	97
191	Recent advances in flow MRI. <i>Journal of Magnetic Resonance</i> , 2013 , 229, 2-11	3	86
190	Reducing data acquisition times in phase-encoded velocity imaging using compressed sensing. <i>Journal of Magnetic Resonance</i> , 2010 , 203, 236-46	3	85

189	Transport heterogeneity in porous pellets□ PGSE NMR studies. <i>Chemical Engineering Science</i> , 1995 , 50, 309-326	4.4	85
188	Validation of a discrete element model using magnetic resonance measurements. <i>Particuology</i> , 2009 , 7, 297-306	2.8	81
187	Quantitative nuclear magnetic resonance measurements of preasymptotic dispersion in flow through porous media. <i>Physics of Fluids</i> , 2005 , 17, 117107	4.4	76
186	Comparing Strengths of Surface Interactions for Reactants and Solvents in Porous Catalysts Using Two-Dimensional NMR Relaxation Correlations. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6610-6615	3.8	73
185	Correlations between dispersion and structure in porous media probed by nuclear magnetic resonance. <i>Physics of Fluids</i> , 1999 , 11, 259-267	4.4	71
184	Magnetic resonance velocity imaging of liquid and gas two-phase flow in packed beds. <i>Journal of Magnetic Resonance</i> , 2009 , 196, 142-8	3	69
183	MRI technique for measurement of velocity vectors, acceleration, and autocorrelation functions in turbulent flow. <i>Journal of Magnetic Resonance</i> , 2004 , 166, 182-9	3	68
182	Local transitions in flow phenomena through packed beds identified by MRI. <i>AIChE Journal</i> , 2000 , 46, 2151-2161	3.6	68
181	Real-time measurement of bubbling phenomena in a three-dimensional gas-fluidized bed using ultrafast magnetic resonance imaging. <i>Physical Review Letters</i> , 2006 , 96, 154504	7.4	67
180	Spatially resolved measurement of anisotropic granular temperature in gas-fluidized beds. <i>Powder Technology</i> , 2008 , 182, 171-181	5.2	65
179	Dynamic MRI visualization of two-phase flow in a ceramic monolith. <i>AIChE Journal</i> , 2002 , 48, 909-912	3.6	63
178	Magnetic resonance: Ongoing and future role in chemical engineering research. <i>AIChE Journal</i> , 2003 , 49, 2-9	3.6	63
177	Measuring adsorption, diffusion and flow in chemical engineering: applications of magnetic resonance to porous media. <i>New Journal of Physics</i> , 2011 , 13, 035001	2.9	60
176	Quantitative ultra-fast MRI of HPMC swelling and dissolution. <i>Journal of Pharmaceutical Sciences</i> , 2010 , 99, 3462-72	3.9	60
175	Interpretation of NMR relaxation as a tool for characterising the adsorption strength of liquids inside porous materials. <i>Chemistry - A European Journal</i> , 2014 , 20, 13009-15	4.8	59
174	The Disintegration Process in Microcrystalline Cellulose Based Tablets, Part 1: Influence of Temperature, Porosity and Superdisintegrants. <i>Journal of Pharmaceutical Sciences</i> , 2015 , 104, 3440-50	3.9	59
173	In situ magnetic resonance visualisation of the spatial variation of catalytic conversion within a fixed-bed reactor. <i>Applied Catalysis A: General</i> , 2002 , 232, 29-38	5.1	57
172	Obtaining true transverse relaxation time distributions in high-field NMR measurements of saturated porous media: Removing the influence of internal gradients. <i>Journal of Chemical Physics</i> , 2010 , 132, 244705	3.9	55

171	In Situ MRI Study of 1-octene Isomerisation and Hydrogenation within a Trickle-bed Reactor. <i>Catalysis Letters</i> , 2005 , 103, 1-8	2.8	53
170	Hydrogen Bonding Network Disruption in Mesoporous Catalyst Supports Probed by PFG-NMR Diffusometry and NMR Relaxometry. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 8975-8982	3.8	50
169	Transport heterogeneity in porous pelletsII. NMR imaging studies under transient and steady-state conditions. <i>Chemical Engineering Science</i> , 1995 , 50, 327-344	4.4	49
168	Surface diffusion in porous catalysts. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 2619-24	3.6	48
167	NMR imaging of the wheat grain cooking process. <i>International Journal of Food Science and Technology</i> , 1997 , 32, 355-375	3.8	47
166	Exploring the origins of turbulence in multiphase flow using compressed sensing MRI. <i>Physical Review Letters</i> , 2012 , 108, 264505	7.4	46
165	Mechanism of the trickle-to-pulse flow transition in fixed-bed reactors. <i>AIChE Journal</i> , 2006 , 52, 1522-1538	3.8	44
164	Investigation of Void Fraction Schemes for Use with CFD-DEM Simulations of Fluidized Beds. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 3002-3013	3.9	43
163	Prediction of binary diffusion coefficients in non-ideal mixtures from NMR data: Hexane/nitrobenzene near its consolute point. <i>Chemical Engineering Science</i> , 2011 , 66, 3898-3906	4.4	41
162	Magnetic resonance visualisation of single- and two-phase flow in porous media. <i>Magnetic Resonance Imaging</i> , 2001 , 19, 339-43	3.3	41
161	Understanding the solvent effect on the catalytic oxidation of 1,4-butanediol in methanol over Au/TiO ₂ catalyst: NMR diffusion and relaxation studies. <i>Chemistry - A European Journal</i> , 2012 , 18, 14426-33	4.8	40
160	Solvent effect and reactivity trend in the aerobic oxidation of 1,3-propanediols over gold supported on titania: NMR diffusion and relaxation studies. <i>Chemistry - A European Journal</i> , 2013 , 19, 11725-32	4.8	40
159	Rapid two-dimensional imaging of bubbles and slugs in a three-dimensional, gas-solid, two-phase flow system using ultrafast magnetic resonance. <i>Physical Review E</i> , 2007 , 75, 020302	2.4	40
158	Validation of NMR relaxation exchange time measurements in porous media. <i>Journal of Chemical Physics</i> , 2007 , 127, 234701	3.9	39
157	Comparison of ECVT and MR Measurements of Voidage in a Gas-Fluidized Bed. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 172-181	3.9	38
156	Magnetic resonance imaging of structure and convection in solidifying mushy layers. <i>Journal of Fluid Mechanics</i> , 2006 , 552, 99	3.7	38
155	Quantitative single point imaging with compressed sensing. <i>Journal of Magnetic Resonance</i> , 2009 , 201, 72-80	3	37
154	Rapid encoding of T(1) with spectral resolution in n-dimensional relaxation correlations. <i>Journal of Magnetic Resonance</i> , 2008 , 194, 156-61	3	37

153	Diffusion, Ion Pairing and Aggregation in 1-Ethyl-3-Methylimidazolium-Based Ionic Liquids Studied by H and F PFG NMR: Effect of Temperature, Anion and Glucose Dissolution. <i>ChemPhysChem</i> , 2018 , 19, 1081-1088	3.2	36
152	Assessing the surface modifications following the mechanochemical preparation of a Ag/Al ₂ O ₃ selective catalytic reduction catalyst. <i>Catalysis Science and Technology</i> , 2014 , 4, 531-539	5.5	36
151	Simultaneous monitoring of hydration kinetics, microstructural evolution, and surface interactions in hydrating gypsum plaster in the presence of additives. <i>Journal of Materials Science</i> , 2010 , 45, 5282-5290	4.3	35
150	Characterization of Crystalline Phase-Transformations in Theophylline by Time-Domain Terahertz Spectroscopy. <i>Spectroscopy Letters</i> , 2006 , 39, 215-224	1.1	35
149	Recent Advances in MRI Studies of Chemical Reactors: Ultrafast Imaging of Multiphase Flows. <i>Topics in Catalysis</i> , 2003 , 24, 19-28	2.3	35
148	Characterization of structural inhomogeneities in porous media. <i>AIChE Journal</i> , 1995 , 41, 894-906	3.6	35
147	Applications of ultra-fast MRI to high voidage bubbly flow: Measurement of bubble size distributions, interfacial area and hydrodynamics. <i>Chemical Engineering Science</i> , 2012 , 71, 468-483	4.4	34
146	CFD modeling of single-phase flow in a packed bed with MRI validation. <i>AIChE Journal</i> , 2012 , 58, 3904-3915	3.15	33
145	Solvent inhibition in the liquid-phase catalytic oxidation of 1,4-butanediol: understanding the catalyst behaviour from NMR relaxation time measurements. <i>Catalysis Science and Technology</i> , 2016 , 6, 7896-7901	5.5	32
144	Diffusion and reaction in whole wheat grains during boiling. <i>AIChE Journal</i> , 1998 , 44, 1777-1789	3.6	32
143	Impact of Processing Conditions on Inter-tablet Coating Thickness Variations Measured by Terahertz In-Line Sensing. <i>Journal of Pharmaceutical Sciences</i> , 2015 , 104, 2513-22	3.9	31
142	MRI studies of the hydrodynamics in a USP 4 dissolution testing cell. <i>Journal of Pharmaceutical Sciences</i> , 2011 , 100, 976-91	3.9	31
141	Synergistic Contribution of the Acidic Metal Oxide-Metal Couple and Solvent Environment in the Selective Hydrogenolysis of Glycerol: A Combined Experimental and Computational Study Using ReOx ^{II} as the Catalyst. <i>ACS Catalysis</i> , 2019 , 9, 485-503	13.1	31
140	Do group 1 metal salts form deep eutectic solvents?. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 25528-25537	3.4	29
139	In situ study of reaction kinetics using compressed sensing NMR. <i>Chemical Communications</i> , 2014 , 50, 14137-40	5.8	29
138	Time resolved velocity measurements of unsteady systems using spiral imaging. <i>Journal of Magnetic Resonance</i> , 2011 , 211, 1-10	3	29
137	A rapid measurement of flow propagators in porous rocks. <i>Journal of Magnetic Resonance</i> , 2008 , 191, 267-72	3	29
136	Determining NMR flow propagator moments in porous rocks without the influence of relaxation. <i>Journal of Magnetic Resonance</i> , 2008 , 193, 218-25	3	29

135	Deactivation studies of a carbon supported AuPt nanoparticulate catalyst in the liquid-phase aerobic oxidation of 1,2-propanediol. <i>Catalysis Science and Technology</i> , 2014 , 4, 1313-1322	5.5	27
134	Measurement of cytoplasmic streaming in single plant cells by magnetic resonance velocimetry. <i>Journal of Fluid Mechanics</i> , 2010 , 642, 5-14	3.7	27
133	In situ magnetic resonance measurement of conversion, hydrodynamics and mass transfer during single- and two-phase flow in fixed-bed reactors. <i>Magnetic Resonance Imaging</i> , 2003 , 21, 213-9	3.3	27
132	Transition to pulsing flow in trickle-bed reactors studied using MRI. <i>AIChE Journal</i> , 2005 , 51, 615-621	3.6	27
131	Gravitational collapse of depletion-induced colloidal gels. <i>Soft Matter</i> , 2016 , 12, 4300-8	3.6	26
130	Less is more: how compressed sensing is transforming metrology in chemistry. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 13330-40	16.4	26
129	Spatially resolved quantification of metal ion concentration in a biofilm-mediated ion exchanger. <i>Biotechnology and Bioengineering</i> , 2008 , 99, 821-9	4.9	26
128	Applications of in situ magnetic resonance techniques in chemical reaction engineering. <i>Topics in Catalysis</i> , 1999 , 8, 87-95	2.3	26
127	Magnetic resonance characterization of coupled gas and particle dynamics in a bubbling fluidized bed. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	26
126	Non-invasive mass transfer measurements in complex biofilm-coated structures. <i>Biotechnology and Bioengineering</i> , 2008 , 101, 602-8	4.9	25
125	Magnetic Resonance Imaging of Catalysts and Catalytic Processes. <i>Advances in Catalysis</i> , 2006 , 1-75	2.4	25
124	Structure and dynamics of aqueous 2-propanol: a THz-TDS, NMR and neutron diffraction study. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 30481-91	3.6	24
123	Exploring Surface Interactions in Catalysts Using Low-Field Nuclear Magnetic Resonance. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 17699-17706	3.8	24
122	A Bayesian approach to characterising multi-phase flows using magnetic resonance: application to bubble flows. <i>Journal of Magnetic Resonance</i> , 2011 , 209, 83-7	3	24
121	Quantitative measurements of liquid holdup and drainage in foam using NMRI. <i>AIChE Journal</i> , 2007 , 53, 290-296	3.6	24
120	The effect of coke deposition on the activity and selectivity of the HZSM-5 zeolite during ethylbenzene alkylation reaction in the presence of ethanol. <i>Catalysis Science and Technology</i> , 2014 , 4, 1017	5.5	23
119	Direct Correlation between Adsorption Energetics and Nuclear Spin Relaxation in a Liquid-saturated Catalyst Material. <i>ChemPhysChem</i> , 2018 , 19, 2472-2479	3.2	23
118	Assessing the effect of reducing agents on the selective catalytic reduction of NO _x over Ag/Al ₂ O ₃ catalysts. <i>Catalysis Science and Technology</i> , 2016 , 6, 1661-1666	5.5	22

117	Geometrical and hydrodynamical study of gas jets in packed and fluidized beds using magnetic resonance. <i>Canadian Journal of Chemical Engineering</i> , 2009 , 87, 517-525	2.3	22
116	Terahertz pulsed spectroscopic imaging using optimized binary masks. <i>Applied Physics Letters</i> , 2009 , 95, 231112	3.4	22
115	Changes in the gelation mechanism of whey protein concentrate with pH and temperature. <i>Journal of Dairy Research</i> , 1994 , 61, 71-81	1.6	22
114	Measurement of the true transverse nuclear magnetic resonance relaxation in the presence of field gradients. <i>Journal of Chemical Physics</i> , 2013 , 139, 074205	3.9	21
113	Atomic charge distribution in sodosilicate glasses from terahertz time-domain spectroscopy. <i>Physical Review B</i> , 2010 , 82,	3.3	21
112	Characterizing the Evolution of Porosity during Controlled Drug Release. <i>Applied Magnetic Resonance</i> , 2007 , 32, 185-204	0.8	21
111	Degradation and drug-release studies of a poly(glycolide-co-trimethylene carbonate) copolymer (Maxon). <i>Journal of Applied Polymer Science</i> , 2005 , 95, 475-486	2.9	21
110	Obtaining sparse distributions in 2D inverse problems. <i>Journal of Magnetic Resonance</i> , 2017 , 281, 188-198	3.5	20
109	A new perspective on catalytic dehydrogenation of ethylbenzene: the influence of side-reactions on catalytic performance. <i>Catalysis Science and Technology</i> , 2015 , 5, 3782-3797	5.5	20
108	Magnetic Resonance Studies of Fluidization Regimes. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 5891-5899	3.9	20
107	Operando magnetic resonance: monitoring the evolution of conversion and product distribution during the heterogeneous catalytic ethene oligomerisation reaction. <i>Chemical Communications</i> , 2013 , 49, 10519-21	5.8	19
106	Magnetic resonance in reaction engineering: beyond spectroscopy. <i>Current Opinion in Chemical Engineering</i> , 2013 , 2, 331-337	5.4	19
105	Flow through an evolving porous media: compressed foam. <i>Journal of Materials Science</i> , 2007 , 42, 6541-6548	4.5	19
104	Fast imaging of laboratory core floods using 3D compressed sensing RARE MRI. <i>Journal of Magnetic Resonance</i> , 2016 , 270, 187-197	3	18
103	MRI strategies for characterising two-phase flow in parallel channel ceramic monoliths. <i>Catalysis Today</i> , 2007 , 128, 3-12	5.3	18
102	Magnetic Resonance Imaging and Velocity Mapping in Chemical Engineering Applications. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2017 , 8, 227-247	8.9	17
101	Bubble size measurement using Bayesian magnetic resonance. <i>Chemical Engineering Science</i> , 2012 , 84, 735-745	4.4	17
100	Magnetic resonance velocity imaging of gas flow in a diesel particulate filter. <i>Chemical Engineering Science</i> , 2017 , 158, 490-499	4.4	16

- 99 Magnetic resonance studies of hydration kinetics and microstructural evolution in plaster pastes. *Journal of Materials Science*, **2009**, 44, 5004-5012 4.3 16
- 98 Rapid measurement of transient velocity evolution using GERVAS. *Journal of Magnetic Resonance*, **2010**, 202, 93-101 3 16
- 97 Using MR techniques to probe permeability reduction in rock cores. *AIChE Journal*, **2003**, 49, 1076-1084 3.6 16
- 96 Product Inhibition in Glycerol Oxidation over Au/TiO₂ Catalysts Quantified by NMR Relaxation. *ACS Catalysis*, **2018**, 8, 7334-7339 13.1 15
- 95 Grain sizing in porous media using Bayesian magnetic resonance. *Physical Review Letters*, **2013**, 110, 018001 9.0 15
- 94 NMR measurements and hydrodynamic simulations of phase-resolved velocity distributions within a three-dimensional vibrofluidized granular bed. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2007**, 463, 2519-2542 2.4 15
- 93 Quantifying transport within a porous medium over a hierarchy of length scales. *Physics of Fluids*, **2006**, 18, 033102 4.4 15
- 92 The influence of the random sequential adsorption of binary mixtures on the kinetics of hydrocarbon hydrogenation reactions. *Journal of Chemical Physics*, **1999**, 110, 4000-4008 3.9 15
- 91 Probing chemistry and kinetics of reactions in heterogeneous catalysts. *Chemical Science*, **2013**, 4, 3484 9.4 14
- 90 In Situ Chemically-Selective Monitoring of Multiphase Displacement Processes in a Carbonate Rock Using 3D Magnetic Resonance Imaging. *Transport in Porous Media*, **2018**, 121, 15-35 3.1 14
- 89 The enhancement of the catalytic performance of CrO_x/Al₂O₃ catalysts for ethylbenzene dehydrogenation through tailored coke deposition. *Catalysis Science and Technology*, **2016**, 6, 1120-1133 5.5 13
- 88 Liquid Structure and Dynamics of Aqueous Isopropanol over γ -Alumina. *Journal of Physical Chemistry C*, **2009**, 113, 21342-21352 3.8 13
- 87 A cumulant analysis for non-Gaussian displacement distributions in Newtonian and non-Newtonian flows through porous media. *Magnetic Resonance Imaging*, **2007**, 25, 513-6 3.3 13
- 86 Enhanced (13)C PFG NMR for the study of hydrodynamic dispersion in porous media. *Journal of Magnetic Resonance*, **2007**, 186, 160-5 3 13
- 85 Magnetic resonance imaging of fluidized beds: Recent advances. *Theoretical Foundations of Chemical Engineering*, **2008**, 42, 469-478 0.9 13
- 84 Quantitative Real-time Imaging of multi-phase flow in ceramic monoliths. *Magnetic Resonance Imaging*, **2003**, 21, 359-61 3.3 13
- 83 Displacement propagators of brine flowing within different types of sedimentary rock. *Magnetic Resonance Imaging*, **2005**, 23, 349-51 3.3 13
- 82 Operando magnetic resonance studies of phase behaviour and oligomer accumulation within catalyst pores during heterogeneous catalytic ethene oligomerization. *Applied Catalysis A: General*, **2018**, 557, 125-134 5.1 12

81	Overhauser dynamic nuclear polarization amplification of NMR flow imaging. <i>Journal of Magnetic Resonance</i> , 2012 , 216, 94-100	3	12
80	An NMR pulsed field gradient study of the electrical and conventional heating of carrot. <i>International Journal of Food Science and Technology</i> , 2007 , 30, 639-654	3.8	12
79	Magnetic resonance imaging of single- and two-phase flow in fixed-bed reactors. <i>Applied Magnetic Resonance</i> , 2002 , 22, 201	0.8	12
78	Rapid imaging of fluid flow patterns in a narrow packed bed using MRI. <i>Magnetic Resonance Imaging</i> , 2005 , 23, 391-3	3.3	12
77	Accelerating flow propagator measurements for the investigation of reactive transport in porous media. <i>Journal of Magnetic Resonance</i> , 2016 , 272, 68-72	3	12
76	A kinetic analysis methodology to elucidate the roles of metal, support and solvent for the hydrogenation of 4-phenyl-2-butanone over Pt/TiO ₂ . <i>Journal of Catalysis</i> , 2015 , 330, 362-373	7.3	11
75	The Properties of HPMC:PEO Extended Release Hydrophilic Matrices and their Response to Ionic Environments. <i>Pharmaceutical Research</i> , 2017 , 34, 941-956	4.5	11
74	A differential scanning calorimetry study of wheat grain cooking. <i>International Journal of Food Science and Technology</i> , 1997 , 32, 473-486	3.8	11
73	NMR Imaging of nonaqueous-phase liquid dissolution in a porous medium. <i>AIChE Journal</i> , 1996 , 42, 1341-1349	13.49	11
72	NMR relaxation in porous materials at zero and ultralow magnetic fields. <i>Journal of Magnetic Resonance</i> , 2018 , 297, 1-8	3	11
71	MRI technique for the snapshot imaging of quantitative velocity maps using RARE. <i>Journal of Magnetic Resonance</i> , 2012 , 216, 183-91	3	10
70	Monitoring water transport between pores and voids in aerated gypsum using two-dimensional nuclear magnetic resonance exchange measurements. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 105302	3.02	10
69	Multi-scale magnetic resonance measurements and validation of Discrete Element Model simulations. <i>Particuology</i> , 2011 , 9, 330-341	2.8	10
68	A Monte Carlo study of temperature-programmed desorption from supported-metal catalysts. <i>Catalysis Letters</i> , 1998 , 55, 1-6	2.8	10
67	Looking into chemical products and processes. <i>Current Applied Physics</i> , 2004 , 4, 93-97	2.6	10
66	In situ reaction monitoring in heterogeneous catalysts by a benchtop NMR spectrometer. <i>Magnetic Resonance Imaging</i> , 2019 , 56, 138-143	3.3	10
65	Operando determination of the liquid-solid mass transfer coefficient during 1-octene hydrogenation. <i>Chemical Engineering Science</i> , 2017 , 171, 614-624	4.4	9
64	Acquisition of spatially-resolved displacement propagators using compressed sensing APGSTE-RARE MRI. <i>Journal of Magnetic Resonance</i> , 2018 , 295, 45-56	3	9

63	Effect of paramagnetic species on T1, T2 and T1/T2 NMR relaxation times of liquids in porous CuSO ₄ /Al ₂ O ₃ . <i>RSC Advances</i> , 2017 , 7, 36163-36167	3.7	9
62	Characterising the rheology of non-Newtonian fluids using PFG-NMR and cumulant analysis. <i>Journal of Magnetic Resonance</i> , 2015 , 255, 122-31	3	9
61	Magnetic resonance measurements of high-velocity particle motion in a three-dimensional gas-solid spouted bed. <i>Physical Review E</i> , 2010 , 82, 050302	2.4	9
60	Polarisation enhanced ¹³ C magnetic resonance studies of the hydrogenation of pentene over Pd/Al ₂ O ₃ catalysts. <i>Catalysis Today</i> , 2006 , 114, 412-417	5.3	9
59	Numerical and experimental studies of gas flow in a particulate filter. <i>Chemical Engineering Science</i> , 2019 , 209, 115179	4.4	8
58	Experimental evidence of velocity profile inversion in developing laminar flow using magnetic resonance velocimetry. <i>Journal of Fluid Mechanics</i> , 2018 , 851, 545-557	3.7	8
57	Ultralow-field nuclear magnetic resonance of liquids confined in ferromagnetic and paramagnetic materials. <i>Applied Physics Letters</i> , 2019 , 115, 072409	3.4	8
56	Ultrafast magnetic-resonance-imaging velocimetry of liquid-liquid systems: overcoming chemical-shift artifacts using compressed sensing. <i>Physical Review E</i> , 2014 , 89, 063009	2.4	8
55	A General approach to T2 measurements in the presence of internal gradients. <i>Microporous and Mesoporous Materials</i> , 2013 , 178, 20-22	5.3	8
54	Retaining both discrete and smooth features in 1D and 2D NMR relaxation and diffusion experiments. <i>Journal of Magnetic Resonance</i> , 2017 , 284, 39-47	3	8
53	Extending the use of Earth's Field NMR using Bayesian methodology: application to particle sizing. <i>Journal of Magnetic Resonance</i> , 2012 , 222, 44-52	3	8
52	Quantification of emulsified water content in oil using a terahertz quantum cascade laser 2009 ,		8
51	Quantitative moisture content detection in food wafers 2009 ,		8
50	Magnetic resonance imaging studies of spontaneous capillary water imbibition in aerated gypsum. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 115403	3	8
49	Scalar relaxation of NMR transitions at ultralow magnetic field. <i>Journal of Magnetic Resonance</i> , 2019 , 298, 101-106	3	8
48	Insights into Functionality-Specific Adsorption Dynamics and Stable Reaction Intermediates Using Fast Field Cycling NMR. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 20271-20278	3.8	8
47	Quantitative mapping of chemical compositions with MRI using compressed sensing. <i>Journal of Magnetic Resonance</i> , 2015 , 261, 27-37	3	7
46	Modelling and upscaling of transport in carbonates during dissolution: Validation and calibration with NMR experiments. <i>Journal of Contaminant Hydrology</i> , 2018 , 212, 85-95	3.9	7

45	Snap-shot Velocity vector mapping using echo-planar imaging. <i>Journal of Magnetic Resonance</i> , 2010 , 204, 266-72	3	7
44	Terahertz time-domain spectroscopy of crushed wheat grain 2005 ,		7
43	Enabling High Spectral Resolution of Liquid Mixtures in Porous Media by Antidiagonal Projections of Two-Dimensional H NMR COSY Spectra. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 5781-5785	6.4	6
42	An integrated total neutron scattering - NMR approach for the study of heterogeneous catalysis. <i>Chemical Communications</i> , 2018 , 54, 10191-10194	5.8	6
41	Understanding the operation and preparation of diesel particulate filters using a multi-faceted nuclear magnetic resonance approach. <i>Catalysis Today</i> , 2013 , 216, 104-110	5.3	6
40	Interactions of binary liquid mixtures with polysaccharides studied using multi-dimensional NMR relaxation time measurements. <i>Polymer</i> , 2010 , 51, 4103-4109	3.9	6
39	Quantification of the Number of Silanol Groups in Silicalite and Mesoporous MCM-41: Use of FT-Raman Spectroscopy. <i>Spectroscopy Letters</i> , 2000 , 33, 569-584	1.1	6
38	Under-sampling and compressed sensing of 3D spatially-resolved displacement propagators in porous media using APGSTE-RARE MRI. <i>Magnetic Resonance Imaging</i> , 2019 , 56, 24-31	3.3	6
37	Validation of a low field Rheo-NMR instrument and application to shear-induced migration of suspended non-colloidal particles in Couette flow. <i>Journal of Magnetic Resonance</i> , 2018 , 286, 30-35	3	5
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