

Philip W Kuchel

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9144469/philip-w-kuchel-publications-by-year.pdf>

Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

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	Extended BlochMcConnell equations for mechanistic analysis of hyperpolarized ^{13}C magnetic resonance experiments on enzyme systems. <i>Magnetic Resonance</i> , 2021 , 2, 421-446	2.9	0
299	Numerical Simulations of Red-Blood Cells in Fluid Flow: A Discrete Multiphysics Study. <i>ChemEngineering</i> , 2021 , 5, 33	2.6	
298	Surface model of the human red blood cell simulating changes in membrane curvature under strain. <i>Scientific Reports</i> , 2021 , 11, 13712	4.9	2
297	Identification of beryllium fluoride complexes in mechanically distorted gels using quadrupolar split Be NMR spectra resolved with solution-state selective cross-polarization. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 16932-16941	3.6	0
296	What Are the Relative Intensities of the Components of NMR Spectral Multiplets from Quadrupolar Nuclei in Uniformly Anisotropic Media?. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2021 , 2021, 1-25	0.6	
295	Enhanced Ca influx in mechanically distorted erythrocytes measured with F nuclear magnetic resonance spectroscopy. <i>Scientific Reports</i> , 2021 , 11, 3749	4.9	5
294	Review of Mutarotase in Metabolic Subculture and Analytical Biochemistry: Prelude to ^{19}F NMR Studies of its Substrate Specificity and Mechanism. <i>Australian Journal of Chemistry</i> , 2020 , 73, 112	1.2	
293	Chapter 7: Cells in Gels: NMR Studies. <i>New Developments in NMR</i> , 2020 , 228-253	0.9	1
292	Anomerisation of Fluorinated Sugars by Mutarotase Studied Using ^{19}F NMR Two-Dimensional Exchange Spectroscopy. <i>Australian Journal of Chemistry</i> , 2020 , 73, 117	1.2	3
291	Effect of red blood cell shape changes on haemoglobin interactions and dynamics: a neutron scattering study. <i>Royal Society Open Science</i> , 2020 , 7, 201507	3.3	2
290	Insights into Gene Therapy for Urea Cycle Defects by Mathematical Modeling. <i>Human Gene Therapy</i> , 2019 , 30, 1385-1394	4.8	9
289	Dissolution dynamic nuclear polarization NMR studies of enzyme kinetics: Setting up differential equations for fitting to spectral time courses. <i>Journal of Magnetic Resonance Open</i> , 2019 , 1, 100001	0.4	1
288	Rapid zero-trans kinetics of Cs exchange in human erythrocytes quantified by dissolution hyperpolarized Cs NMR spectroscopy. <i>Scientific Reports</i> , 2019 , 9, 19726	4.9	3
287	Sub-minute kinetics of human red cell fumarase: H spin-echo NMR spectroscopy and C rapid-dissolution dynamic nuclear polarization. <i>NMR in Biomedicine</i> , 2018 , 31, e3870	4.4	7
286	The NMR 'split peak effect' in cell suspensions: Historical perspective, explanation and applications. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2018 , 104, 1-11	10.4	4
285	Glyoxalase activity in human erythrocytes and mouse lymphoma, liver and brain probed with hyperpolarized C-methylglyoxal. <i>Communications Biology</i> , 2018 , 1, 232	6.7	7
284	Transmembrane Exchange of Fluorosugars: Characterization of Red Cell GLUT1 Kinetics Using ^{19}F NMR. <i>Biophysical Journal</i> , 2018 , 115, 1906-1919	2.9	11

283	Anisotropic diffusion in stretched hydrogels containing erythrocytes: evidence of cell-shape distortion recorded by PGSE NMR spectroscopy. <i>Magnetic Resonance in Chemistry</i> , 2017 , 55, 438-446	2.1	7
282	Na and solute diffusion in aqueous channels of Myverol bicontinuous cubic phase: PGSE NMR and computer modelling. <i>Magnetic Resonance in Chemistry</i> , 2017 , 55, 464-471	2.1	6
281	The S1 helix critically regulates the finely tuned gating of Kv11.1 channels. <i>Journal of Biological Chemistry</i> , 2017 , 292, 7688-7705	5.4	6
280	Accelerating metabolism and transmembrane cation flux by distorting red blood cells. <i>Science Advances</i> , 2017 , 3, eaao1016	14.3	25
279	Hypoxia-Responsive Cobalt Complexes in Tumor Spheroids: Laser Ablation Inductively Coupled Plasma Mass Spectrometry and Magnetic Resonance Imaging Studies. <i>Inorganic Chemistry</i> , 2017 , 56, 9860-9868 ²⁴	5.1	24
278	Bile salt stimulated lipase: Inhibition by phospholipids and relief by phospholipase A. <i>Journal of Cystic Fibrosis</i> , 2017 , 16, 763-770	4.1	6
277	NMR magnetization-transfer analysis of rapid membrane transport in human erythrocytes. <i>Biophysical Reviews</i> , 2016 , 8, 369-384	3.7	6
276	Morphology and water permeability of red blood cells from green sea turtle (<i>Chelonia mydas</i>). <i>Protoplasma</i> , 2015 , 252, 1181-5	3.4	3
275	NMR Spectra of Glycine Isotopomers in Anisotropic Media: Subtle Chiral Interactions. <i>Analytical Chemistry</i> , 2015 , 87, 10437-42	7.8	3
274	NMR of (133)Cs(+) in stretched hydrogels: One-dimensional, z- and NOESY spectra, and probing the ion's environment in erythrocytes. <i>Journal of Magnetic Resonance</i> , 2015 , 261, 110-20	3	11
273	(1)H NMR z-spectra of acetate methyl in stretched hydrogels: quantum-mechanical description and Markov chain Monte Carlo relaxation-parameter estimation. <i>Journal of Magnetic Resonance</i> , 2015 , 250, 29-36	3	5
272	FmR analysis: Rapid and direct estimation of relaxation and kinetic parameters from dynamic nuclear polarization time courses. <i>Magnetic Resonance in Medicine</i> , 2015 , 73, 2075-80	4.4	6
271	The interaction of sterically stabilized magnetic nanoparticles with fresh human red blood cells. <i>International Journal of Nanomedicine</i> , 2015 , 10, 6645-55	7.3	9
270	Receptor expression modulates calcium-sensing receptor mediated intracellular Ca ²⁺ mobilization. <i>Endocrinology</i> , 2015 , 156, 1330-42	4.8	18
269	Structure and antimicrobial activity of platypus 'intermediate' defensin-like peptide. <i>FEBS Letters</i> , 2014 , 588, 1821-6	3.8	3
268	NMR resonance splitting of urea in stretched hydrogels: proton exchange and (1)H/(2)H isotopologues. <i>Journal of Magnetic Resonance</i> , 2014 , 247, 72-80	3	4
267	Membrane flickering of the human erythrocyte: constrained random walk used with Bayesian analysis. <i>European Biophysics Journal</i> , 2014 , 43, 157-67	1.9	5
266	Membrane flickering of the human erythrocyte: physical and chemical effectors. <i>European Biophysics Journal</i> , 2014 , 43, 169-77	1.9	9

265	Long-lived spin state of a tripeptide in stretched hydrogel. <i>Journal of Biomolecular NMR</i> , 2014 , 59, 31-41	3	3
264	Dependence of residual dipolar couplings on foot angle in (1)H MR spectra from skeletal muscle. <i>Magnetic Resonance Imaging</i> , 2014 , 32, 379-84	3.3	6
263	Quadrupolar Splitting in Stretched Hydrogels 2014 , 171-180		4
262	Hyperpolarized [1,(13)C]pyruvate in lysed human erythrocytes: effects of co-substrate supply on reaction time courses. <i>NMR in Biomedicine</i> , 2014 , 27, 1203-10	4.4	10
261	NMR q-space analysis of canonical shapes of human erythrocytes: stomatocytes, discocytes, spherocytes and echinocytes. <i>European Biophysics Journal</i> , 2013 , 42, 3-16	1.9	6
260	Matrix-dependent modulation of anisotropic effects on NMR spectra from 7Li+ and 23Na+ encapsulated in cryptands. <i>European Biophysics Journal</i> , 2013 , 42, 17-23	1.9	6
259	Transmembrane exchange of hyperpolarized 13C-urea in human erythrocytes: subminute timescale kinetic analysis. <i>Biophysical Journal</i> , 2013 , 105, 1956-66	2.9	20
258	Adeno-associated virus-mediated rescue of neonatal lethality in argininosuccinate synthetase-deficient mice. <i>Molecular Therapy</i> , 2013 , 21, 1823-31	11.7	29
257	Cardiac magnetic resonance imaging of rapid VCAM-1 up-regulation in myocardial ischemia-reperfusion injury. <i>European Biophysics Journal</i> , 2013 , 42, 61-70	1.9	15
256	Stoichiometric relationship between Na(+) ions transported and glucose consumed in human erythrocytes: Bayesian analysis of (23)Na and (13)C NMR time course data. <i>Biophysical Journal</i> , 2013 , 104, 1676-84	2.9	11
255	'Chiral compartmentation' in metabolism: enzyme stereo-specificity yielding evolutionary options. <i>FEBS Letters</i> , 2013 , 587, 2790-7	3.8	10
254	Insights into hERG K+ channel structure and function from NMR studies. <i>European Biophysics Journal</i> , 2013 , 42, 71-9	1.9	10
253	Imaging brain deoxyglucose uptake and metabolism by glucoCEST MRI. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013 , 33, 1270-8	7.3	126
252	Cucurbit[5]uril-metal complex-induced room-temperature phosphorescence of 9aphthol and 9aphthol. <i>Dalton Transactions</i> , 2013 , 42, 2608-15	4.3	20
251	Mathematical Modeling and Data Analysis of NMR Experiments using Hyperpolarized (13)C Metabolites. <i>Magnetic Resonance Insights</i> , 2013 , 6, 13-21	5	16
250	Cardiac function and lipid distribution in rats fed a high-fat diet: in vivo magnetic resonance imaging and spectroscopy. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013 , 304, H1495-504	5.2	15
249	(1)H NMR spectroscopy for the in vitro understanding of the glycaemic index. <i>British Journal of Nutrition</i> , 2013 , 109, 1934-9	3.6	3
248	Detection of platypus-type L/D-peptide isomerase activity in aqueous extracts of papaya fruit. <i>Biotechnology Letters</i> , 2012 , 34, 1659-65	3	2

247	Fermentative glycolysis with purified Escherichia coli enzymes for in vitro ATP production and evaluating an engineered enzyme. <i>Journal of Biotechnology</i> , 2012 , 157, 113-23	3.7	15
246	Stejskal-tanner equation derived in full. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2012 , 40A, 205-214	0.6	32
245	Cytoskeletal rearrangements in human red blood cells induced by snake venoms: light microscopy of shapes and NMR studies of membrane function. <i>Cell Biology International</i> , 2012 , 36, 87-97	4.5	11
244	Skeletal muscle lipid metabolism studied by advanced magnetic resonance spectroscopy. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2012 , 65, 66-76	10.4	9
243	Simultaneous estimation of T ₁ and the flip angle in hyperpolarized NMR experiments using acquisition at non-regular time intervals. <i>Journal of Magnetic Resonance</i> , 2012 , 222, 68-73	3	18
242	The S4-S5 linker acts as a signal integrator for HERG K ⁺ channel activation and deactivation gating. <i>PLoS ONE</i> , 2012 , 7, e31640	3.7	36
241	96.45 Can you Bend a truncated truncated tetrahedron?. <i>Mathematical Gazette</i> , 2012 , 96, 317-323	0.1	2
240	Slow relaxation of longitudinal multispin orders in weakly and strongly coupled two-spin systems. <i>Magnetic Resonance in Chemistry</i> , 2012 , 50, 443-8	2.1	0
239	⁷ Li ⁺ NMR quadrupolar splitting in stretched hydrogels: developments in relaxation time estimation from z-spectra. <i>Magnetic Resonance in Chemistry</i> , 2012 , 50 Suppl 1, S17-21	2.1	6
238	Relative intensities of components of quadrupolar-split multiplets in NMR spectra: Rationale for a simple rule. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2012 , 40A, 90-99	0.6	8
237	The N-terminal tail of hERG contains an amphipathic helix that regulates channel deactivation. <i>PLoS ONE</i> , 2011 , 6, e16191	3.7	72
236	The effects of long-term storage of human red blood cells on the glutathione synthesis rate and steady-state concentration. <i>Transfusion</i> , 2011 , 51, 1450-9	2.9	41
235	Glutamine and ketoglutarate as glutamate sources for glutathione synthesis in human erythrocytes. <i>FEBS Journal</i> , 2011 , 278, 3152-63	5.7	38
234	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 ⁷ Li ⁺ and ²³ Na ⁺ in stretched hydrogels. <i>Journal of Magnetic Resonance</i> , 2011 , 212, 40-6	3	17
233	Kinetics of starch hydrolysis and glucose mutarotation studied by NMR chemical exchange saturation transfer (CEST). <i>Carbohydrate Polymers</i> , 2011 , 86, 1525-1532	10.3	6
232	¹ H and ¹³ C NMR studies of glycine in anisotropic media: double-quantum transitions and the effects of chiral interactions. <i>Journal of Magnetic Resonance</i> , 2011 , 211, 74-9	3	13
231	Starch granule characterization by kinetic analysis of their stages during enzymic hydrolysis: ¹ H nuclear magnetic resonance studies. <i>Carbohydrate Polymers</i> , 2011 , 83, 1775-1786	10.3	12
230	Induction and prevention of severe hyperammonemia in the spfash mouse model of ornithine transcarbamylase deficiency using shRNA and rAAV-mediated gene delivery. <i>Molecular Therapy</i> , 2011 , 19, 854-9	11.7	36

229	Comparative NMR studies of diffusional water permeability of red blood cells from different species: XVIII platypus (<i>Ornithorhynchus anatinus</i>) and saltwater crocodile (<i>Crocodylus porosus</i>). <i>Cell Biology International</i> , 2010 , 34, 703-8	4.5	5
228	Novel venom gene discovery in the platypus. <i>Genome Biology</i> , 2010 , 11, R95	18.3	45
227	L-to-D-peptide isomerase in male echidna venom. <i>Australian Journal of Zoology</i> , 2010 , 58, 284	0.5	11
226	Comparative NMR studies of diffusional water permeability of red blood cells from different species: XVI Dingo (<i>Canis familiaris dingo</i>) and dog (<i>Canis familiaris</i>). <i>Cell Biology International</i> , 2010 , 34, 373-8	4.5	6
225	Glutathione synthesis and turnover in the human erythrocyte: alignment of a model based on detailed enzyme kinetics with experimental data. <i>Journal of Biological Chemistry</i> , 2010 , 285, 23557-67	5.4	55
224	z-Spectra of $^{23}\text{Na}^+$ in stretched gels: quantitative multiple quantum analysis. <i>Journal of Magnetic Resonance</i> , 2010 , 205, 260-8	3	14
223	Mathematical models of naturally "morphed" human erythrocytes: stomatocytes and echinocytes. <i>Bulletin of Mathematical Biology</i> , 2010 , 72, 1323-33	2.1	5
222	Mammalian peptide isomerase: platypus-type activity is present in mouse heart. <i>Chemistry and Biodiversity</i> , 2010 , 7, 1603-11	2.5	16
221	Erythrocyte shape reversion from echinocytes to discocytes: kinetics via fast-measurement NMR diffusion-diffraction. <i>Magnetic Resonance in Medicine</i> , 2010 , 64, 645-52	4.4	17
220	Digestion of starch: In vivo and in vitro kinetic models used to characterise oligosaccharide or glucose release. <i>Carbohydrate Polymers</i> , 2010 , 80, 599-617	10.3	241
219	The pore domain outer helix contributes to both activation and inactivation of the HERG K ⁺ channel. <i>Journal of Biological Chemistry</i> , 2009 , 284, 1000-8	5.4	39
218	Platypus venom: source of novel compounds. <i>Australian Journal of Zoology</i> , 2009 , 57, 203	0.5	13
217	AAV2/8-mediated correction of OTC deficiency is robust in adult but not neonatal Spf(ash) mice. <i>Molecular Therapy</i> , 2009 , 17, 1340-6	11.7	71
216	Role of N-acetylcysteine and cystine in glutathione synthesis in human erythrocytes. <i>Redox Report</i> , 2009 , 14, 115-24	5.9	58
215	Comparative NMR studies of diffusional water permeability of red blood cells from different species: XV. Agile wallaby (<i>Macropus agilis</i>), red-necked wallaby (<i>Macropus rufogriseus</i>) and Goodfellow's tree kangaroo (<i>Dendrolagus goodfellowi</i>). <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2009 , 154, 105-9	2.6	8
214	NMR (Pro)chiral discrimination using polysaccharide gels. <i>Chemistry - A European Journal</i> , 2009 , 15, 12182-91	2.9	32
213	"Setting paint" analogy for the hydrophobic self-association of tropoelastin into elastin-like hydrogel. <i>Biopolymers</i> , 2009 , 91, 321-30	2.2	12
212	Structure of the pore-helix of the hERG K(+) channel. <i>European Biophysics Journal</i> , 2009 , 39, 111-20	1.9	17

211	Erythrocyte orientational and cell volume effects on NMR q-space analysis: simulations of restricted diffusion. <i>European Biophysics Journal</i> , 2009 , 39, 139-48	1.9	9
210	Effectors of the frequency of calcium oscillations in HEK-293 cells: wavelet analysis and a computer model. <i>European Biophysics Journal</i> , 2009 , 39, 149-65	1.9	10
209	Human erythrocyte flickering: temperature, ATP concentration, water transport, and cell aging, plus a computer simulation. <i>European Biophysics Journal</i> , 2009 , 38, 923-39	1.9	18
208	Double quantum transition as the origin of the central dip in the z-spectrum of HDO in variably stretched gel. <i>Journal of Magnetic Resonance</i> , 2009 , 198, 197-203	3	17
207	Understanding and utilising mammalian venom via a platypus venom transcriptome. <i>Journal of Proteomics</i> , 2009 , 72, 155-64	3.9	32
206	Magnetic-resonance evaluation of the suitability of microstructured polymer optical fibers as sensors for ionic aqueous solutions. <i>ACS Applied Materials & Interfaces</i> , 2009 , 1, 197-203	9.5	3
205	Kinetics of in vitro digestion of starches monitored by time-resolved (1)H Nuclear Magnetic Resonance. <i>Biomacromolecules</i> , 2009 , 10, 638-44	6.9	21
204	Mechanism of Mg ²⁺ binding in the Na ⁺ ,K ⁺ -ATPase. <i>Biophysical Journal</i> , 2009 , 96, 3753-61	2.9	21
203	Hepcidin, the hormone of iron metabolism, is bound specifically to alpha-2-macroglobulin in blood. <i>Blood</i> , 2009 , 113, 6225-36	2.2	92
202	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. <i>Toxicon</i> , 2008 , 52, 559-65	2.8	25
201	Prochiral and chiral resolution in 2H NMR spectra: solutes in stretched and compressed gelatin gels. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 8659-64	2.8	25
200	Inhomogeneous NMR line shape as a probe of microscopic organization of bicontinuous cubic phases. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 6636-45	3.4	7
199	Substrate specificity of platypus venom L-to-D-peptide isomerase. <i>Journal of Biological Chemistry</i> , 2008 , 283, 8969-75	5.4	48
198	Drug binding to the inactivated state is necessary but not sufficient for high-affinity binding to human ether- γ -go-go-related gene channels. <i>Molecular Pharmacology</i> , 2008 , 74, 1443-52	4.3	100
197	Defensins and the convergent evolution of platypus and reptile venom genes. <i>Genome Research</i> , 2008 , 18, 986-94	9.7	101
196	92.81 10n 2 +2 revealed. <i>Mathematical Gazette</i> , 2008 , 92, 546-551	0.1	1
195	Assembly of the oncogenic DNA-binding complex LMO2-Ldb1-TAL1-E12. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008 , 70, 1461-74	4.2	21
194	2H ₂ O quadrupolar splitting used to measure water exchange in erythrocytes. <i>Journal of Magnetic Resonance</i> , 2008 , 192, 48-59	3	19

193	Erythrocyte-shape evolution recorded with fast-measurement NMR diffusion-diffraction. <i>Journal of Magnetic Resonance Imaging</i> , 2008 , 28, 1409-16	5.6	19
192	Water chemical shift in ¹ H NMR of red cells: effects of pH when transmembrane magnetic susceptibility differences are low. <i>Magnetic Resonance in Medicine</i> , 2008 , 59, 707-11	4.4	2
191	Isotopomer subspaces as indicators of metabolic-pathway structure. <i>Journal of Theoretical Biology</i> , 2008 , 252, 391-401	2.3	7
190	Tunable-alignment chiral system based on gelatin for NMR spectroscopy. <i>Journal of the American Chemical Society</i> , 2007 , 129, 5340-1	16.4	46
189	pH and cell volume effects on H ₂ O and phosphoryl resonance splitting in rapid-spinning NMR of red cells. <i>Biophysical Journal</i> , 2007 , 92, 1770-6	2.9	9
188	91.69 Can you Bend a truncated octahedron?. <i>Mathematical Gazette</i> , 2007 , 91, 533-536	0.1	4
187	Kinetics of uptake and deacetylation of N-acetylcysteine by human erythrocytes. <i>International Journal of Biochemistry and Cell Biology</i> , 2007 , 39, 1698-706	5.6	51
186	(39)K nuclear magnetic resonance and a mathematical model of K(+) transport in human erythrocytes. <i>European Biophysics Journal</i> , 2006 , 35, 293-301	1.9	3
185	Metabolic homeostasis in the human erythrocyte: in silico analysis. <i>BioSystems</i> , 2006 , 83, 118-24	1.9	5
184	PFG NMR diffusion experiments for complex systems. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2006 , 28A, 249-269	0.6	55
183	Antifungal effects on metabolite profiles of medically important yeast species measured by nuclear magnetic resonance spectroscopy. <i>Antimicrobial Agents and Chemotherapy</i> , 2006 , 50, 4018-26	5.9	16
182	Plasma membrane oxidoreductases: effects on erythrocyte metabolism and redox homeostasis. <i>Antioxidants and Redox Signaling</i> , 2006 , 8, 1241-7	8.4	21
181	New discrete metallocycles incorporating palladium(II) and platinum(II) corners and dipyrityldibenzotetraaza[14]annulene side units. <i>Dalton Transactions</i> , 2006 , 744-50	4.3	26
180	Rapid exchange of fluoroethylamine via the Rhesus complex in human erythrocytes: ¹⁹ F NMR magnetization transfer analysis showing competition by ammonia and ammonia analogues. <i>Biochemistry</i> , 2006 , 45, 9354-61	3.2	8
179	Mammalian l-to-d-amino-acid-residue isomerase from platypus venom. <i>FEBS Letters</i> , 2006 , 580, 1587-91	3.8	45
178	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. <i>Journal of Magnetic Resonance</i> , 2006 , 180, 256-65	3	79
177	Proton nuclear magnetic resonance-based metabonomics for rapid diagnosis of meningitis and ventriculitis. <i>Clinical Infectious Diseases</i> , 2005 , 41, 1582-90	11.6	89
176	Investigation of methaemoglobin reduction by extracellular NADH in mammalian erythrocytes. <i>International Journal of Biochemistry and Cell Biology</i> , 2005 , 37, 1438-45	5.6	21

175	D-amino acid residue in a defensin-like peptide from platypus venom: effect on structure and chromatographic properties. <i>Biochemical Journal</i> , 2005 , 391, 215-20	3.8	54
174	Convection-compensating diffusion experiments with phase-sensitive double-quantum filtering. <i>Journal of Magnetic Resonance</i> , 2005 , 174, 229-36	3	25
173	Acquisition of pure-phase diffusion spectra using oscillating-gradient spin echo. <i>Journal of Magnetic Resonance</i> , 2005 , 176, 151-9	3	11
172	Why does the mammalian red blood cell have aquaporins?. <i>BioSystems</i> , 2005 , 82, 189-96	1.9	29
171	A way of visualizing NMR experiments on quadrupolar nuclei. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2005 , 25A, 40-52	0.6	16
170	Determination of Na ⁺ binding parameters by relaxation analysis of selected ²³ Na NMR coherences: RNA, BSA and SDS. <i>Magnetic Resonance in Chemistry</i> , 2005 , 43, 217-24	2.1	11
169	NMR studies of exchange between intra- and extracellular glutathione in human erythrocytes. <i>Redox Report</i> , 2005 , 10, 83-90	5.9	16
168	Rapid simulation and analysis of isotopomer distributions using constraints based on enzyme mechanisms: an example from HT29 cancer cells. <i>Bioinformatics</i> , 2005 , 21, 3558-64	7.2	33
167	Current status and challenges in connecting models of erythrocyte metabolism to experimental reality. <i>Progress in Biophysics and Molecular Biology</i> , 2004 , 85, 325-42	4.7	11
166	Convection-compensating PGSE experiment incorporating excitation-sculpting water suppression (CONVEX). <i>Journal of Magnetic Resonance</i> , 2004 , 169, 92-101	3	34
165	The HERG K ⁺ channel: progress in understanding the molecular basis of its unusual gating kinetics. <i>European Biophysics Journal</i> , 2004 , 33, 89-97	1.9	51
164	Chemical shift and magnetic susceptibility contributions to the separation of intracellular and supernatant resonances in variable angle spinning NMR spectra of erythrocyte suspensions. <i>Magnetic Resonance in Medicine</i> , 2004 , 51, 441-4	4.4	21
163	Measurement of compartment size in q-space experiments: Fourier transform of the second derivative. <i>Magnetic Resonance in Medicine</i> , 2004 , 52, 907-12	4.4	26
162	Enhancement of Na ⁺ diffusion in a bicontinuous cubic phase by the ionophore monensin. <i>Langmuir</i> , 2004 , 20, 2660-6	4	12
161	The beta-defensin-fold family of polypeptides. <i>Toxicon</i> , 2004 , 44, 581-8	2.8	88
160	Structure of the HERG K ⁺ channel S5P extracellular linker: role of an amphipathic alpha-helix in C-type inactivation. <i>Journal of Biological Chemistry</i> , 2003 , 278, 42136-48	5.4	63
159	Identification of a novel family of proteins in snake venoms. Purification and structural characterization of nawaprin from Naja nigricollis snake venom. <i>Journal of Biological Chemistry</i> , 2003 , 278, 40097-104	5.4	49
158	Nobel Prizes for magnetic resonance imaging and channel proteins. <i>Medical Journal of Australia</i> , 2003 , 179, 611-3	4	10

157	Redox reactions and electron transfer across the red cell membrane. <i>IUBMB Life</i> , 2003 , 55, 375-85	4.7	38
156	Simulations of NMR-detected diffusion in suspensions of red cells: the "signatures" in q-space plots of various lattice arrangements. <i>European Biophysics Journal</i> , 2003 , 31, 563-74	1.9	14
155	Simulations of NMR-detected diffusion in suspensions of red cells: the effects of variation in membrane permeability and observation time. <i>European Biophysics Journal</i> , 2003 , 32, 671-5	1.9	10
154	Pulsed field gradient nuclear magnetic resonance as a tool for studying drug delivery systems. <i>Concepts in Magnetic Resonance</i> , 2003 , 19A, 51-64		58
153	Scalar couplings as pH probes in compartmentalized biological systems: ³¹ P NMR of phosphite. <i>Magnetic Resonance in Medicine</i> , 2003 , 50, 693-6	4.4	7
152	Solution-state cross-polarization for selective excitation of scalar-coupled quadrupolar nuclei $S > 1/2$ in the presence of a residual quadrupolar splitting. <i>Chemical Physics Letters</i> , 2003 , 376, 732-736	2.5	3
151	Mathematical modelling of the urea cycle. A numerical investigation into substrate channelling. <i>FEBS Journal</i> , 2003 , 270, 3953-61		31
150	Diffusion coefficients of the monomer and oligomers in hydroxyethyl methacrylate. <i>Journal of Polymer Science Part A</i> , 2003 , 41, 2491-2501	2.5	22
149	NMR Studies of Diffusion-Coherence Phenomena in Red Cell Suspensions: Current Status. <i>Israel Journal of Chemistry</i> , 2003 , 43, 45-54	3.4	5
148	NMR Study of the Association of Propofol with Nonionic Surfactants. <i>Langmuir</i> , 2003 , 19, 2088-2095	4	69
147	Solution structure of CnErg1 (Ergtoxin), a HERG specific scorpion toxin. <i>FEBS Letters</i> , 2003 , 539, 138-42	3.8	38
146	The G α dos channel: a review of the Ca ²⁺ -activated K ⁺ channel in human erythrocytes. <i>International Journal of Biochemistry and Cell Biology</i> , 2003 , 35, 1182-97	5.6	84
145	Selective cross-polarization in solution state nuclear magnetic resonance of scalar coupled spin 1/2 and quadrupolar nuclei. <i>Journal of Chemical Physics</i> , 2003 , 118, 6997-7004	3.9	8
144	PGSE NMR diffusion study of the self-association of N-methylacetamide in carbon tetrachloride. <i>Magnetic Resonance in Chemistry</i> , 2002 , 40, S115-S121	2.1	9
143	Device for aeration and mixing of cell and organelle suspensions during NMR experiments. <i>Journal of Magnetic Resonance</i> , 2002 , 159, 158-60	3	
142	D-Amino acid residue in the C-type natriuretic peptide from the venom of the mammal, Ornithorhynchus anatinus, the Australian platypus. <i>FEBS Letters</i> , 2002 , 524, 172-6	3.8	67
141	Conformations of platypus venom C-type natriuretic peptide in aqueous solution and sodium dodecyl sulfate micelles. <i>Toxicon</i> , 2002 , 40, 711-9	2.8	24
140	Simulations of molecular diffusion in lattices of cells: insights for NMR of red blood cells. <i>Biophysical Journal</i> , 2002 , 83, 161-71	2.9	21

139	NMR structure of bucandin, a neurotoxin from the venom of the Malayan krait (<i>Bungarus candidus</i>). <i>Biochemical Journal</i> , 2001 , 360, 539-48	3.8	14
138	¹ H NMR of compounds with low water solubility in the presence of erythrocytes: effects of emulsion phase separation. <i>European Biophysics Journal</i> , 2001 , 30, 69-74	1.9	4
137	Thermodynamic and hydrodynamic properties of human tropoelastin. Analytical ultracentrifuge and pulsed field-gradient spin-echo NMR studies. <i>Journal of Biological Chemistry</i> , 2001 , 276, 28042-50	5.4	38
136	NMR structure of bucandin, a neurotoxin from the venom of the Malayan krait (<i>Bungarus candidus</i>). <i>Biochemical Journal</i> , 2001 , 360, 539-548	3.8	28
135	Defensin-like peptide-2 from platypus venom: member of a class of peptides with a distinct structural fold. <i>Biochemical Journal</i> , 2000 , 348, 649	3.8	22
134	Defensin-like peptide-2 from platypus venom: member of a class of peptides with a distinct structural fold. <i>Biochemical Journal</i> , 2000 , 348, 649-656	3.8	61
133	Evidence of red cell alignment in the magnetic field of an NMR spectrometer based on the diffusion tensor of water. <i>Journal of Magnetic Resonance</i> , 2000 , 145, 291-301	3	28
132	¹³ C NMR evidence of the failure of human erythrocytes to metabolize ascorbate and dehydroascorbate to lactate. <i>Free Radical Biology and Medicine</i> , 2000 , 28, 1607-10	7.8	6
131	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. <i>European Biophysics Journal</i> , 2000 , 29, 221-7	1.9	23
130	Parallel secretion of pancreatic phospholipase A(2), phospholipase A(1), lipase, and colipase in children with exocrine pancreatic dysfunction. <i>Pediatric Research</i> , 2000 , 48, 735-40	3.2	12
129	Determination of NADH-dependent glutamate synthase (GOGAT) in <i>Spodoptera frugiperda</i> (Sf9) insect cells by a selective ¹ H/ ¹⁵ N NMR in vitro assay. <i>Journal of Biotechnology</i> , 2000 , 79, 87-97	3.7	22
128	Pathways of glutamine metabolism in <i>Spodoptera frugiperda</i> (Sf9) insect cells: evidence for the presence of the nitrogen assimilation system, and a metabolic switch by ¹ H/ ¹⁵ N NMR. <i>Journal of Biotechnology</i> , 2000 , 78, 23-37	3.7	46
127	Combined NMR Experimental and Computer-Simulation Study of 2,3-Bisphosphoglycerate Metabolism in Human Erythrocytes 2000 , 139-145		1
126	Biochemical and functional characterisation of secreted phospholipase activities from <i>Cryptococcus neoformans</i> in their naturally occurring state. <i>Journal of Medical Microbiology</i> , 1999 , 48, 731-740	3.2	33
125	Mechanism of action of P-glycoprotein in relation to passive membrane permeation. <i>International Review of Cytology</i> , 1999 , 190, 175-250		64
124	Assignment of coherence features in NMR q-space plots to particular diffusion modes in erythrocyte suspensions. <i>Journal of Magnetic Resonance</i> , 1999 , 138, 135-43	3	38
123	Permeability coefficients from NMR q-space data: models with unevenly spaced semi-permeable parallel membranes. <i>Journal of Magnetic Resonance</i> , 1999 , 139, 258-72	3	33
122	Parametric-equation representation of biconcave erythrocytes. <i>Bulletin of Mathematical Biology</i> , 1999 , 61, 209-20	2.1	40

121	Heteronuclear NMR studies of metabolites produced by <i>Cryptococcus neoformans</i> in culture media: identification of possible virulence factors. <i>Magnetic Resonance in Medicine</i> , 1999 , 42, 442-53	4.4	38
120	Using the beta/alpha peak-height ratio of ATP in ³¹ P NMR spectra to measure free [Mg ²⁺]: theoretical and practical problems. <i>NMR in Biomedicine</i> , 1999 , 12, 217-20	4.4	6
119	Phospholipid changes in children with pancreatic sufficiency and insufficiency. <i>Clinica Chimica Acta</i> , 1999 , 281, 89-100	6.2	6
118	Solution structure of a defensin-like peptide from platypus venom. <i>Biochemical Journal</i> , 1999 , 341, 785-794	3.8	52
117	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations ¹ : in vivo kinetic characterization of 2,3-bisphosphoglycerate synthase/phosphatase using ¹³ C and ³¹ P NMR. <i>Biochemical Journal</i> , 1999 , 342, 567-580	3.8	80
116	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations ¹ : equations and parameter refinement. <i>Biochemical Journal</i> , 1999 , 342, 581-596	3.8	107
115	Solution structure of a defensin-like peptide from platypus venom. <i>Biochemical Journal</i> , 1999 , 341, 785	3.8	24
114	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations ¹ : computer simulation and Metabolic Control Analysis. <i>Biochemical Journal</i> , 1999 , 342, 597-604	3.8	77
113	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations ¹ : in vivo kinetic characterization of 2,3-bisphosphoglycerate synthase/phosphatase using ¹³ C and ³¹ P NMR. <i>Biochemical Journal</i> , 1999 , 342, 567	3.8	42
112	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations ¹ : equations and parameter refinement. <i>Biochemical Journal</i> , 1999 , 342, 581	3.8	48
111	Model of 2,3-bisphosphoglycerate metabolism in the human erythrocyte based on detailed enzyme kinetic equations ¹ : computer simulation and Metabolic Control Analysis. <i>Biochemical Journal</i> , 1999 , 342, 597	3.8	32
110	Lysine and glutamate transport in the erythrocytes of common brushtail possum, Tammar Wallaby and eastern grey, kangaroo. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 1998 , 119, 951-6	2.6	2
109	Elevated glutamate dehydrogenase flux in glucose-deprived hybridoma and myeloma cells: evidence from ¹ H/ ¹⁵ N NMR. <i>Biotechnology and Bioengineering</i> , 1998 , 60, 508-17	4.9	28
108	NMR triple-quantum filtered relaxation analysis of ¹⁷ O-water in insulin solutions: an insight into the aggregation of insulin and the properties of its bound water. <i>Biophysical Chemistry</i> , 1998 , 70, 231-9	3.5	11
107	Multiple-quantum filtered ¹⁷ Q and ²³ Na NMR analysis of mitochondrial suspensions. <i>Biophysical Chemistry</i> , 1998 , 73, 137-43	3.5	14
106	Characterisation of erythrocyte shapes and sizes by NMR diffusion-diffraction of water: correlations with electron micrographs. <i>Magnetic Resonance Imaging</i> , 1998 , 16, 423-34	3.3	64
105	¹³ C NMR studies of vitamin C transport and its redox cycling in human erythrocytes. <i>Biochemistry</i> , 1998 , 37, 7578-88	3.2	60
104	Structural selectivity and molecular nature of L-glutamate transport in cultured human fibroblasts. <i>Archives of Biochemistry and Biophysics</i> , 1998 , 353, 356-64	4.1	41

103	Model of the pH-dependence of the concentrations of complexes involving metabolites, haemoglobin and magnesium ions in the human erythrocyte. <i>FEBS Journal</i> , 1997 , 245, 71-83		23
102	Changes in cellular and plasma membrane phospholipid composition after lipopolysaccharide stimulation of human neutrophils, studied by 31P NMR. <i>FEBS Journal</i> , 1997 , 243, 328-35		21
101	13C-NMR studies of transmembrane electron transfer to extracellular ferricyanide in human erythrocytes. <i>FEBS Journal</i> , 1997 , 246, 638-45		23
100	Strong and weak binding of water to proteins studied by NMR triple-quantum filtered relaxation spectroscopy of (17)O-water. <i>Biophysical Chemistry</i> , 1997 , 67, 187-98	3.5	20
99	NMR diffusion measurements to characterise membrane transport and solute binding. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 1997 , 30, 39-68	10.4	202
98	Diffusion of solutes in agarose and alginate gels: 1H and 23Na PFGSE and 23Na TQF NMR studies. <i>Magnetic Resonance in Medicine</i> , 1997 , 37, 44-52	4.4	45
97	NMR "diffusion-diffraction" of water revealing alignment of erythrocytes in a magnetic field and their dimensions and membrane transport characteristics. <i>Magnetic Resonance in Medicine</i> , 1997 , 37, 637-43	4.4	122
96	Free magnesium-ion concentration in erythrocytes by 31P NMR: the effect of metabolite-haemoglobin interactions. <i>NMR in Biomedicine</i> , 1997 , 10, 129-37	4.4	11
95	Mobility of water in biological systems studied by 17O NMR via multiple-quantum filtered relaxation analysis. <i>Magnetic Resonance in Chemistry</i> , 1997 , 35, S47-S51	2.1	6
94	Phospholipid composition of erythrocyte membranes and plasma of mammalian blood including Australian marsupials; quantitative 31P NMR analysis using detergent. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1996 , 113, 221-7	2.3	55
93	Quantitative 31P nuclear magnetic resonance analysis of the phospholipids of erythrocyte membranes using detergent. <i>Lipids</i> , 1996 , 31, 765-70	1.6	35
92	Changes in plasma phospholipids in the presence and absence of erythrocytes 31P-NMR time-course studies. <i>FEBS Journal</i> , 1996 , 235, 648-52		4
91	Spin Lattice Relaxation Times of H2 and D2 in Aqueous Solutions. <i>Journal of Magnetic Resonance Series A</i> , 1996 , 119, 1-5		10
90	Determination of the Bound Water Fraction in Cells and Protein Solutions Using 17O-Water Multiple-Quantum Filtered Relaxation Analysis. <i>Journal of Magnetic Resonance Series B</i> , 1996 , 111, 1-8		20
89	Analytical Solutions and Simulations for Spin-Echo Measurements of Diffusion of Spins in a Sphere with Surface and Bulk Relaxation. <i>Journal of Magnetic Resonance Series B</i> , 1996 , 112, 1-17		36
88	13C NMR investigation of cholesterol esterification rate in human whole blood. <i>Clinica Chimica Acta</i> , 1995 , 237, 25-30	6.2	4
87	NMR Studies of Erythrocyte Metabolism. <i>Advances in Molecular and Cell Biology</i> , 1995 , 11, 147-205		5
86	Effects of cholesterol on transmembrane water diffusion in human erythrocytes measured using pulsed field gradient NMR. <i>Biophysical Chemistry</i> , 1995 , 55, 197-208	3.5	41

85	Fructose 3-phosphate and 5-phosphoribosyl-1-pyrophosphate formation in perfused human erythrocytes: 31P NMR studies. <i>Magnetic Resonance in Medicine</i> , 1994 , 31, 110-21	4.4	4
84	Cholesterol effects on nonelectrolyte membrane transport in human erythrocytes: NMR magnetization transfer studies. <i>Magnetic Resonance in Medicine</i> , 1994 , 32, 505-10	4.4	5
83	Diffusion of Solvent in Swollen Latex Particles. <i>Journal of Colloid and Interface Science</i> , 1994 , 166, 437-443	4.3	5
82	19F NMR magnetization transfer between 5-FBAPTA and its complexes. An alternative means for measuring free Ca ²⁺ concentration, and detection of complexes with protein in erythrocytes. <i>NMR in Biomedicine</i> , 1994 , 7, 330-8	4.4	17
81	Stereospecificity of substrate usage by glyoxalase 1: nuclear magnetic resonance studies of kinetics and hemithioacetal substrate conformation. <i>Biochemistry</i> , 1994 , 33, 3548-59	3.2	20
80	NMR studies of diffusional water permeability of red blood cells from the echidna <i>Tachyglossus aculeatus</i> . <i>Comparative Biochemistry and Physiology Part B: Comparative Biochemistry</i> , 1994 , 107, 45-50		3
79	A 31P nuclear magnetic resonance investigation of acyl group transfer from phosphatidylcholine to yield lysophosphatidylcholine in human plasma. <i>Lipids</i> , 1994 , 29, 183-8	1.6	7
78	Immobilization methods for NMR studies of cellular metabolism--a practical guide. <i>ImmunoMethods</i> , 1994 , 4, 163-78		10
77	Theoretical and practical aspects of NMR studies of cells. <i>ImmunoMethods</i> , 1994 , 4, 85-97		10
76	78.15 Is There Light at the End of the Funnel?. <i>Mathematical Gazette</i> , 1994 , 78, 336	0.1	
75	NMR methods for measuring membrane transport. <i>Sub-Cellular Biochemistry</i> , 1994 , 23, 247-327	5.5	7
74	Characterisation of erythrocyte transmembrane exchange of trifluoroacetate using 19F-NMR: evidence for transport via the monocarboxylate transporter. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1993 , 1150, 35-44	3.8	7
73	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. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993 , 89, 2807		21
72	Nmr studies of diffusional water permeability of erythrocytes from eight species of marsupial. <i>Comparative Biochemistry and Physiology A, Comparative Physiology</i> , 1993 , 106, 515-518		16
71	NMR studies of diffusional water permeability of red blood cells from macropodid marsupials (kangaroos and wallabies). <i>Comparative Biochemistry and Physiology A, Comparative Physiology</i> , 1993 , 104, 799-803		28
70	Transmembrane 19F NMR chemical shift difference of fluorinated solutes in liposomes, erythrocytes and erythrocyte ghosts. <i>NMR in Biomedicine</i> , 1993 , 6, 136-43	4.4	7
69	Stability and nonreactivity of ergothioneine in human erythrocytes studied by 1H NMR. <i>Magnetic Resonance in Medicine</i> , 1993 , 29, 826-9	4.4	5
68	Glycerophosphocholine release in human erythrocytes. 1H spin-echo and 31P-NMR evidence for lysophospholipase. <i>FEBS Journal</i> , 1993 , 212, 411-6		12

67	High control coefficient of transketolase in the nonoxidative pentose phosphate pathway of human erythrocytes: NMR, antibody, and computer simulation studies. <i>Biochemistry</i> , 1992 , 31, 12792-8	3.2	28
66	Band-3 mediated uptake of beryllfluoride complexes by human erythrocytes. <i>Biochemistry</i> , 1992 , 31, 9263-8	3.2	6
65	Urea exchange across the human erythrocyte membrane measured using ¹³ C NMR lineshape analysis. <i>European Biophysics Journal</i> , 1992 , 21, 207-16	1.9	10
64	NMR studies of erythrocytes immobilized in agarose and alginate gels. <i>Magnetic Resonance in Medicine</i> , 1992 , 25, 273-88	4.4	14
63	Rates of anion transfer across erythrocyte membranes measured with NMR spectroscopy. <i>Progress in Cell Research</i> , 1992 , 105-119		5
62	A ³⁵ Cl and ³⁷ Cl NMR study of chloride binding to the erythrocyte anion transport protein. <i>Biophysical Chemistry</i> , 1991 , 40, 329-37	3.5	17
61	Translational diffusion of hemoglobin in human erythrocytes and hemolysates. <i>Journal of Magnetic Resonance</i> , 1991 , 94, 574-580		
60	¹ H NMR spectroscopic survey of plasma and erythrocytes from selected marsupials and domestic animals of Australia. <i>Comparative Biochemistry and Physiology Part B: Comparative Biochemistry</i> , 1991 , 99, 575-97		7
59	¹ H nuclear magnetic resonance assay of erythrocyte triosephosphate isomerase. <i>Analytical Biochemistry</i> , 1991 , 197, 178-81	3.1	2
58	¹ H and ³¹ P NMR and HPLC studies of mouse L1210 leukemia cell extracts: the effect of Au(I) and Cu(I) diphosphine complexes on the cell metabolism. <i>Magnetic Resonance in Medicine</i> , 1991 , 18, 142-58	4.4	41
57	The phenomenon of separate intra- and extracellular resonances of difluorophosphate in ³¹ P and ¹⁹ F NMR spectra of erythrocytes. <i>Magnetic Resonance in Medicine</i> , 1991 , 18, 193-8	4.4	22
56	Effect of nonrectangular field gradient pulses in the stejskal and tanner (diffusion) pulse sequence. <i>Journal of Magnetic Resonance</i> , 1991 , 94, 133-139		26
55	Glyoxalase 2 deficiency in the erythrocytes of a horse: ¹ H NMR studies of enzyme kinetics and transport of S-lactoylglutathione. <i>Archives of Biochemistry and Biophysics</i> , 1991 , 291, 291-9	4.1	22
54	Correlation of Viscosity and Conductance with ²³ Na+NMRT1Measurements. <i>Bulletin of the Chemical Society of Japan</i> , 1990 , 63, 2961-2965	5.1	16
53	Kinetic analysis of the human erythrocyte glyoxalase system using ¹ H NMR and a computer model. <i>FEBS Journal</i> , 1990 , 193, 83-90		58
52	Hypophosphite transport in human erythrocytes studied by overdetermined one-dimensional NMR exchange analysis. <i>NMR in Biomedicine</i> , 1990 , 3, 59-63	4.4	10
51	Spin-exchange NMR spectroscopy in studies of the kinetics of enzymes and membrane transport. <i>NMR in Biomedicine</i> , 1990 , 3, 102-19	4.4	37
50	Restricted diffusion of bicarbonate and hypophosphite ions modulated by transport in suspensions of red blood cells. <i>Journal of Magnetic Resonance</i> , 1990 , 90, 100-110		1

49	Reaction of cis- and trans-[PtCl ₂ (NH ₃) ₂] with reduced glutathione studied by ¹ H, ¹³ C, ¹⁹⁵ Pt and ¹⁵ N-{ ¹ H} DEPT NMR. <i>Journal of Inorganic Biochemistry</i> , 1990 , 38, 305-326	4.2	78
48	Reaction of cis- and trans-[PtCl ₂ (NH ₃) ₂] with reduced glutathione inside human red blood cells, studied by ¹ H and ¹⁵ N-[¹ H] DEPT NMR. <i>Journal of Inorganic Biochemistry</i> , 1990 , 38, 327-45	4.2	77
47	EAmino acid isomers of a natural substrate of the enzyme Eglutamyl-amino acid cyclotransferase. Synthesis of (3S)-3-aminoglutaryl-(S)-alanine and (3R)-3-aminoglutaryl-(S)-alanine. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1990 , 2363-2369		8
46	Stimulation of human erythrocyte 2,3-bisphosphoglycerate phosphatase by vanadate. <i>Archives of Biochemistry and Biophysics</i> , 1990 , 276, 160-71	4.1	13
45	A simple and inexpensive method for preparing erythrocyte membranes by filtration through a hollow-fiber system. <i>Analytical Biochemistry</i> , 1989 , 179, 190-3	3.1	11
44	Inhibition and active-site modelling of prolidase. <i>FEBS Journal</i> , 1989 , 180, 377-84		28
43	Comparison of computer simulations of the F-type and L-type non-oxidative hexose monophosphate shunts with ³¹ P-NMR experimental data from human erythrocytes. <i>FEBS Journal</i> , 1989 , 180, 399-420		47
42	gamma-Glutamylcyclotransferase: inhibition by D-beta-aminoglutaryl-L-alanine and analysis of the solvent kinetic isotope effect. <i>FEBS Journal</i> , 1989 , 184, 97-101		6
41	Characterization of the transport of the nonelectrolyte dimethyl methylphosphonate across the red cell membrane. <i>NMR in Biomedicine</i> , 1989 , 1, 198-204	4.4	19
40	Perturbation of homogeneous magnetic fields by isolated single and confocal spheroids. Implications for NMR spectroscopy of cells. <i>NMR in Biomedicine</i> , 1989 , 2, 151-60	4.4	30
39	Microviscosity of human erythrocytes studied with hypophosphite and ³¹ P-NMR. <i>Biophysical Chemistry</i> , 1989 , 33, 205-15	3.5	18
38	Magnetic potential and field gradients of a model cell. <i>Journal of Theoretical Biology</i> , 1989 , 137, 55-69	2.3	4
37	Expressions for surfaces in disk-cyclide coordinates : derivations using symbolic computation. <i>Journal of the Franklin Institute</i> , 1988 , 325, 505-508	4	2
36	Interactions of Na ⁺ with haemoglobin-organic phosphate complexes. <i>Biophysical Chemistry</i> , 1988 , 30, 81-92	3.5	8
35	Mutarotase equilibrium exchange kinetics studied by ¹³ C-NMR. <i>Biophysical Chemistry</i> , 1988 , 32, 89-95	3.5	15
34	Physical basis of the effect of hemoglobin on the ³¹ P NMR chemical shifts of various phosphoryl compounds. <i>Biochemistry</i> , 1988 , 27, 8803-10	3.2	44
33	Characterization of transmembrane chemical shift differences in the ³¹ P NMR spectra of various phosphoryl compounds added to erythrocyte suspensions. <i>Biochemistry</i> , 1988 , 27, 8795-802	3.2	28
32	Further investigation of the use of dimethyl methylphosphonate as a ³¹ P-NMR probe of red cell volume. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1988 , 968, 160-6	4.9	18

31	Conformation of reduced glutathione in aqueous solution by ^1H and ^{13}C n.m.r. <i>International Journal of Peptide and Protein Research</i> , 1987 , 29, 638-46		29
30	Determination of erythrocyte glucose 1,6-bisphosphate--a comparison of two methods using a centrifugal analyzer. <i>Clinica Chimica Acta</i> , 1987 , 164, 181-7	6.2	3
29	Glucose transport in human erythrocytes measured using ^{13}C NMR spin transfer. <i>FEBS Letters</i> , 1987 , 219, 5-10	3.8	30
28	No evidence for bradykinin hydrolysis in human erythrocyte suspensions: ^1H NMR studies. <i>American Journal of Hematology</i> , 1987 , 25, 183-9	7.1	3
27	Bi-cyclide and flat-ring cyclide coordinate surfaces: correction of two expressions. <i>Mathematics of Computation</i> , 1987 , 49, 607-607	1.6	2
26	Equilibrium exchange of dimethyl methylphosphonate across the human red cell membrane measured using NMR spin transfer. <i>Journal of Magnetic Resonance</i> , 1986 , 68, 311-318		2
25	Bicarbonate exchange kinetics at equilibrium across the erythrocyte membrane by ^{13}C NMR. <i>Biochemical and Biophysical Research Communications</i> , 1986 , 136, 266-72	3.4	15
24	Direct quantitative analysis of enzyme-catalyzed reactions by two-dimensional nuclear magnetic resonance spectroscopy: adenylate kinase and phosphoglyceromutase. <i>Journal of the American Chemical Society</i> , 1986 , 108, 169-173	16.4	31
23	Direct NMR evidence that prolidase is specific for the trans isomer of imidodipeptide substrates. <i>Biochemistry</i> , 1986 , 25, 1054-62	3.2	36
22	Intracellular pH in stored erythrocytes. Refinement and further characterisation of the ^{31}P -NMR methylphosphonate procedure. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1986 , 885, 23-33	4.9	37
21	Proton NMR spectroscopy of rabbit renal cortex. <i>Kidney International</i> , 1985 , 28, 6-10	9.9	12
20	Red cell volume changes monitored using a new ^{31}P NMR procedure. <i>Journal of Magnetic Resonance</i> , 1985 , 62, 568-572		5
19	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. <i>FEBS Journal</i> , 1985 , 150, 371-86		62
18	The assimilation of tri- and tetrapeptides by human erythrocytes. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1985 , 846, 127-34	4.9	15
17	Enkephalin degradation by human erythrocytes and hemolysates studied using ^1H NMR spectroscopy. <i>Archives of Biochemistry and Biophysics</i> , 1985 , 242, 515-22	4.1	7
16	Proton nuclear magnetic resonance spectroscopy of rabbit brain homogenate. <i>Journal of Neurochemistry</i> , 1984 , 42, 878-9	6	14
15	Studies of rat brain metabolism using proton nuclear magnetic resonance: spectral assignments and monitoring of prolidase, acetylcholinesterase, and glutaminase. <i>Journal of Neurochemistry</i> , 1984 , 43, 1561-7	6	22
14	^{31}P NMR spin-transfer in the phosphoglyceromutase reaction. <i>FEBS Journal</i> , 1984 , 143, 643-9		42

13	Cell volume dependence of ^1H spin-echo NMR signals in human erythrocyte suspensions. The influence of in situ field gradients. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1984 , 803, 137-44	4.9	47
12	The relationship between glucose concentration and rate of lactate production by human erythrocytes in an open perfusion system. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1984 , 805, 191-203	4.9	16
11	Proton NMR spectroscopic studies of dipeptidase in human erythrocytes. <i>Biochemical and Biophysical Research Communications</i> , 1983 , 110, 305-12	3.4	28
10	Endogenous phospholipase and choline release in human erythrocytes: a study using ^1H -NMR spectroscopy. <i>Biochemical and Biophysical Research Communications</i> , 1982 , 105, 1280-7	3.4	34
9	Erythrocyte glycolysis: stimulation by nalidixic acid. <i>Biochemical Medicine</i> , 1982 , 27, 95-108		11
8	Average Lengths of Chords in a Square. <i>Mathematics Magazine</i> , 1981 , 54, 261-269	0.1	5
7	Nuclear Magnetic Resonance of Biological Samples. <i>Critical Reviews in Analytical Chemistry</i> , 1981 , 12, 155-231	5.2	32
6	Determination of the stability constants of Mn^{2+} and Mg^{2+} complexes of the components of the NADP-linked isocitrate dehydrogenase reaction by electron spin resonance. <i>FEBS Journal</i> , 1980 , 110, 465-73		9
5	Measurement of choline concentration and transport in human erythrocytes by ^1H NMR: comparison of normal blood and that from lithium-treated psychiatric patients. <i>Clinica Chimica Acta</i> , 1980 , 104, 77-85	6.2	25
4	Human erythrocyte metabolism studies by ^1H spin echo NMR. <i>FEBS Letters</i> , 1977 , 82, 12-6	3.8	242
3	Physicochemical and kinetic properties of beef liver argininosuccinase. Studies in the presence and absence of arginase. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1975 , 397, 478-88	3.8	8
2	Modelling Metabolism with Mathematica		32
1	Average Lengths of Chords in a Square		3