Philip W Kuchel

List of Publications by Citations

300 papers	7,500 citations	45 h-index	67 g-index
306 ext. papers	8,074 ext. citations	3.9 avg, IF	5.77 L-index

#	Paper	IF	Citations
300	Human erythrocyte metabolism studies by 1H spin echo NMR. *FEBS Letters*, **1977**, 82, 12-6	3.8	242
299	Digestion of starch: In vivo and in vitro kinetic models used to characterise oligosaccharide or glucose release. *Carbohydrate Polymers*, **2010**, 80, 599-617	10.3	241
298	NMR diffusion measurements to characterise membrane transport and solute binding. *Progress in Nuclear Magnetic Resonance Spectroscopy*, **1997**, 30, 39-68	10.4	202
297	Imaging brain deoxyglucose uptake and metabolism by glucoCEST MRI. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 1270-8	7.3	126
296	NMR "diffusion-diffraction" of water revealing alignment of erythrocytes in a magnetic field and their dimensions and membrane transport characteristics. *Magnetic Resonance in Medicine*, **1997**, 37, 637-43	4.4	122
295	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations1: equations and parameter refinement. *Biochemical Journal*, **1999**, 342, 581-596	3.8	107
294	Defensins and the convergent evolution of platypus and reptile venom genes. *Genome Research*, **2008**, 18, 986-94	9.7	101
293	Drug binding to the inactivated state is necessary but not sufficient for high-affinity binding to human ether-□go-go-related gene channels. *Molecular Pharmacology*, **2008**, 74, 1443-52	4.3	100
292	Hepcidin, the hormone of iron metabolism, is bound specifically to alpha-2-macroglobulin in blood. *Blood*, **2009**, 113, 6225-36	2.2	92
291	Proton nuclear magnetic resonance-based metabonomics for rapid diagnosis of meningitis and ventriculitis. *Clinical Infectious Diseases*, **2005**, 41, 1582-90	11.6	89
290	The beta-defensin-fold family of polypeptides. *Toxicon*, **2004**, 44, 581-8	2.8	88
289	The G□dos channel: a review of the Ca2+-activated K+ channel in human erythrocytes. *International Journal of Biochemistry and Cell Biology*, **2003**, 35, 1182-97	5.6	84
288	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations1: in vivo kinetic characterization of 2,3-bisphosphoglycerate synthase/phosphatase using 13C and 31P NMR. *Biochemical Journal*, **1999**, 342, 567-580	3.8	80
287	Apparatus for rapid adjustment of the degree of alignment of NMR samples in aqueous media: verification with residual quadrupolar splittings in (23)Na and (133)Cs spectra. *Journal of Magnetic Resonance*, **2006**, 180, 256-65	3	79
286	Reaction of cis- and trans-[PtCl2(NH3)2] with reduced glutathione studied by 1H, 13C, 195Pt and 15N-{1H} DEPT NMR. *Journal of Inorganic Biochemistry*, **1990**, 38, 305-326	4.2	78
285	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations1: computer simulation and Metabolic Control Analysis. *Biochemical Journal*, **1999**, 342, 597-604	3.8	77
284	Reaction of cis- and trans-[PtCl2(NH3)2] with reduced glutathione inside human red blood cells, studied by 1H and 15N-[1H] DEPT NMR. *Journal of Inorganic Biochemistry*, **1990**, 38, 327-45	4.2	77

283	The N-terminal tail of hERG contains an amphipathic □helix that regulates channel deactivation. *PLoS ONE*, **2011**, 6, e16191	3.7	72
282	AAV2/8-mediated correction of OTC deficiency is robust in adult but not neonatal Spf(ash) mice. *Molecular Therapy*, **2009**, 17, 1340-6	11.7	71
281	NMR Study of the Association of Propofol with Nonionic Surfactants. *Langmuir*, **2003**, 19, 2088-2095	4	69
280	D-Amino acid residue in the C-type natriuretic peptide from the venom of the mammal, Ornithorhynchus anatinus, the Australian platypus. *FEBS Letters*, **2002**, 524, 172-6	3.8	67
279	Characterisation of erythrocyte shapes and sizes by NMR diffusion-diffraction of water: correlations with electron micrographs. *Magnetic Resonance Imaging*, **1998**, 16, 423-34	3.3	64
278	Mechanism of action of P-glycoprotein in relation to passive membrane permeation. *International Review of Cytology*, **1999**, 190, 175-250		64
277	Structure of the HERG K+ channel S5P extracellular linker: role of an amphipathic alpha-helix in C-type inactivation. *Journal of Biological Chemistry*, **2003**, 278, 42136-48	5.4	63
276	Regulation of the human-erythrocyte hexose-monophosphate shunt under conditions of oxidative stress. A study using NMR spectroscopy, a kinetic isotope effect, a reconstituted system and computer simulation. *FEBS Journal*, **1985**, 150, 371-86		62
275	Defensin-like peptide-2 from platypus venom: member of a class of peptides with a distinct structural fold. *Biochemical Journal*, **2000**, 348, 649-656	3.8	61
274	13C NMR studies of vitamin C transport and its redox cycling in human erythrocytes. *Biochemistry*, **1998**, 37, 7578-88	3.2	60
273	Role of N-acetylcysteine and cystine in glutathione synthesis in human erythrocytes. *Redox Report*, **2009**, 14, 115-24	5.9	58
272	Pulsed field gradient nuclear magnetic resonance as a tool for studying drug delivery systems. *Concepts in Magnetic Resonance*, **2003**, 19A, 51-64		58
271	Kinetic analysis of the human erythrocyte glyoxalase system using 1H NMR and a computer model. *FEBS Journal*, **1990**, 193, 83-90		58
270	Glutathione synthesis and turnover in the human erythrocyte: alignment of a model based on detailed enzyme kinetics with experimental data. *Journal of Biological Chemistry*, **2010**, 285, 23557-67	5.4	55
269	PFG NMR diffusion experiments for complex systems. *Concepts in Magnetic Resonance Part A: Bridging Education and Research*, **2006**, 28A, 249-269	0.6	55
268	Phospholipid composition of erythrocyte membranes and plasma of mammalian blood including Australian marsupials; quantitative 31P NMR analysis using detergent. *Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology*, **1996**, 113, 221-7	2.3	55
267	D-amino acid residue in a defensin-like peptide from platypus venom: effect on structure and chromatographic properties. *Biochemical Journal*, **2005**, 391, 215-20	3.8	54
266	Solution structure of a defensin-like peptide from platypus venom. *Biochemical Journal*, **1999**, 341, 785-798	3.8	52

265	Kinetics of uptake and deacetylation of N-acetylcysteine by human erythrocytes. *International Journal of Biochemistry and Cell Biology*, **2007**, 39, 1698-706	5.6	51
264	The HERG K+ channel: progress in understanding the molecular basis of its unusual gating kinetics. *European Biophysics Journal*, **2004**, 33, 89-97	1.9	51
263	Identification of a novel family of proteins in snake venoms. Purification and structural characterization of nawaprin from Naja nigricollis snake venom. *Journal of Biological Chemistry*, **2003**, 278, 40097-104	5.4	49
262	Substrate specificity of platypus venom L-to-D-peptide isomerase. *Journal of Biological Chemistry*, **2008**, 283, 8969-75	5.4	48
261	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations1: equations and parameter refinement. *Biochemical Journal*, **1999**, 342, 581	3.8	48
260	Comparison of computer simulations of the F-type and L-type non-oxidative hexose monophosphate shunts with 31P-NMR experimental data from human erythrocytes. *FEBS Journal*, **1989**, 180, 399-420		47
259	Cell volume dependence of 1H spin-echo NMR signals in human erythrocyte suspensions. The influence of in situ field gradients. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1984**, 803, 137-44	4.9	47
258	Tunable-alignment chiral system based on gelatin for NMR spectroscopy. *Journal of the American Chemical Society*, **2007**, 129, 5340-1	16.4	46
257	Pathways of glutamine metabolism in Spodoptera frugiperda (Sf9) insect cells: evidence for the presence of the nitrogen assimilation system, and a metabolic switch by 1H/15N NMR. *Journal of Biotechnology*, **2000**, 78, 23-37	3.7	46
256	Novel venom gene discovery in the platypus. *Genome Biology*, **2010**, 11, R95	18.3	45
255	Diffusion of solutes in agarose and alginate gels: 1H and 23Na PFGSE and 23Na TQF NMR studies. *Magnetic Resonance in Medicine*, **1997**, 37, 44-52	4.4	45
254	Mammalian l-to-d-amino-acid-residue isomerase from platypus venom. *FEBS Letters*, **2006**, 580, 1587-91	3.8	45
253	Physical basis of the effect of hemoglobin on the 31P NMR chemical shifts of various phosphoryl compounds. *Biochemistry*, **1988**, 27, 8803-10	3.2	44
252	31P NMR spin-transfer in the phosphoglyceromutase reaction. *FEBS Journal*, **1984**, 143, 643-9		42
251	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations1: in vivo kinetic characterization of 2,3-bisphosphoglycerate synthase/phosphatase using 13C and 31P NMR. *Biochemical Journal*, **1999**, 342, 567	3.8	42
250	The effects of long-term storage of human red blood cells on the glutathione synthesis rate and steady-state concentration. *Transfusion*, **2011**, 51, 1450-9	2.9	41
249	Structural selectivity and molecular nature of L-glutamate transport in cultured human fibroblasts. *Archives of Biochemistry and Biophysics*, **1998**, 353, 356-64	4.1	41
248	Effects of cholesterol on transmembrane water diffusion in human erythrocytes measured using pulsed field gradient NMR. *Biophysical Chemistry*, **1995**, 55, 197-208	3.5	41

247	1H and 31P NMR and HPLC studies of mouse L1210 leukemia cell extracts: the effect of Au(I) and Cu(I) diphosphine complexes on the cell metabolism. *Magnetic Resonance in Medicine*, **1991**, 18, 142-58	4.4	41
246	Parametric-equation representation of biconcave erythrocytes. *Bulletin of Mathematical Biology*, **1999**, 61, 209-20	2.1	40
245	The pore domain outer helix contributes to both activation and inactivation of the HERG K+ channel. *Journal of Biological Chemistry*, **2009**, 284, 1000-8	5.4	39
244	Glutamine and □ketoglutarate as glutamate sources for glutathione synthesis in human erythrocytes. *FEBS Journal*, **2011**, 278, 3152-63	5.7	38
243	Redox reactions and electron transfer across the red cell membrane. *IUBMB Life*, **2003**, 55, 375-85	4.7	38
242	Solution structure of CnErg1 (Ergtoxin), a HERG specific scorpion toxin. *FEBS Letters*, **2003**, 539, 138-42	3.8	38
241	Thermodynamic and hydrodynamic properties of human tropoelastin. Analytical ultracentrifuge and pulsed field-gradient spin-echo NMR studies. *Journal of Biological Chemistry*, **2001**, 276, 28042-50	5.4	38
240	Assignment of coherence features in NMR q-space plots to particular diffusion modes in erythrocyte suspensions. *Journal of Magnetic Resonance*, **1999**, 138, 135-43	3	38
239	Heteronuclear NMR studies of metabolites produced by Cryptococcus neoformans in culture media: identification of possible virulence factors. *Magnetic Resonance in Medicine*, **1999**, 42, 442-53	4.4	38
238	Spin-exchange NMR spectroscopy in studies of the kinetics of enzymes and membrane transport. *NMR in Biomedicine*, **1990**, 3, 102-19	4.4	37
237	Intracellular pH in stored erythrocytes. Refinement and further characterisation of the 31P-NMR methylphosphonate procedure. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1986**, 885, 23-33	4.9	37
236	The S4-S5 linker acts as a signal integrator for HERG K+ channel activation and deactivation gating. *PLoS ONE*, **2012**, 7, e31640	3.7	36
235	Induction and prevention of severe hyperammonemia in the spfash mouse model of ornithine transcarbamylase deficiency using shRNA and rAAV-mediated gene delivery. *Molecular Therapy*, **2011**, 19, 854-9	11.7	36
234	Analytical Solutions and Simulations for Spin-Echo Measurements of Diffusion of Spins in a Sphere with Surface and Bulk Relaxation. *Journal of Magnetic Resonance Series B*, **1996**, 112, 1-17		36
233	Direct NMR evidence that prolidase is specific for the trans isomer of imidodipeptide substrates. *Biochemistry*, **1986**, 25, 1054-62	3.2	36
232	Quantitative 31P nuclear magnetic resonance analysis of the phospholipids of erythrocyte membranes using detergent. *Lipids*, **1996**, 31, 765-70	1.6	35
231	Convection-compensating PGSE experiment incorporating excitation-sculpting water suppression (CONVEX). *Journal of Magnetic Resonance*, **2004**, 169, 92-101	3	34
230	Endogenous phospholipase and choline release in human erythrocytes: a study using 1H-NMR spectroscopy. *Biochemical and Biophysical Research Communications*, **1982**, 105, 1280-7	3.4	34

229	Rapid simulation and analysis of isotopomer distributions using constraints based on enzyme mechanisms: an example from HT29 cancer cells. *Bioinformatics*, **2005**, 21, 3558-64	7.2	33
228	Biochemical and functional characterisation of secreted phospholipase activities from Cryptococcus neoformans in their naturally occurring state. *Journal of Medical Microbiology*, **1999**, 48, 731-740	3.2	33
227	Permeability coefficients from NMR q-space data: models with unevenly spaced semi-permeable parallel membranes. *Journal of Magnetic Resonance*, **1999**, 139, 258-72	3	33
226	Stejskal-tanner equation derived in full. *Concepts in Magnetic Resonance Part A: Bridging Education and Research*, **2012**, 40A, 205-214	0.6	32
225	NMR (Pro)chiral discrimination using polysaccharide gels. *Chemistry - A European Journal*, **2009**, 15, 12189-91	4.8	32
224	Understanding and utilising mammalian venom via a platypus venom transcriptome. *Journal of Proteomics*, **2009**, 72, 155-64	3.9	32
223	Modelling Metabolism with Mathematica		32
222	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations1: computer simulation and Metabolic Control Analysis. *Biochemical Journal*, **1999**, 342, 597	3.8	32
221	Nuclear Magnetic Resonance of Biological Samples. *Critical Reviews in Analytical Chemistry*, **1981**, 12, 155-231	5.2	32
220	Mathematical modelling of the urea cycle. A numerical investigation into substrate channelling. *FEBS Journal*, **2003**, 270, 3953-61		31
219	Direct quantitative analysis of enzyme-catalyzed reactions by two-dimensional nuclear magnetic resonance spectroscopy: adenylate kinase and phosphoglyceromutase. *Journal of the American Chemical Society*, **1986**, 108, 169-173	16.4	31
218	Perturbation of homogeneous magnetic fields by isolated single and confocal spheroids. Implications for NMR spectroscopy of cells. *NMR in Biomedicine*, **1989**, 2, 151-60	4.4	30
217	Glucose transport in human erythrocytes measured using 13C NMR spin transfer. *FEBS Letters*, **1987**, 219, 5-10	3.8	30
216	Adeno-associated virus-mediated rescue of neonatal lethality in argininosuccinate synthetase-deficient mice. *Molecular Therapy*, **2013**, 21, 1823-31	11.7	29
215	Conformation of reduced glutathione in aqueous solution by 1H and 13C n.m.r. *International Journal of Peptide and Protein Research*, **1987**, 29, 638-46		29
214	Why does the mammalian red blood cell have aquaporins?. *BioSystems*, **2005**, 82, 189-96	1.9	29
213	Elevated glutamate dehydrogenase flux in glucose-deprived hybridoma and myeloma cells: evidence from 1H/15N NMR. *Biotechnology and Bioengineering*, **1998**, 60, 508-17	4.9	28
212	Evidence of red cell alignment in the magnetic field of an NMR spectrometer based on the diffusion tensor of water. *Journal of Magnetic Resonance*, **2000**, 145, 291-301	3	28

211	NMR structure of bucandin, a neurotoxin from the venom of the Malayan krait (Bungarus candidus). *Biochemical Journal*, **2001**, 360, 539-548	3.8	28
210	NMR studies of diffusional water permeability of red blood cells from macropodid marsupials (kangaroos and wallabies). *Comparative Biochemistry and Physiology A, Comparative Physiology*, **1993**, 104, 799-803		28
209	High control coefficient of transketolase in the nonoxidative pentose phosphate pathway of human erythrocytes: NMR, antibody, and computer simulation studies. *Biochemistry*, **1992**, 31, 12792-8	3.2	28
208	Inhibition and active-site modelling of prolidase. *FEBS Journal*, **1989**, 180, 377-84		28
207	Characterization of transmembrane chemical shift differences in the 31P NMR spectra of various phosphoryl compounds added to erythrocyte suspensions. *Biochemistry*, **1988**, 27, 8795-802	3.2	28
206	Proton NMR spectroscopic studies of dipeptidase in human erythrocytes. *Biochemical and Biophysical Research Communications*, **1983**, 110, 305-12	3.4	28
205	New discrete metallocycles incorporating palladium(II) and platinum(II) corners and dipyridyldibenzotetraaza[14]annulene side units. *Dalton Transactions*, **2006**, 744-50	4.3	26
204	Measurement of compartment size in q-space experiments: Fourier transform of the second derivative. *Magnetic Resonance in Medicine*, **2004**, 52, 907-12	4.4	26
203	Effect of nonrectangular field gradient pulses in the stejskal and tanner (diffusion) pulse sequence. *Journal of Magnetic Resonance*, **1991**, 94, 133-139		26
202	Accelerating metabolism and transmembrane cation flux by distorting red blood cells. *Science Advances*, **2017**, 3, eaao1016	14.3	25
201	Expression patterns of platypus defensin and related venom genes across a range of tissue types reveal the possibility of broader functions for OvDLPs than previously suspected. *Toxicon*, **2008**, 52, 559-65	2.8	25
200	Prochiral and chiral resolution in 2H NMR spectra: solutes in stretched and compressed gelatin gels. *Journal of Physical Chemistry A*, **2008**, 112, 8659-64	2.8	25
199	Convection-compensating diffusion experiments with phase-sensitive double-quantum filtering. *Journal of Magnetic Resonance*, **2005**, 174, 229-36	3	25
198	Measurement of choline concentration and transport in human erythrocytes by 1H NMR: comparison of normal blood and that from lithium-treated psychiatric patients. *Clinica Chimica Acta* , **1980**, 104, 77-85	6.2	25
197	Hypoxia-Responsive Cobalt Complexes in Tumor Spheroids: Laser Ablation Inductively Coupled Plasma Mass Spectrometry and Magnetic Resonance Imaging Studies. *Inorganic Chemistry*, **2017**, 56, 9860-9868	5.1	24
196	Conformations of platypus venom C-type natriuretic peptide in aqueous solution and sodium dodecyl sulfate micelles. *Toxicon*, **2002**, 40, 711-9	2.8	24
195	Solution structure of a defensin-like peptide from platypus venom. *Biochemical Journal*, **1999**, 341, 785	3.8	24
194	Model of the pH-dependence of the concentrations of complexes involving metabolites, haemoglobin and magnesium ions in the human erythrocyte. *FEBS Journal*, **1997**, 245, 71-83		23

193	13C-NMR studies of transmembrane electron transfer to extracellular ferricyanide in human erythrocytes. *FEBS Journal*, **1997**, 246, 638-45		23
192	Mean residence time of molecules diffusing in a cell bounded by a semi-permeable membrane: Monte Carlo simulations and an expression relating membrane transition probability to permeability. *European Biophysics Journal*, **2000**, 29, 221-7	1.9	23
191	Diffusion coefficients of the monomer and oligomers in hydroxyethyl methacrylate. *Journal of Polymer Science Part A*, **2003**, 41, 2491-2501	2.5	22
190	Defensin-like peptide-2 from platypus venom: member of a class of peptides with a distinct structural fold. *Biochemical Journal*, **2000**, 348, 649	3.8	22
189	Determination of NADH-dependent glutamate synthase (GOGAT) in Spodoptera frugiperda (Sf9) insect cells by a selective 1H/15N NMR in vitro assay. *Journal of Biotechnology*, **2000**, 79, 87-97	3.7	22
188	The phenomenon of separate intra- and extracellular resonances of difluorophosphate in 31P and 19F NMR spectra of erythrocytes. *Magnetic Resonance in Medicine*, **1991**, 18, 193-8	4.4	22
187	Glyoxalase 2 deficiency in the erythrocytes of a horse: 1H NMR studies of enzyme kinetics and transport of S-lactoylglutathione. *Archives of Biochemistry and Biophysics*, **1991**, 291, 291-9	4.1	22
186	Studies of rat brain metabolism using proton nuclear magnetic resonance: spectral assignments and monitoring of prolidase, acetylcholinesterase, and glutaminase. *Journal of Neurochemistry*, **1984**, 43, 1561-7	6	22
185	Kinetics of in vitro digestion of starches monitored by time-resolved (1)H Nuclear Magnetic Resonance. *Biomacromolecules*, **2009**, 10, 638-44	6.9	21
184	Mechanism of Mg2+ binding in the Na+,K+-ATPase. *Biophysical Journal*, **2009**, 96, 3753-61	2.9	21
183	Changes in cellular and plasma membrane phospholipid composition after lipopolysaccharide stimulation of human neutrophils, studied by 31P NMR. *FEBS Journal*, **1997**, 243, 328-35		21
182	Assembly of the oncogenic DNA-binding complex LMO2-Ldb1-TAL1-E12. *Proteins: Structure, Function and Bioinformatics*, **2008**, 70, 1461-74	4.2	21
181	Investigation of methaemoglobin reduction by extracellular NADH in mammalian erythrocytes. *International Journal of Biochemistry and Cell Biology*, **2005**, 37, 1438-45	5.6	21
180	Plasma membrane oxidoreductases: effects on erythrocyte metabolism and redox homeostasis. *Antioxidants and Redox Signaling*, **2006**, 8, 1241-7	8.4	21
179	Chemical shift and magnetic susceptibility contributions to the separation of intracellular and supernatant resonances in variable angle spinning NMR spectra of erythrocyte suspensions. *Magnetic Resonance in Medicine*, **2004**, 51, 441-4	4.4	21
178	Simulations of molecular diffusion in lattices of cells: insights for NMR of red blood cells. *Biophysical Journal*, **2002**, 83, 161-71	2.9	21
177	7 Li and 23Na nuclear magnetic resonance studies of transport and diffusion in liposomes. Comparison of transport rate constants estimated using pulsed field gradient and magnetization-transfer procedures. *Journal of the Chemical Society, Faraday Transactions*, **1993**, 89, 2807		21
176	Transmembrane exchange of hyperpolarized 13C-urea in human erythrocytes: subminute timescale kinetic analysis. *Biophysical Journal*, **2013**, 105, 1956-66	2.9	20

175	Cucurbit[5]uril-metal complex-induced room-temperature phosphorescence of naphthol and naphthol. *Dalton Transactions*, **2013**, 42, 2608-15	4.3	20
174	Strong and weak binding of water to proteins studied by NMR triple-quantum filtered relaxation spectroscopy of (17)O-water. *Biophysical Chemistry*, **1997**, 67, 187-98	3.5	20
173	Determination of the Bound Water Fraction in Cells and Protein Solutions Using 17O-Water Multiple-Quantum Filtered Relaxation Analysis. *Journal of Magnetic Resonance Series B*, **1996**, 111, 1-8		20
172	Stereospecificity of substrate usage by glyoxalase 1: nuclear magnetic resonance studies of kinetics and hemithioacetal substrate conformation. *Biochemistry*, **1994**, 33, 3548-59	3.2	20
171	2H2O quadrupolar splitting used to measure water exchange in erythrocytes. *Journal of Magnetic Resonance*, **2008**, 192, 48-59	3	19
170	Erythrocyte-shape evolution recorded with fast-measurement NMR diffusion-diffraction. *Journal of Magnetic Resonance Imaging*, **2008**, 28, 1409-16	5.6	19
169	Characterization of the transport of the nonelectrolyte dimethyl methylphosphonate across the red cell membrane. *NMR in Biomedicine*, **1989**, 1, 198-204	4.4	19
168	Receptor expression modulates calcium-sensing receptor mediated intracellular Ca2+ mobilization. *Endocrinology*, **2015**, 156, 1330-42	4.8	18
167	Simultaneous estimation of T and the flip angle in hyperpolarized NMR experiments using acquisition at non-regular time intervals. *Journal of Magnetic Resonance*, **2012**, 222, 68-73	3	18
166	Human erythrocyte flickering: temperature, ATP concentration, water transport, and cell aging, plus a computer simulation. *European Biophysics Journal*, **2009**, 38, 923-39	1.9	18
165	Microviscosity of human erythrocytes studied with hypophosphite and 31P-NMR. *Biophysical Chemistry*, **1989**, 33, 205-15	3.5	18
164	Further investigation of the use of dimethyl methylphosphonate as a 31P-NMR probe of red cell volume. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1988**, 968, 160-6	4.9	18
163	Relaxation times of spin states of all ranks and orders of quadrupolar nuclei estimated from NMR z-spectra: Markov chain Monte Carlo analysis applied to 7Li+ and 23Na+ in stretched hydrogels. *Journal of Magnetic Resonance*, **2011**, 212, 40-6	3	17
162	Structure of the pore-helix of the hERG K(+) channel. *European Biophysics Journal*, **2009**, 39, 111-20	1.9	17
161	Double quantum transition as the origin of the central dip in the z-spectrum of HDO in variably stretched gel. *Journal of Magnetic Resonance*, **2009**, 198, 197-203	3	17
160	Erythrocyte shape reversion from echinocytes to discocytes: kinetics via fast-measurement NMR diffusion-diffraction. *Magnetic Resonance in Medicine*, **2010**, 64, 645-52	4.4	17
159	19F NMR magnetization transfer between 5-FBAPTA and its complexes. An alternative means for measuring free Ca2+ concentration, and detection of complexes with protein in erythrocytes. *NMR in Biomedicine*, **1994**, 7, 330-8	4.4	17
158	A 35Cl and 37Cl NMR study of chloride binding to the erythrocyte anion transport protein. *Biophysical Chemistry*, **1991**, 40, 329-37	3.5	17

157	Mathematical Modeling and Data Analysis of NMR Experiments using Hyperpolarized (13)C Metabolites. *Magnetic Resonance Insights*, **2013**, 6, 13-21	5	16
156	Mammalian peptide isomerase: platypus-type activity is present in mouse heart. *Chemistry and Biodiversity*, **2010**, 7, 1603-11	2.5	16
155	Antifungal effects on metabolite profiles of medically important yeast species measured by nuclear magnetic resonance spectroscopy. *Antimicrobial Agents and Chemotherapy*, **2006**, 50, 4018-26	5.9	16
154	A way of visualizing NMR experiments on quadrupolar nuclei. *Concepts in Magnetic Resonance Part A: Bridging Education and Research*, **2005**, 25A, 40-52	0.6	16
153	NMR studies of exchange between intra- and extracellular glutathione in human erythrocytes. *Redox Report*, **2005**, 10, 83-90	5.9	16
152	Nmr studies of diffusional water permeability of erythrocytes from eight species of marsupial. *Comparative Biochemistry and Physiology A, Comparative Physiology*, **1993**, 106, 515-518		16
151	Correlation of Viscosity and Conductance with23Na+NMRT1Measurements. *Bulletin of the Chemical Society of Japan*, **1990**, 63, 2961-2965	5.1	16
150	The relationship between glucose concentration and rate of lactate production by human erythrocytes in an open perfusion system. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1984**, 805, 191-203	4.9	16
149	Cardiac magnetic resonance imaging of rapid VCAM-1 up-regulation in myocardial ischemia-reperfusion injury. *European Biophysics Journal*, **2013**, 42, 61-70	1.9	15
148	Fermentative glycolysis with purified Escherichia coli enzymes for in vitro ATP production and evaluating an engineered enzyme. *Journal of Biotechnology*, **2012**, 157, 113-23	3.7	15
147	Cardiac function and lipid distribution in rats fed a high-fat diet: in vivo magnetic resonance imaging and spectroscopy. *American Journal of Physiology - Heart and Circulatory Physiology*, **2013**, 304, H1495-504	5.2	15
146	Mutarotase equilibrium exchange kinetics studied by 13C-NMR. *Biophysical Chemistry*, **1988**, 32, 89-95	3.5	15
145	The assimilation of tri- and tetrapeptides by human erythrocytes. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1985**, 846, 127-34	4.9	15
144	Bicarbonate exchange kinetics at equilibrium across the erythrocyte membrane by 13C NMR. *Biochemical and Biophysical Research Communications*, **1986**, 136, 266-72	3.4	15
143	z-Spectra of 23Na+ in stretched gels: quantitative multiple quantum analysis. *Journal of Magnetic Resonance*, **2010**, 205, 260-8	3	14
142	Multiple-quantum filtered 17Q and 23Na NMR analysis of mitochondrial suspensions. *Biophysical Chemistry*, **1998**, 73, 137-43	3.5	14
141	Simulations of NMR-detected diffusion in suspensions of red cells: the "signatures" in q-space plots of various lattice arrangements. *European Biophysics Journal*, **2003**, 31, 563-74	1.9	14
140	NMR structure of bucandin, a neurotoxin from the venom of the Malayan krait (Bungarus candidus). *Biochemical Journal*, **2001**, 360, 539-48	3.8	14

139	NMR studies of erythrocytes immobilized in agarose and alginate gels. *Magnetic Resonance in Medicine*, **1992**, 25, 273-88	4.4	14
138	Proton nuclear magnetic resonance spectroscopy of rabbit brain homogenate. *Journal of Neurochemistry*, **1984**, 42, 878-9	6	14
137	1H and 13C NMR studies of glycine in anisotropic media: double-quantum transitions and the effects of chiral interactions. *Journal of Magnetic Resonance*, **2011**, 211, 74-9	3	13
136	Platypus venom: source of novel compounds. *Australian Journal of Zoology*, **2009**, 57, 203	0.5	13
135	Stimulation of human erythrocyte 2,3-bisphosphoglycerate phosphatase by vanadate. *Archives of Biochemistry and Biophysics*, **1990**, 276, 160-71	4.1	13
134	"Setting paint" analogy for the hydrophobic self-association of tropoelastin into elastin-like hydrogel. *Biopolymers*, **2009**, 91, 321-30	2.2	12
133	Starch granule characterization by kinetic analysis of their stages during enzymic hydrolysis: 1H nuclear magnetic resonance studies. *Carbohydrate Polymers*, **2011**, 83, 1775-1786	10.3	12
132	Enhancement of Na+ diffusion in a bicontinuous cubic phase by the ionophore monensin. *Langmuir*, **2004**, 20, 2660-6	4	12
131	Parallel secretion of pancreatic phospholipase A(2), phospholipase A(1), lipase, and colipase in children with exocrine pancreatic dysfunction. *Pediatric Research*, **2000**, 48, 735-40	3.2	12
130	Glycerophosphocholine release in human erythrocytes. 1H spin-echo and 31P-NMR evidence for lysophospholipase. *FEBS Journal*, **1993**, 212, 411-6		12
129	Proton NMR spectroscopy of rabbit renal cortex. *Kidney International*, **1985**, 28, 6-10	9.9	12
128	NMR of (133)Cs(+) in stretched hydrogels: One-dimensional, z- and NOESY spectra, and probing the ion's environment in erythrocytes. *Journal of Magnetic Resonance*, **2015**, 261, 110-20	3	11
127	Stoichiometric relationship between Na(+) ions transported and glucose consumed in human erythrocytes: Bayesian analysis of (23)Na and (13)C NMR time course data. *Biophysical Journal*, **2013**, 104, 1676-84	2.9	11
126	Cytoskeletal rearrangements in human red blood cells induced by snake venoms: light microscopy of shapes and NMR studies of membrane function. *Cell Biology International*, **2012**, 36, 87-97	4.5	11
125	L-to-D-peptide isomerase in male echidna venom. *Australian Journal of Zoology*, **2010**, 58, 284	0.5	11
124	Free magnesium-ion concentration in erythrocytes by 31P NMR: the effect of metabolite-haemoglobin interactions. *NMR in Biomedicine*, **1997**, 10, 129-37	4.4	11
123	NMR triple-quantum filtered relaxation analysis of 17O-water in insulin solutions: an insight into the aggregation of insulin and the properties of its bound water. *Biophysical Chemistry*, **1998**, 70, 231-9	3.5	11
122	Current status and challenges in connecting models of erythrocyte metabolism to experimental reality. *Progress in Biophysics and Molecular Biology*, **2004**, 85, 325-42	4.7	11

121	Acquisition of pure-phase diffusion spectra using oscillating-gradient spin echo. *Journal of Magnetic Resonance*, **2005**, 176, 151-9	3	11
120	Determination of Na+ binding parameters by relaxation analysis of selected 23Na NMR coherences: RNA, BSA and SDS. *Magnetic Resonance in Chemistry*, **2005**, 43, 217-24	2.1	11
119	A simple and inexpensive method for preparing erythrocyte membranes by filtration through a hollow-fiber system. *Analytical Biochemistry*, **1989**, 179, 190-3	3.1	11
118	Erythrocyte glycolysis: stimulation by nalidixic acid. *Biochemical Medicine*, **1982**, 27, 95-108		11
117	Transmembrane Exchange of Fluorosugars: Characterization of Red Cell GLUT1 Kinetics Using ¹⁹F NMR. *Biophysical Journal*, **2018**, 115, 1906-1919	2.9	11
116	'Chiral compartmentation' in metabolism: enzyme stereo-specificity yielding evolutionary options. *FEBS Letters*, **2013**, 587, 2790-7	3.8	10
115	Insights into hERG K+ channel structure and function from NMR studies. *European Biophysics Journal*, **2013**, 42, 71-9	1.9	10
114	Hyperpolarized [1,(13)C]pyruvate in lysed human erythrocytes: effects of co-substrate supply on reaction time courses. *NMR in Biomedicine*, **2014**, 27, 1203-10	4.4	10
113	Effectors of the frequency of calcium oscillations in HEK-293 cells: wavelet analysis and a computer model. *European Biophysics Journal*, **2009**, 39, 149-65	1.9	10
112	Nobel Prizes for magnetic resonance imaging and channel proteins. *Medical Journal of Australia*, **2003**, 179, 611-3	4	10
111	Simulations of NMR-detected diffusion in suspensions of red cells: the effects of variation in membrane permeability and observation time. *European Biophysics Journal*, **2003**, 32, 671-5	1.9	10
110	Spin□attice Relaxation Times of H2and D2in Aqueous Solutions. *Journal of Magnetic Resonance Series A*, **1996**, 119, 1-5		10
109	Immobilization methods for NMR studies of cellular metabolism--a practical guide. *ImmunoMethods* , **1994**, 4, 163-78		10
108	Theoretical and practical aspects of NMR studies of cells. *ImmunoMethods*, **1994**, 4, 85-97		10
107	Urea exchange across the human erythrocyte membrane measured using 13C NMR lineshape analysis. *European Biophysics Journal*, **1992**, 21, 207-16	1.9	10
106	Hypophosphite transport in human erythrocytes studied by overdetermined one-dimensional NMR exchange analysis. *NMR in Biomedicine*, **1990**, 3, 59-63	4.4	10
105	Insights into Gene Therapy for Urea Cycle Defects by Mathematical Modeling. *Human Gene Therapy*, **2019**, 30, 1385-1394	4.8	9
104	Membrane flickering of the human erythrocyte: physical and chemical effectors. *European Biophysics Journal*, **2014**, 43, 169-77	1.9	9

103	The interaction of sterically stabilized magnetic nanoparticles with fresh human red blood cells. *International Journal of Nanomedicine*, **2015**, 10, 6645-55	7.3	9
102	Skeletal muscle lipid metabolism studied by advanced magnetic resonance spectroscopy. *Progress in Nuclear Magnetic Resonance Spectroscopy*, **2012**, 65, 66-76	10.4	9
101	Erythrocyte orientational and cell volume effects on NMR q-space analysis: simulations of restricted diffusion. *European Biophysics Journal*, **2009**, 39, 139-48	1.9	9
100	pH and cell volume effects on H2O and phosphoryl resonance splitting in rapid-spinning NMR of red cells. *Biophysical Journal*, **2007**, 92, 1770-6	2.9	9
99	PGSE NMR diffusion study of the self-association of N-methylacetamide in carbon tetrachloride. *Magnetic Resonance in Chemistry*, **2002**, 40, S115-S121	2.1	9
98	Determination of the stability constants of Mn2+ and Mg2+ complexes of the components of the NADP-linked isocitrate dehydrogenase reaction by electron spin resonance. *FEBS Journal*, **1980**, 110, 465-73		9
97	Relative intensities of components of quadrupolar-split multiplets in NMR spectra: Rationale for a simple rule. *Concepts in Magnetic Resonance Part A: Bridging Education and Research*, **2012**, 40A, 90-99	0.6	8
96	Comparative NMR studies of diffusional water permeability of red blood cells from different species: XV. Agile wallaby (Macropus agilis), red-necked wallaby (Macropus rufogriseus) and Goodfellow's tree kangaroo (Dendrolagus goodfellowi). *Comparative Biochemistry and Physiology*	2.6	8
95	Rapid exchange of fluoroethylamine via the Rhesus complex in human erythrocytes: 19F NMR magnetization transfer analysis showing competition by ammonia and ammonia analogues. *Biochemistry*, **2006**, 45, 9354-61	3.2	8
94	Selective cross-polarization in solution state nuclear magnetic resonance of scalar coupled spin 12 and quadrupolar nuclei. *Journal of Chemical Physics*, **2003**, 118, 6997-7004	3.9	8
93	□Amino acid isomers of a natural substrate of the enzyme □glutamyl-amino acid cyclotransferase. Synthesis of (3S)-3-aminoglutaryl-(S)-alanine and (3R)-3-aminoglutaryl-(S)-alanine. *Journal of the Chemical Society Perkin Transactions 1*, **1990**, 2363-2369		8
92	Interactions of Na+ with haemoglobin-organic phosphate complexes. *Biophysical Chemistry*, **1988**, 30, 81-92	3.5	8
91	Physicochemical and kinetic properties of beef liver argininosuccinase. Studies in the presence and absence of arginase. *Biochimica Et Biophysica Acta - Biomembranes*, **1975**, 397, 478-88	3.8	8
90	Anisotropic diffusion in stretched hydrogels containing erythrocytes: evidence of cell-shape distortion recorded by PGSE NMR spectroscopy. *Magnetic Resonance in Chemistry*, **2017**, 55, 438-446	2.1	7
89	Sub-minute kinetics of human red cell fumarase: H spin-echo NMR spectroscopy and C rapid-dissolution dynamic nuclear polarization. *NMR in Biomedicine*, **2018**, 31, e3870	4.4	7
88	Inhomogeneous NMR line shape as a probe of microscopic organization of bicontinuous cubic phases. *Journal of Physical Chemistry B*, **2008**, 112, 6636-45	3.4	7
87	Isotopomer subspaces as indicators of metabolic-pathway structure. *Journal of Theoretical Biology*, **2008**, 252, 391-401	2.3	7
86	Scalar couplings as pH probes in compartmentalized biological systems: 31P NMR of phosphite. *Magnetic Resonance in Medicine*, **2003**, 50, 693-6	4.4	7

85	Characterisation of erythrocyte transmembrane exchange of trifluoroacetate using 19F-NMR: evidence for transport via the monocarboxylate transporter. *Biochimica Et Biophysica Acta - Biomembranes*, **1993**, 1150, 35-44	3.8	7
84	A 31P nuclear magnetic resonance investigation of acyl group transfer from phosphatidylcholine to yield lysophosphatidylcholine in human plasma. *Lipids*, **1994**, 29, 183-8	1.6	7
83	1H NMR spectroscopic survey of plasma and erythrocytes from selected marsupials and domestic animals of Australia. *Comparative Biochemistry and Physiology Part B: Comparative Biochemistry*, **1991**, 99, 575-97		7
82	Transmembrane 19F NMR chemical shift difference of fluorinated solutes in liposomes, erythrocytes and erythrocyte ghosts. *NMR in Biomedicine*, **1993**, 6, 136-43	4.4	7
81	Enkephalin degradation by human erythrocytes and hemolysates studied using 1H NMR spectroscopy. *Archives of Biochemistry and Biophysics*, **1985**, 242, 515-22	4.1	7
80	Glyoxalase activity in human erythrocytes and mouse lymphoma, liver and brain probed with hyperpolarized C-methylglyoxal. *Communications Biology*, **2018**, 1, 232	6.7	7
79	NMR methods for measuring membrane transport. *Sub-Cellular Biochemistry*, **1994**, 23, 247-327	5.5	7
78	Na and solute diffusion in aqueous channels of Myverol bicontinuous cubic phase: PGSE NMR and computer modelling. *Magnetic Resonance in Chemistry*, **2017**, 55, 464-471	2.1	6
77	The S1 helix critically regulates the finely tuned gating of Kv11.1 channels. *Journal of Biological Chemistry*, **2017**, 292, 7688-7705	5.4	6
76	NMR magnetization-transfer analysis of rapid membrane transport in human erythrocytes. *Biophysical Reviews*, **2016**, 8, 369-384	3.7	6
75	Dependence of residual dipolar couplings on foot angle in (1)H MR spectra from skeletal muscle. *Magnetic Resonance Imaging*, **2014**, 32, 379-84	3.3	6
74	NMR q-space analysis of canonical shapes of human erythrocytes: stomatocytes, discocytes, spherocytes and echinocytes. *European Biophysics Journal*, **2013**, 42, 3-16	1.9	6
73	Matrix-dependent modulation of anisotropic effects on NMR spectra from 7Li+ and 23Na+ encapsulated in cryptands. *European Biophysics Journal*, **2013**, 42, 17-23	1.9	6
72	Bile salt stimulated lipase: Inhibition by phospholipids and relief by phospholipase A. *Journal of Cystic Fibrosis*, **2017**, 16, 763-770	4.1	6
71	FmR□analysis: Rapid and direct estimation of relaxation and kinetic parameters from dynamic nuclear polarization time courses. *Magnetic Resonance in Medicine*, **2015**, 73, 2075-80	4.4	6
70	7Li+ NMR quadrupolar splitting in stretched hydrogels: developments in relaxation time estimation from z-spectra. *Magnetic Resonance in Chemistry*, **2012**, 50 Suppl 1, S17-21	2.1	6
69	Kinetics of starch hydrolysis and glucose mutarotation studied by NMR chemical exchange saturation transfer (CEST). *Carbohydrate Polymers*, **2011**, 86, 1525-1532	10.3	6
68	Comparative NMR studies of diffusional water permeability of red blood cells from different species: XVI Dingo (Canis familiaris dingo) and dog (Canis familiaris). *Cell Biology International*, **2010**, 34, 373-8	4.5	6

67	Mobility of water in biological systems studied by 17O NMR via multiple-quantum filtered relaxation analysis. *Magnetic Resonance in Chemistry*, **1997**, 35, S47-S51	2.1	6
66	13C NMR evidence of the failure of human erythrocytes to metabolize ascorbate and dehydroascorbate to lactate. *Free Radical Biology and Medicine*, **2000**, 28, 1607-10	7.8	6
65	Using the beta/alpha peak-height ratio of ATP in 31P NMR spectra to measure free [Mg2+]: theoretical and practical problems. *NMR in Biomedicine*, **1999**, 12, 217-20	4.4	6
64	Phospholipid changes in children with pancreatic sufficiency and insufficiency. *Clinica Chimica Acta*, **1999**, 281, 89-100	6.2	6
63	Band-3 mediated uptake of beryllofluoride complexes by human erythrocytes. *Biochemistry*, **1992**, 31, 9263-8	3.2	6
62	gamma-Glutamylcyclotransferase: inhibition by D-beta-aminoglutaryl-L-alanine and analysis of the solvent kinetic isotope effect. *FEBS Journal*, **1989**, 184, 97-101		6
61	(1)H NMR z-spectra of acetate methyl in stretched hydrogels: quantum-mechanical description and Markov chain Monte Carlo relaxation-parameter estimation. *Journal of Magnetic Resonance*, **2015**, 250, 29-36	3	5
60	Membrane flickering of the human erythrocyte: constrained random walk used with Bayesian analysis. *European Biophysics Journal*, **2014**, 43, 157-67	1.9	5
59	Comparative NMR studies of diffusional water permeability of red blood cells from different species: XVIII platypus (Ornithorhynchus anatinus) and saltwater crocodile (Crocodylus porosus). *Cell Biology International*, **2010**, 34, 703-8	4.5	5
58	Mathematical models of naturally "morphed" human erythrocytes: stomatocytes and echinocytes. *Bulletin of Mathematical Biology*, **2010**, 72, 1323-33	2.1	5
57	Metabolic homeostasis in the human erythrocyte: in silico analysis. *BioSystems*, **2006**, 83, 118-24	1.9	5
56	NMR Studies of Diffusion-Coherence Phenomena in Red Cell Suspensions: Current Status. *Israel Journal of Chemistry*, **2003**, 43, 45-54	3.4	5
55	Cholesterol effects on nonelectrolyte membrane transport in human erythrocytes: NMR magnetization transfer studies. *Magnetic Resonance in Medicine*, **1994**, 32, 505-10	4.4	5
54	Diffusion of Solvent in Swollen Latex Particles. *Journal of Colloid and Interface Science*, **1994**, 166, 437-443	3.3	5
53	NMR Studies of Erythrocyte Metabolism. *Advances in Molecular and Cell Biology*, **1995**, 11, 147-205		5
52	Stability and nonreactivity of ergothioneine in human erythrocytes studied by 1H NMR. *Magnetic Resonance in Medicine*, **1993**, 29, 826-9	4.4	5
51	Red cell volume changes monitored using a new 31P NMR procedure. *Journal of Magnetic Resonance*, **1985**, 62, 568-572		5
50	Average Lengths of Chords in a Square. *Mathematics Magazine*, **1981**, 54, 261-269	0.1	5

49	Rates of anion transfer across erythrocyte membranes measured with NMR spectroscopy. *Progress in Cell Research*, **1992**, 105-119		5
48	Enhanced Ca influx in mechanically distorted erythrocytes measured with F nuclear magnetic resonance spectroscopy. *Scientific Reports*, **2021**, 11, 3749	4.9	5
47	NMR resonance splitting of urea in stretched hydrogels: proton exchange and (1)H/(2)H isotopologues. *Journal of Magnetic Resonance*, **2014**, 247, 72-80	3	4
46	Quadrupolar Splitting in Stretched Hydrogels **2014**, 171-180		4
45	91.69 Can you bend a truncated octahedron?. *Mathematical Gazette*, **2007**, 91, 533-536	0.1	4
44	1H NMR of compounds with low water solubility in the presence of erythrocytes: effects of emulsion phase separation. *European Biophysics Journal*, **2001**, 30, 69-74	1.9	4
43	13C NMR investigation of cholesterol esterification rate in human whole blood. *Clinica Chimica Acta* , **1995**, 237, 25-30	6.2	4
42	Changes in plasma phospholipids in the presence and absence of erythrocytes 31P-NMR time-course studies. *FEBS Journal*, **1996**, 235, 648-52		4
41	Fructose 3-phosphate and 5-phosphoribosyl-1-pyrophosphate formation in perfused human erythrocytes: 31P NMR studies. *Magnetic Resonance in Medicine*, **1994**, 31, 110-21	4.4	4
40	Magnetic potential and field gradients of a model cell. *Journal of Theoretical Biology*, **1989**, 137, 55-69	2.3	4
39	The NMR 'split peak effect' in cell suspensions: Historical perspective, explanation and applications. *Progress in Nuclear Magnetic Resonance Spectroscopy*, **2018**, 104, 1-11	10.4	4
38	Morphology and water permeability of red blood cells from green sea turtle (Chelonia mydas). *Protoplasma*, **2015**, 252, 1181-5	3.4	3
37	NMR Spectra of Glycine Isotopomers in Anisotropic Media: Subtle Chiral Interactions. *Analytical Chemistry*, **2015**, 87, 10437-42	7.8	3
36	Structure and antimicrobial activity of platypus 'intermediate' defensin-like peptide. *FEBS Letters*, **2014**, 588, 1821-6	3.8	3
35	Long-lived spin state of a tripeptide in stretched hydrogel. *Journal of Biomolecular NMR*, **2014**, 59, 31-41	3	3
34	(1)H NMR spectroscopy for the in vitro understanding of the glycaemic index. *British Journal of Nutrition*, **2013**, 109, 1934-9	3.6	3
33	Magnetic-resonance evaluation of the suitability of microstructured polymer optical fibers as sensors for ionic aqueous solutions. *ACS Applied Materials & Interfaces*, **2009**, 1, 197-203	9.5	3
32	(39)K nuclear magnetic resonance and a mathematical model of K(+) transport in human erythrocytes. *European Biophysics Journal*, **2006**, 35, 293-301	1.9	3

31	Solution-state cross-polarization for selective excitation of scalar-coupled quadrupolar nuclei S>1/2 in the presence of a residual quadrupolar splitting. *Chemical Physics Letters*, **2003**, 376, 732-736	2.5	3
30	NMR studies of diffusional water permeability of red blood cells from the echidna Tachyglossus aculeatus. *Comparative Biochemistry and Physiology Part B: Comparative Biochemistry*, **1994**, 107, 45-50		3
29	Determination of erythrocyte glucose 1,6-bisphosphate--a comparison of two methods using a centrifugal analyzer. *Clinica Chimica Acta*, **1987**, 164, 181-7	6.2	3
28	No evidence for bradykinin hydrolysis in human erythrocyte suspensions: 1H NMR studies. *American Journal of Hematology*, **1987**, 25, 183-9	7.1	3
27	Average Lengths of Chords in a Square		3
26	Anomerisation of Fluorinated Sugars by Mutarotase Studied Using 19F NMR Two-Dimensional Exchange Spectroscopy. *Australian Journal of Chemistry*, **2020**, 73, 117	1.2	3
25	Rapid zero-trans kinetics of Cs exchange in human erythrocytes quantified by dissolution hyperpolarized Cs NMR spectroscopy. *Scientific Reports*, **2019**, 9, 19726	4.9	3
24	Detection of platypus-type L/D-peptide isomerase activity in aqueous extracts of papaya fruit. *Biotechnology Letters*, **2012**, 34, 1659-65	3	2
23	96.45 Can you Bendla truncated truncated tetrahedron?. *Mathematical Gazette*, **2012**, 96, 317-323	0.1	2
22	Lysine and glutamate transport in the erythrocytes of common brushtail possum, Tammar Wallaby and eastern grey, kangaroo. *Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology*, **1998**, 119, 951-6	2.6	2
21	Water chemical shift in 1H NMR of red cells: effects of pH when transmembrane magnetic susceptibility differences are low. *Magnetic Resonance in Medicine*, **2008**, 59, 707-11	4.4	2
20	1H nuclear magnetic resonance assay of erythrocyte triosephosphate isomerase. *Analytical Biochemistry*, **1991**, 197, 178-81	3.1	2
19	Equilibrium exchange of dimethyl methylphosphonate across the human red cell membrane measured using NMR spin transfer. *Journal of Magnetic Resonance*, **1986**, 68, 311-318		2
18	Expressions for surfaces in disk-cyclide coordinates : derivations using symbolic computation. *Journal of the Franklin Institute*, **1988**, 325, 505-508	4	2
17	Bi-cyclide and flat-ring cyclide coordinate surfaces: correction of two expressions. *Mathematics of Computation*, **1987**, 49, 607-607	1.6	2
16	Effect of red blood cell shape changes on haemoglobin interactions and dynamics: a neutron scattering study. *Royal Society Open Science*, **2020**, 7, 201507	3.3	2
15	Surface model of the human red blood cell simulating changes in membrane curvature under strain. *Scientific Reports*, **2021**, 11, 13712	4.9	2
14	92.81 10n 2 +2 revealed. *Mathematical Gazette*, **2008**, 92, 546-551	0.1	1

13	Restricted diffusion of bicarbonate and hypophosphite ions modulated by transport in suspensions of red blood cells. *Journal of Magnetic Resonance*, **1990**, 90, 100-110		1
12	Combined NMR Experimental and Computer-Simulation Study of 2,3-Bisphosphoglycerate Metabolism in Human Erythrocytes **2000**, 139-145		1
11	Chapter 7:Cells in Gels: NMR Studies. *New Developments in NMR*, **2020**, 228-253	0.9	1
10	Dissolution dynamic nuclear polarization NMR studies of enzyme kinetics: Setting up differential equations for fitting to spectral time courses. *Journal of Magnetic Resonance Open*, **2019**, 1, 100001	0.4	1
9	Slow relaxation of longitudinal multispin orders in weakly and strongly coupled two-spin systems. *Magnetic Resonance in Chemistry*, **2012**, 50, 443-8	2.1	0
8	Extended Bloch□McConnell equations for mechanistic analysis of hyperpolarized ¹³C magnetic resonance experiments on enzyme systems. *Magnetic Resonance*, **2021**, 2, 421-446	2.9	0
7	Identification of beryllium fluoride complexes in mechanically distorted gels using quadrupolar split Be NMR spectra resolved with solution-state selective cross-polarization. *Physical Chemistry Chemical Physics*, **2021**, 23, 16932-16941	3.6	0
6	Device for aeration and mixing of cell and organelle suspensions during NMR experiments. *Journal of Magnetic Resonance*, **2002**, 159, 158-60	3	
5	78.15 Is There Light at the End of the Funnel?. *Mathematical Gazette*, **1994**, 78, 336	0.1	
4	Translational diffusion of hemoglobin in human erythrocytes and hemolysates. *Journal of Magnetic Resonance*, **1991**, 94, 574-580		
3	Review of Mutarotase in □Metabolic Subculture□and Analytical Biochemistry: Prelude to 19F NMR Studies of its Substrate Specificity and Mechanism. *Australian Journal of Chemistry*, **2020**, 73, 112	1.2	
2	Numerical Simulations of Red-Blood Cells in Fluid Flow: A Discrete Multiphysics Study. *ChemEngineering*, **2021**, 5, 33	2.6	
1	What Are the Relative Intensities of the Components of NMR Spectral Multiplets from Quadrupolar Nuclei in Uniformly Anisotropic Media?. *Concepts in Magnetic Resonance Part A: Bridging Education and Research*, **2021**, 2021, 1-25	0.6	