Allan Dean Sherry

List of Publications by Year in Descending Order

415 papers	20,092 citations	73 h-index	121 g-index
428 ext. papers	21,448 ext. citations	6.6 avg, IF	6.65 L-index

#	Paper	IF	Citations
415	Prospects and limitations of paraCEST agents serving as biological reporters in vivo.. *NMR in Biomedicine*, **2022**, e4698	4.4	2
414	Review and consensus recommendations on clinical APT-weighted imaging approaches at 3T: Application to brain tumors.. *Magnetic Resonance in Medicine*, **2022**,	4.4	3
413	Imaging Cell Function Using a Zinc-Responsive MRI Contrast Agent May Identify First Responder Islets.. *Frontiers in Endocrinology*, **2021**, 12, 809867	5.7	0
412	Detection of glucose-derived D- and L-lactate in cancer cells by the use of a chiral NMR shift reagent. *Cancer & Metabolism*, **2021**, 9, 38	5.4	1
411	Co-Polarized [1-C]Pyruvate and [1,3-C]Acetoacetate Provide a Simultaneous View of Cytosolic and Mitochondrial Redox in a Single Experiment. *ACS Sensors*, **2021**, 6, 3967-3977	9.2	1
410	ZIMIR Imaging of Mouse Pancreatic Islet Cells Shows Oscillatory Insulin Secretion. *Frontiers in Endocrinology*, **2021**, 12, 613964	5.7	3
409	P-MRS of the healthy human brain at 7 T detects multiple hexose derivatives of uridine diphosphate glucose. *NMR in Biomedicine*, **2021**, 34, e4511	4.4	2
408	Imaging Beta-Cell Function in the Pancreas of Non-Human Primates Using a Zinc-Sensitive MRI Contrast Agent. *Frontiers in Endocrinology*, **2021**, 12, 641722	5.7	2
407	P-MRS of healthy human brain: Measurement of guanosine diphosphate mannose at 7 T. *NMR in Biomedicine*, **2021**, 34, e4576	4.4	0
406	Analysis of steady-state carbon tracer experiments using akaike information criteria. *Metabolomics*, **2021**, 17, 61	4.7	0
405	The Roles of ZnT1 and ZnT4 in Glucose-Stimulated Zinc Secretion in Prostate Epithelial Cells. *Molecular Imaging and Biology*, **2021**, 23, 230-240	3.8	3
404	New Insights into Metabolic Regulation from Hyperpolarized 13C MRS/MRI Studies **2021**, 181-203		
403	Magnetic Resonance Imaging Detection of Glucose-Stimulated Zinc Secretion in the Enlarged Dog Prostate as a Potential Method for Differentiating Prostate Cancer From Benign Prostatic Hyperplasia. *Investigative Radiology*, **2021**, 56, 450-457	10.1	1
402	Characterization and compensation of inhomogeneity artifact in spiral hyperpolarized C imaging of the human heart. *Magnetic Resonance in Medicine*, **2021**, 86, 157-166	4.4	2
401	Manganese(II)-Based Responsive Contrast Agent Detects Glucose-Stimulated Zinc Secretion from the Mouse Pancreas and Prostate by MRI. *Inorganic Chemistry*, **2021**, 60, 2168-2177	5.1	9
400	Quantitative measurement of redox state in human brain by P MRS at 7T with spectral simplification and inclusion of multiple nucleotide sugar components in data analysis. *Magnetic Resonance in Medicine*, **2020**, 84, 2338-2351	4.4	9
399	Glycine by MR spectroscopy is an imaging biomarker of glioma aggressiveness. *Neuro-Oncology*, **2020**, 22, 1018-1029	1	13

398	Mitochondrial substrate utilization regulates cardiomyocyte cell-cycle progression. *Nature Metabolism*, **2020**, 2, 167-178	14.6	50
397	Comparison of the equilibrium, kinetic and water exchange properties of some metal ion-DOTA and DOTA-bis(amide) complexes. *Journal of Inorganic Biochemistry*, **2020**, 206, 111042	4.2	8
396	Mitochondrial Substrate Utilization Regulates Cardiomyocyte Cell Cycle Progression. *Nature Metabolism*, **2020**, 2, 167-178	14.6	29
395	Lactate Dehydrogenase A Governs Cardiac Hypertrophic Growth in Response to Hemodynamic Stress. *Cell Reports*, **2020**, 32, 108087	10.6	16
394	Imaging Tissue Physiology In Vivo by Use of Metal Ion-Responsive MRI Contrast Agents. *Pharmaceuticals*, **2020**, 13,	5.2	4
393	A Frequency-Selective pH-Responsive paraCEST Agent. *Angewandte Chemie - International Edition*, **2020**, 59, 21671-21676	16.4	5
392	A Frequency-Selective pH-Responsive paraCEST Agent. *Angewandte Chemie*, **2020**, 132, 21855-21860	3.6	
391	Hyperpolarized N-labeled, deuterated tris (2-pyridylmethyl)amine as an MRI sensor of freely available Zn. *Communications Chemistry*, **2020**, 3,	6.3	2
390	In vivo assessment of increased oxidation of branched-chain amino acids in glioblastoma. *Scientific Reports*, **2019**, 9, 340	4.9	14
389	A Responsive Magnetic Resonance Imaging Contrast Agent for Detection of Excess Copper(II) in the Liver. *Journal of the American Chemical Society*, **2019**, 141, 11009-11018	16.4	17
388	Modular P wideband inversion transfer for integrative analysis of adenosine triphosphate metabolism, T relaxation and molecular dynamics in skeletal muscle at 7T. *Magnetic Resonance in Medicine*, **2019**, 81, 3440-3452	4.4	1
387	Metabolism of hyperpolarized C-acetoacetate to -hydroxybutyrate detects real-time mitochondrial redox state and dysfunction in heart tissue. *NMR in Biomedicine*, **2019**, 32, e4091	4.4	8
386	Synchrotron Radiation X-ray Fluorescence Elemental Mapping in Healthy versus Malignant Prostate Tissues Provides New Insights into the Glucose-Stimulated Zinc Trafficking in the Prostate As Discovered by MRI. *Inorganic Chemistry*, **2019**, 58, 13654-13660	5.1	8
385	Active pyruvate dehydrogenase and impaired gluconeogenesis in orthotopic hepatomas of rats. *Metabolism: Clinical and Experimental*, **2019**, 101, 153993	12.7	6
384	Real-time hyperpolarized C magnetic resonance detects increased pyruvate oxidation in pyruvate dehydrogenase kinase 2/4-double knockout mouse livers. *Scientific Reports*, **2019**, 9, 16480	4.9	6
383	Probing carbohydrate metabolism using hyperpolarized C-labeled molecules. *NMR in Biomedicine*, **2019**, 32, e4018	4.4	8
382	Unveiling a hidden P signal coresonating with extracellular inorganic phosphate by outer-volume-suppression and localized P MRS in the human brain at 7T. *Magnetic Resonance in Medicine*, **2018**, 80, 1289-1297	4.4	15
381	Presaturation Power Adjusted Pulsed CEST: A Method to Increase Independence of Target CEST Signals. *Contrast Media and Molecular Imaging*, **2018**, 2018, 3141789	3.2	1

380	A novel inhibitor of pyruvate dehydrogenase kinase stimulates myocardial carbohydrate oxidation in diet-induced obesity. *Journal of Biological Chemistry*, **2018**, 293, 9604-9613	5.4	11
379	Advances in gadolinium-based MRI contrast agent designs for monitoring biological processes in vivo. *Current Opinion in Chemical Biology*, **2018**, 45, 121-130	9.7	48
378	tcaSIM: A Simulation Program for Optimal Design of C Tracer Experiments for Analysis of Metabolic Flux by NMR and Mass Spectroscopy. *Current Metabolomics*, **2018**, 6, 176-187	1	6
377	Esterase-Catalyzed Production of Hyperpolarized C-Enriched Carbon Dioxide in Tissues for Measuring pH. *ACS Sensors*, **2018**, 3, 2232-2236	9.2	8
376	Imaging Insulin Secretion from Mouse Pancreas by MRI Is Improved by Use of a Zinc-Responsive MRI Sensor with Lower Affinity for Zn Ions. *Journal of the American Chemical Society*, **2018**, 140, 17456-17464	16.4	47
375	Nitroxyl Modified Tobacco Mosaic Virus as a Metal-Free High-Relaxivity MRI and EPR Active Superoxide Sensor. *Molecular Pharmaceutics*, **2018**, 15, 2973-2983	5.6	30
374	Band inversion amplifies P- P nuclear overhauser effects: Relaxation mechanism and dynamic behavior of ATP in the human brain by P MRS at 7 T. *Magnetic Resonance in Medicine*, **2017**, 77, 1409-1418	4.4	8
373	On-bead combinatorial synthesis and imaging of europium(III)-based paraCEST agents aids in identification of chemical features that enhance CEST sensitivity. *Magnetic Resonance in Chemistry*, **2017**, 55, 747-753	2.1	9
372	Influence of Dy and Tb doping on C dynamic nuclear polarization. *Journal of Chemical Physics*, **2017**, 146, 014303	3.9	14
371	Hyperpolarized [1- C]gluconolactone as a probe of the pentose phosphate pathway. *NMR in Biomedicine*, **2017**, 30, e3713	4.4	16
370	Efficient P band inversion transfer approach for measuring creatine kinase activity, ATP synthesis, and molecular dynamics in the human brain at 7 T. *Magnetic Resonance in Medicine*, **2017**, 78, 1657-1666	4.4	11
369	Crosslinked shells for nano-assembled capsules: a new encapsulation method for smaller Gd-loaded capsules with exceedingly high relaxivities. *Chemical Communications*, **2017**, 53, 6355-6358	5.8	7
368	Oxidation of [U- C]glucose in the human brain at 7T under steady state conditions. *Magnetic Resonance in Medicine*, **2017**, 78, 2065-2071	4.4	20
367	Imaging Extracellular Lactate In Vitro and In Vivo Using CEST MRI and a Paramagnetic Shift Reagent. *Chemistry - A European Journal*, **2017**, 23, 1752-1756	4.8	21
366	Enantiomeric Recognition of d- and l-Lactate by CEST with the Aid of a Paramagnetic Shift Reagent. *Journal of the American Chemical Society*, **2017**, 139, 17431-17437	16.4	19
365	Protonation of carboxyl groups in EuDOTA-tetraamide complexes results in catalytic prototropic exchange and quenching of the CEST signal. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2017**, 375,	3	4
364	Lanthanide-Based T and CEST Complexes Provide Insights into the Design of pH Sensitive MRI Agents. *Angewandte Chemie - International Edition*, **2017**, 56, 16626-16630	16.4	14
363	Measuring glucose cerebral metabolism in the healthy mouse using hyperpolarized C magnetic resonance. *Scientific Reports*, **2017**, 7, 11719	4.9	36

362	Zinc as an Imaging Biomarker of Prostate Cancer. *Israel Journal of Chemistry*, **2017**, 57, 854-861	3.4	11
361	Electrochemical investigation of the Eu redox couple in complexes with variable numbers of glycinamide and acetate pendant arms. *European Journal of Inorganic Chemistry*, **2017**, 2017, 5001-5005	2.3	11
360	Transition Metal Doping Reveals Link between Electron T Reduction and C Dynamic Nuclear Polarization Efficiency. *Journal of Physical Chemistry A*, **2017**, 121, 9221-9228	2.8	12
359	Lanthanide-Based T2ex and CEST Complexes Provide Insights into the Design of pH Sensitive MRI Agents. *Angewandte Chemie*, **2017**, 129, 16853-16857	3.6	2
358	The rate of lactate production from glucose in hearts is not altered by per-deuteration of glucose. *Journal of Magnetic Resonance*, **2017**, 284, 86-93	3	8
357	Chapter 11 ParaCEST Agents: Design, Discovery, and Implementation **2017**, 219-256		
356	Chapter 4 Early Discovery and Investigations of paraCEST Agents in Dallas **2017**, 39-46		
355	Zinc-sensitive MRI contrast agent detects differential release of Zn(II) ions from the healthy vs. malignant mouse prostate. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E5464-71	11.5	69
354	Accelerated chemical shift imaging of hyperpolarized (13) C metabolites. *Magnetic Resonance in Medicine*, **2016**, 76, 1033-8	4.4	12
353	An Oral Load of [13C3]Glycerol and Blood NMR Analysis Detect Fatty Acid Esterification, Pentose Phosphate Pathway, and Glycerol Metabolism through the Tricarboxylic Acid Cycle in Human Liver. *Journal of Biological Chemistry*, **2016**, 291, 19031-41	5.4	14
352	Oxidative Conversion of a Europium(II)-Based T1 Agent into a Europium(III)-Based paraCEST Agent that can be Detected In Vivo by Magnetic Resonance Imaging. *Angewandte Chemie*, **2016**, 128, 5108-5111	3.6	6
351	A general chemical shift decomposition method for hyperpolarized (13) C metabolite magnetic resonance imaging. *Magnetic Resonance in Chemistry*, **2016**, 54, 665-73	2.1	6
350	A simple approach to evaluate the kinetic rate constant for ATP synthesis in resting human skeletal muscle at 7 T. *NMR in Biomedicine*, **2016**, 29, 1240-8	4.4	8
349	Oxidative Conversion of a Europium(II)-Based T1 Agent into a Europium(III)-Based paraCEST Agent that can be Detected In Vivo by Magnetic Resonance Imaging. *Angewandte Chemie - International Edition*, **2016**, 55, 5024-7	16.4	22
348	Toward 20 T magnetic resonance for human brain studies: opportunities for discovery and neuroscience rationale. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2016**, 29, 617-39	2.8	46
347	Breaking the Barrier to Slow Water Exchange Rates for Optimal Magnetic Resonance Detection of paraCEST Agents. *Inorganic Chemistry*, **2016**, 55, 3007-14	5.1	20
346	Unexpected Changes in the Population of Coordination Isomers for the Lanthanide Ion Complexes of DOTMA-Tetraglycinate. *Inorganic Chemistry*, **2016**, 55, 9297-305	5.1	14
345	Integration of 13C Isotopomer Methods and Hyperpolarization Provides a Comprehensive Picture of Metabolism **2016**, 885-900		2

344	The Relationship between NMR Chemical Shifts of Thermally Polarized and Hyperpolarized Y Complexes and Their Solution Structures. *Chemistry - A European Journal*, **2016**, 22, 16657-16667	4.8	11
343	Impact of Ho(3+)-doping on (13)C dynamic nuclear polarization using trityl OX063 free radical. *Physical Chemistry Chemical Physics*, **2016**, 18, 21351-9	3.6	16
342	Metabolism of hyperpolarized [1-(13)C]pyruvate through alternate pathways in rat liver. *NMR in Biomedicine*, **2016**, 29, 466-74	4.4	33
341	pH imaging of mouse kidneys in vivo using a frequency-dependent paraCEST agent. *Magnetic Resonance in Medicine*, **2016**, 75, 2432-41	4.4	49
340	Production of hyperpolarized CO from [1-C]pyruvate in perfused liver does reflect total anaplerosis but is not a reliable biomarker of glucose production. *Metabolomics*, **2015**, 11, 1144-1156	4.7	15
339	Nuclear spin hyperpolarization of the solvent using signal amplification by reversible exchange (SABRE). *Journal of Magnetic Resonance*, **2015**, 257, 15-23	3	29
338	Limitations of detection of anaplerosis and pyruvate cycling from metabolism of [1-(13)C] acetate. *Nature Medicine*, **2015**, 21, 108-9	50.5	13
337	Amplifying the sensitivity of zinc(II) responsive MRI contrast agents by altering water exchange rates. *Journal of the American Chemical Society*, **2015**, 137, 14173-9	16.4	56
336	Hyperpolarized 15N-pyridine derivatives as pH-sensitive MRI agents. *Scientific Reports*, **2015**, 5, 9104	4.9	74
335	(31)P-MRS of healthy human brain: ATP synthesis, metabolite concentrations, pH, and T1 relaxation times. *NMR in Biomedicine*, **2015**, 28, 1455-62	4.4	59
334	A pH-Responsive MRI Agent that Can Be Activated Beyond the Tissue Magnetization Transfer Window. *Angewandte Chemie - International Edition*, **2015**, 54, 8662-4	16.4	27
333	[(68) Ga]-HP-DO3A-nitroimidazole: a promising agent for PET detection of tumor hypoxia. *Contrast Media and Molecular Imaging*, **2015**, 10, 465-72	3.2	11
332	Exchange kinetics by inversion transfer: integrated analysis of the phosphorus metabolite kinetic exchanges in resting human skeletal muscle at 7 T. *Magnetic Resonance in Medicine*, **2015**, 73, 1359-69	4.4	18
331	Hyperpolarized 13C NMR detects rapid drug-induced changes in cardiac metabolism. *Magnetic Resonance in Medicine*, **2015**, 74, 312-9	4.4	29
330	Amplification of the effects of magnetization exchange by (31) P band inversion for measuring adenosine triphosphate synthesis rates in human skeletal muscle. *Magnetic Resonance in Medicine*, **2015**, 74, 1505-14	4.4	11
329	A pH-Responsive MRI Agent that Can Be Activated Beyond the Tissue Magnetization Transfer Window. *Angewandte Chemie*, **2015**, 127, 8786-8788	3.6	3
328	Basic MR relaxation mechanisms and contrast agent design. *Journal of Magnetic Resonance Imaging*, **2015**, 42, 545-65	5.6	109
327	Lactate Contributes to Glyceroneogenesis and Glyconeogenesis in Skeletal Muscle by Reversal of Pyruvate Kinase. *Journal of Biological Chemistry*, **2015**, 290, 30486-97	5.4	7

326	The ratio of acetate-to-glucose oxidation in astrocytes from a single 13C NMR spectrum of cerebral cortex. *Journal of Neurochemistry*, **2015**, 132, 99-109	6	7
325	Molecular platform for design and synthesis of targeted dual-modality imaging probes. *Bioconjugate Chemistry*, **2015**, 26, 549-58	6.3	15
324	Mitochondrial metabolism mediates oxidative stress and inflammation in fatty liver. *Journal of Clinical Investigation*, **2015**, 125, 4447-62	15.9	234
323	The stereochemistry of amide side chains containing carboxyl groups influences water exchange rates in EuDOTA-tetraamide complexes. *Journal of Biological Inorganic Chemistry*, **2014**, 19, 161-71	3.7	20
322	GdDO3NI, a nitroimidazole-based T1 MRI contrast agent for imaging tumor hypoxia in vivo. *Journal of Biological Inorganic Chemistry*, **2014**, 19, 271-9	3.7	24
321	Redox- and hypoxia-responsive MRI contrast agents. *ChemMedChem*, **2014**, 9, 1116-29	3.7	59
320	Propionate stimulates pyruvate oxidation in the presence of acetate. *American Journal of Physiology - Heart and Circulatory Physiology*, **2014**, 307, H1134-41	5.2	16
319	Simultaneous steady-state and dynamic 13C NMR can differentiate alternative routes of pyruvate metabolism in living cancer cells. *Journal of Biological Chemistry*, **2014**, 289, 6212-24	5.4	44
318	The presence of fast-exchanging proton species in aqueous solutions of paraCEST agents can impact rate constants measured for slower exchanging species when fitting CEST spectra to the Bloch equations. *Inorganic Chemistry*, **2014**, 53, 10012-4	5.1	11
317	CEST and PARACEST Agents for Molecular Imaging **2014**, 225-243		2
316	Maximizing T2-exchange in Dy(3+)DOTA-(amide)X chelates: fine-tuning the water molecule exchange rate for enhanced T2 contrast in MRI. *Magnetic Resonance in Medicine*, **2014**, 71, 1179-85	4.4	34
315	In vivo imaging of paraCEST agents using frequency labeled exchange transfer MRI. *Magnetic Resonance in Medicine*, **2014**, 71, 286-93	4.4	9
314	In vivo chemical exchange saturation transfer imaging allows early detection of a therapeutic response in glioblastoma. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 4542-7	11.5	140
313	Interaction between the pentose phosphate pathway and gluconeogenesis from glycerol in the liver. *Journal of Biological Chemistry*, **2014**, 289, 32593-603	5.4	21
312	Dynamic monitoring of carnitine and acetylcarnitine in the trimethylamine signal after exercise in human skeletal muscle by 7T 1H-MRS. *Magnetic Resonance in Medicine*, **2013**, 69, 7-17	4.4	27
311	Multi-chromatic pH-activatable 19F-MRI nanoprobes with binary ON/OFF pH transitions and chemical-shift barcodes. *Angewandte Chemie - International Edition*, **2013**, 52, 8074-8	16.4	95
310	The importance of water exchange rates in the design of responsive agents for MRI. *Current Opinion in Chemical Biology*, **2013**, 17, 167-74	9.7	85
309	Modulation of CEST images in vivo by T1 relaxation: a new approach in the design of responsive PARACEST agents. *Journal of the American Chemical Society*, **2013**, 135, 14904-7	16.4	42

308	Advantages of paramagnetic chemical exchange saturation transfer (CEST) complexes having slow to intermediate water exchange properties as responsive MRI agents. *NMR in Biomedicine*, **2013**, 26, 829-38	4.4	30
307	CEST: from basic principles to applications, challenges and opportunities. *Journal of Magnetic Resonance*, **2013**, 229, 155-72	3	210
306	Dissolution DNP-NMR spectroscopy using galvinoxyl as a polarizing agent. *Journal of Magnetic Resonance*, **2013**, 227, 14-9	3	28
305	Stability and Toxicity of Contrast Agents **2013**, 157-208		31
304	A europium(III)-based PARACEST agent for sensing singlet oxygen by MRI. *Dalton Transactions*, **2013**, 42, 8066-9	4.3	31
303	A novel class of polymeric pH-responsive MRI CEST agents. *Chemical Communications*, **2013**, 49, 6418-20	5.8	24
302	Electron spin resonance studies of trityl OX063 at a concentration optimal for DNP. *Physical Chemistry Chemical Physics*, **2013**, 15, 9800-7	3.6	70
301	Metabolism of glycerol, glucose, and lactate in the citric acid cycle prior to incorporation into hepatic acylglycerols. *Journal of Biological Chemistry*, **2013**, 288, 14488-14496	5.4	17
300	Evidence for transaldolase activity in the isolated heart supplied with [U-13C3]glycerol. *Journal of Biological Chemistry*, **2013**, 288, 2914-22	5.4	4
299	Multi-Chromatic pH-Activatable 19F-MRI Nanoprobes with Binary ON/OFF pH Transitions and Chemical-Shift Barcodes. *Angewandte Chemie*, **2013**, 125, 8232-8236	3.6	17
298	Noninvasive monitoring of lactate dynamics in human forearm muscle after exhaustive exercise by (1)H-magnetic resonance spectroscopy at 7 tesla. *Magnetic Resonance in Medicine*, **2013**, 70, 610-9	4.4	12
297	Characterization of lung cancer by amide proton transfer (APT) imaging: an in-vivo study in an orthotopic mouse model. *PLoS ONE*, **2013**, 8, e77019	3.7	34
296	pCEST: Positive contrast using Chemical Exchange Saturation Transfer. *Journal of Magnetic Resonance*, **2012**, 215, 64-73	3	16
295	Nanoparticle-based PARACEST agents: the quenching effect of silica nanoparticles on the CEST signal from surface-conjugated chelates. *Contrast Media and Molecular Imaging*, **2012**, 7, 19-25	3.2	10
294	In vivo determination of human breast fat composition by □H magnetic resonance spectroscopy at 7 T. *Magnetic Resonance in Medicine*, **2012**, 67, 20-6	4.4	47
293	Reply to: Intramyocellular lipids vs. intramyocellular triglycerides. *Magnetic Resonance in Medicine*, **2012**, 67, 299-299	4.4	1
292	A second generation MRI contrast agent for imaging zinc ions. *MedChemComm*, **2012**, 3, 480-483	5	25
291	Impact of Gd3+ on DNP of [1-13C]pyruvate doped with trityl OX063, BDPA, or 4-oxo-TEMPO. *Journal of Physical Chemistry A*, **2012**, 116, 5129-38	2.8	84

290	Imaging free zinc levels in vivo - what can be learned?. *Inorganica Chimica Acta*, **2012**, 393, 12-23	2.7	39
289	Europium(III) DOTA-tetraamide complexes as redox-active MRI sensors. *Journal of the American Chemical Society*, **2012**, 134, 5798-800	16.4	86
288	SWIFT-CEST: a new MRI method to overcome T shortening caused by PARACEST contrast agents. *Magnetic Resonance in Medicine*, **2012**, 68, 816-21	4.4	19
287	Using frequency-labeled exchange transfer to separate out conventional magnetization transfer effects from exchange transfer effects when detecting ParaCEST agents. *Magnetic Resonance in Medicine*, **2012**, 67, 906-11	4.4	19
286	Comparison of kinetic models for analysis of pyruvate-to-lactate exchange by hyperpolarized 13 C NMR. *NMR in Biomedicine*, **2012**, 25, 1286-94	4.4	89
285	Amphiphilic EuDOTA-tetraamide complexes form micelles with enhanced CEST sensitivity. *European Journal of Inorganic Chemistry*, **2012**, 2012, 2126-2134	2.3	15
284	Synthesis and characterization of a hypoxia-sensitive MRI probe. *Chemistry - A European Journal*, **2012**, 18, 9669-76	4.8	41
283	Fast Dissolution Dynamic Nuclear Polarization NMR of 13C-Enriched 89Y-DOTA Complex: Experimental and Theoretical Considerations. *Applied Magnetic Resonance*, **2012**, 43, 69-79	0.8	29
282	Europium(III) DOTA-derivatives having ketone donor pendant arms display dramatically slower water exchange. *Inorganic Chemistry*, **2011**, 50, 1648-55	5.1	35
281	Investigations into whole water, prototropic and amide proton exchange in lanthanide(III) DOTA-tetraamide chelates. *Dalton Transactions*, **2011**, 40, 6759-64	4.3	27
280	TmDOTA-tetraglycinate encapsulated liposomes as pH-sensitive LipoCEST agents. *PLoS ONE*, **2011**, 6, e27370	3.7	21
279	Transfer of hyperpolarization from long T1 storage nuclei to short T1 neighbors using FLOPSY-8. *Journal of Magnetic Resonance*, **2011**, 213, 187-91	3	3
278	Strategies for labeling proteins with PARACEST agents. *Bioorganic and Medicinal Chemistry*, **2011**, 19, 1106-14	3.4	6
277	T2 exchange agents: a new class of paramagnetic MRI contrast agent that shortens water T2 by chemical exchange rather than relaxation. *Magnetic Resonance in Medicine*, **2011**, 66, 1697-703	4.4	38
276	A lanthanide complex with dual biosensing properties: CEST (chemical exchange saturation transfer) and BIRDS (biosensor imaging of redundant deviation in shifts) with europium DOTA-tetraglycinate. *NMR in Biomedicine*, **2011**, 24, 1216-25	4.4	27
275	Imaging the extracellular pH of tumors by MRI after injection of a single cocktail of T1 and T2 contrast agents. *NMR in Biomedicine*, **2011**, 24, 1380-91	4.4	68
274	Could 13C MRI assist clinical decision-making for patients with heart disease?. *NMR in Biomedicine*, **2011**, 24, 973-9	4.4	38
273	The pH sensitivity of -NH exchange in LnDOTA-tetraamide complexes varies with amide substituent. *Contrast Media and Molecular Imaging*, **2011**, 6, 459-64	3.2	15

272	Towards the rational design of MRI contrast agents: substitution of lanthanide(III) NB-DOTA-tetraamide chelates influences but does not control coordination geometry. *Chemistry - A European Journal*, **2011**, 17, 10372-8	4.8	17
271	BDPA: an efficient polarizing agent for fast dissolution dynamic nuclear polarization NMR spectroscopy. *Chemistry - A European Journal*, **2011**, 17, 10825-7	4.8	68
270	On-bead combinatorial synthesis and imaging of chemical exchange saturation transfer magnetic resonance imaging agents to identify factors that influence water exchange. *Journal of the American Chemical Society*, **2011**, 133, 13023-30	16.4	19
269	DNP by thermal mixing under optimized conditions yields >60,000-fold enhancement of 89Y NMR signal. *Journal of the American Chemical Society*, **2011**, 133, 8673-80	16.4	82
268	Off-resonance saturation MRI of superparamagnetic nanoprobes: theoretical models and experimental validations. *Journal of Magnetic Resonance*, **2011**, 209, 53-60	3	16
267	The effect of 13C enrichment in the glassing matrix on dynamic nuclear polarization of [1-13C]pyruvate. *Physics in Medicine and Biology*, **2011**, 56, N85-92	3.8	33
266	Noninvasive MRI of cell function using a Zn2+-responsive contrast agent. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 18400-5	11.5	118
265	Flux through hepatic pyruvate carboxylase and phosphoenolpyruvate carboxykinase detected by hyperpolarized 13C magnetic resonance. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 19084-9	11.5	108
264	Competition of pyruvate with physiological substrates for oxidation by the heart: implications for studies with hyperpolarized [1-13C]pyruvate. *American Journal of Physiology - Heart and Circulatory Physiology*, **2010**, 298, H1556-64	5.2	54
263	Advantages of macromolecular to nanosized chemical-exchange saturation transfer agents for MRI applications. *Future Medicinal Chemistry*, **2010**, 2, 351-66	4.1	22
262	Hyperpolarized 89Y complexes as pH sensitive NMR probes. *Journal of the American Chemical Society*, **2010**, 132, 1784-5	16.4	60
261	Activation of a PARACEST agent for MRI through selective outersphere interactions with phosphate diesters. *Inorganic Chemistry*, **2010**, 49, 5963-70	5.1	31
260	A responsive europium(III) chelate that provides a direct readout of pH by MRI. *Journal of the American Chemical Society*, **2010**, 132, 14002-3	16.4	103
259	MRI detection of VEGFR2 in vivo using a low molecular weight peptoid-(Gd)8-dendron for targeting. *Journal of the American Chemical Society*, **2010**, 132, 12829-31	16.4	44
258	Multifunctional Polymeric Scaffolds for Enhancement of PARACEST Contrast Sensitivity and Performance: The Effects of Random Copolymer Variations. *Macromolecules*, **2010**, 43, 6616-6624	5.5	14
257	The population of SAP and TSAP isomers in cyclen-based lanthanide(III) chelates is substantially affected by solvent. *Inorganic Chemistry*, **2010**, 49, 8662-4	5.1	30
256	Polymeric PARACEST MRI contrast agents as potential reporters for gene therapy. *Organic and Biomolecular Chemistry*, **2010**, 8, 5333-8	3.9	19
255	Comprehensive Metabolic Analysis for Understanding of Disease **2010**, 97-107		1

254	CEST and PARACEST MR contrast agents. *Acta Radiologica*, **2010**, 51, 910-23	2	104
253	Alternatives to gadolinium-based metal chelates for magnetic resonance imaging. *Chemical Reviews*, **2010**, 110, 2960-3018	68.1	346
252	Improved synthesis of DOTA tetraamide ligands for lanthanide(III) ions: a tool for increasing the repertoire of potential PARACEST contrast agents for MRI and/or fluorescent sensors. *Contrast Media and Molecular Imaging*, **2010**, 5, 121-5	3.2	10
251	Bimodal MR-PET agent for quantitative pH imaging. *Angewandte Chemie - International Edition*, **2010**, 49, 2382-4	16.4	132
250	A multislice gradient echo pulse sequence for CEST imaging. *Magnetic Resonance in Medicine*, **2010**, 63, 253-6	4.4	55
249	A concentration-independent method to measure exchange rates in PARACEST agents. *Magnetic Resonance in Medicine*, **2010**, 63, 625-32	4.4	148
248	1H MRS of intramyocellular lipids in soleus muscle at 7 T: spectral simplification by using long echo times without water suppression. *Magnetic Resonance in Medicine*, **2010**, 64, 662-71	4.4	34
247	Off-resonance saturation magnetic resonance imaging of superparamagnetic polymeric micelles. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 4095-7	0.9	4
246	Evidence for reverse flux through pyruvate kinase in skeletal muscle. *American Journal of Physiology - Endocrinology and Metabolism*, **2009**, 296, E748-57	6	9
245	In vivo off-resonance saturation magnetic resonance imaging of alphavbeta3-targeted superparamagnetic nanoparticles. *Cancer Research*, **2009**, 69, 1651-8	10.1	85
244	Lanthanide(III) complexes of tris(amide) PCTA derivatives as potential bimodal magnetic resonance and optical imaging agents. *Chemistry - A European Journal*, **2009**, 15, 13188-200	4.8	33
243	NMR Characterization of Lanthanide(3+) Complexes of Tetraazatetrakisphosphinato and Tetraazatetra□kisphosphonato Ligands. *Helvetica Chimica Acta*, **2009**, 92, 2532-2551	2	15
242	Modulation of water exchange in Eu(III) DOTA-tetraamide complexes: considerations for in vivo imaging of PARACEST agents. *Contrast Media and Molecular Imaging*, **2009**, 4, 183-91	3.2	53
241	Primer on gadolinium chemistry. *Journal of Magnetic Resonance Imaging*, **2009**, 30, 1240-8	5.6	292
240	Orientation of lipid strands in the extracellular compartment of muscle: effect on quantitation of intramyocellular lipids. *Magnetic Resonance in Medicine*, **2009**, 61, 16-21	4.4	21
239	Multi-frequency PARACEST agents based on europium(III)-DOTA-tetraamide ligands. *Angewandte Chemie - International Edition*, **2009**, 48, 9330-3	16.4	37
238	Synthesis and evaluation of lanthanide ion DOTA-tetraamide complexes bearing peripheral hydroxyl groups. *Journal of Biological Inorganic Chemistry*, **2009**, 14, 421-38	3.7	15
237	Responsive MRI agents for sensing metabolism in vivo. *Accounts of Chemical Research*, **2009**, 42, 948-57	24.3	229

236	Effect of the regiochemistry of butyl amide substituents on the solution-state structures of lanthanide(III) DOTA-tetraamide complexes. *Inorganic Chemistry*, **2009**, 48, 10338-45	5.1	26
235	A new gadolinium-based MRI zinc sensor. *Journal of the American Chemical Society*, **2009**, 131, 11387-91	16.4	130
234	(S)-5-(p-nitrobenzyl)-PCTA, a promising bifunctional ligand with advantageous metal ion complexation kinetics. *Bioconjugate Chemistry*, **2009**, 20, 565-75	6.3	50
233	Nanoassembled capsules as delivery vehicles for large payloads of high relaxivity Gd3+ agents. *Journal of the American Chemical Society*, **2009**, 131, 15918-23	16.4	36
232	Comprehensive Metabolic Analysis for Understanding of Disease Mechanisms **2009**, 180-192		
231	Chemical exchange saturation transfer contrast agents for magnetic resonance imaging. *Annual Review of Biomedical Engineering*, **2008**, 10, 391-411	12	295
230	Modulation of water exchange in europium(III) DOTA-tetraamide complexes via electronic substituent effects. *Journal of the American Chemical Society*, **2008**, 130, 6-7	16.4	96
229	Synthesis and relaxometric studies of a dendrimer-based pH-responsive MRI contrast agent. *Chemistry - A European Journal*, **2008**, 14, 7250-8	4.8	96
228	Composition of adipose tissue and marrow fat in humans by 1H NMR at 7 Tesla. *Journal of Lipid Research*, **2008**, 49, 2055-62	6.3	281
227	Synthesis, potentiometric, kinetic, and NMR Studies of 1,4,7,10-tetraazacyclododecane-1,7-bis(acetic acid)-4,10-bis(methylenephosphonic acid) (DO2A2P) and its complexes with Ca(II), Cu(II), Zn(II) and lanthanide(III) ions. *Inorganic Chemistry*, **2008**, 47, 3851-62	5.1	58
226	Labeling of adenovirus particles with PARACEST agents. *Bioconjugate Chemistry*, **2008**, 19, 598-606	6.3	46
225	Polymeric PARACEST agents for enhancing MRI contrast sensitivity. *Journal of the American Chemical Society*, **2008**, 130, 13854-5	16.4	67
224	Silencing of cytosolic or mitochondrial isoforms of malic enzyme has no effect on glucose-stimulated insulin secretion from rodent islets. *Journal of Biological Chemistry*, **2008**, 283, 28909-17	5.4	61
223	Chronic suppression of acetyl-CoA carboxylase 1 in beta-cells impairs insulin secretion via inhibition of glucose rather than lipid metabolism. *Journal of Biological Chemistry*, **2008**, 283, 14248-56	5.4	44
222	Metabolic cycling in control of glucose-stimulated insulin secretion. *American Journal of Physiology - Endocrinology and Metabolism*, **2008**, 295, E1287-97	6	182
221	Size-induced enhancement of chemical exchange saturation transfer (CEST) contrast in liposomes. *Journal of the American Chemical Society*, **2008**, 130, 5178-84	16.4	57
220	The effect of the amide substituent on the biodistribution and tolerance of lanthanide(III) DOTA-tetraamide derivatives. *Investigative Radiology*, **2008**, 43, 861-70	10.1	23
219	Imaging the tissue distribution of glucose in livers using a PARACEST sensor. *Magnetic Resonance in Medicine*, **2008**, 60, 1047-55	4.4	71

218	Inhibition of carbohydrate oxidation during the first minute of reperfusion after brief ischemia: NMR detection of hyperpolarized 13CO2 and H13CO3-. *Magnetic Resonance in Medicine*, **2008**, 60, 1029-36	4.4	81
217	Towards the rational design of MRI contrast agents: electron spin relaxation is largely unaffected by the coordination geometry of gadolinium(III)-DOTA-type complexes. *Chemistry - A European Journal*, **2008**, 14, 2658-67	4.8	38
216	The detection limit of a Gd3+-based T1 agent is substantially reduced when targeted to a protein microdomain. *Magnetic Resonance Imaging*, **2008**, 26, 608-17	3.3	42
215	Advances in molecular imaging of pancreatic beta cells. *Frontiers in Bioscience - Landmark*, **2008**, 13, 4558-75	2.85	13
214	Hyperpolarized (89)Y offers the potential of direct imaging of metal ions in biological systems by magnetic resonance. *Journal of the American Chemical Society*, **2007**, 129, 12942-3	16.4	45
213	A bridge to coordination isomer selection in lanthanide(III) DOTA-tetraamide complexes. *Inorganic Chemistry*, **2007**, 46, 2584-95	5.1	38
212	Potentiometric and relaxometric properties of a gadolinium-based MRI contrast agent for sensing tissue pH. *Inorganic Chemistry*, **2007**, 46, 5260-70	5.1	102
211	Synthesis and Characterization of DOTA-(amide)(4) Derivatives: Equilibrium and Kinetic Behavior of Their Lanthanide(III) Complexes. *European Journal of Inorganic Chemistry*, **2007**, 2007, 4340-4349	2.3	59
210	Spectral properties of a bifunctional PARACEST europium chelate: an intermediate for targeted imaging applications. *Contrast Media and Molecular Imaging*, **2007**, 2, 55-8	3.2	25
209	MRI detection of paramagnetic chemical exchange effects in mice kidneys in vivo. *Magnetic Resonance in Medicine*, **2007**, 58, 650-5	4.4	58
208	Albumin-binding PARACEST agents. *Journal of Biological Inorganic Chemistry*, **2007**, 12, 855-65	3.7	32
207	Hyperpolarized 13C allows a direct measure of flux through a single enzyme-catalyzed step by NMR. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 19773-7	11.5	237
206	Normal flux through ATP-citrate lyase or fatty acid synthase is not required for glucose-stimulated insulin secretion. *Journal of Biological Chemistry*, **2007**, 282, 31592-600	5.4	60
205	Role of excess glycogenolysis in fasting hyperglycemia among pre-diabetic and diabetic Zucker (fa/fa) rats. *Diabetes*, **2007**, 56, 777-85	0.9	13
204	MRI detection of glycogen in vivo by using chemical exchange saturation transfer imaging (glycoCEST). *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 4359-64	11.5	329
203	Cytosolic phosphoenolpyruvate carboxykinase does not solely control the rate of hepatic gluconeogenesis in the intact mouse liver. *Cell Metabolism*, **2007**, 5, 313-20	24.6	203
202	PARACEST Contrast Agents **2007**, 101-122		3
201	PARACEST Contrast Agents **2007**, 101-122		3

200	Catalytic effects of apoferritin interior surface residues on water proton exchange in lanthanide complexes. *Contrast Media and Molecular Imaging*, **2006**, 1, 10-4	3.2	31
199	High resolution pH(e) imaging of rat glioma using pH-dependent relaxivity. *Magnetic Resonance in Medicine*, **2006**, 55, 309-15	4.4	148
198	Diminished hepatic gluconeogenesis via defects in tricarboxylic acid cycle flux in peroxisome proliferator-activated receptor gamma coactivator-1alpha (PGC-1alpha)-deficient mice. *Journal of Biological Chemistry*, **2006**, 281, 19000-8	5.4	95
197	A pyruvate cycling pathway involving cytosolic NADP-dependent isocitrate dehydrogenase regulates glucose-stimulated insulin secretion. *Journal of Biological Chemistry*, **2006**, 281, 30593-602	5.4	169
196	Compensatory responses to pyruvate carboxylase suppression in islet beta-cells. Preservation of glucose-stimulated insulin secretion. *Journal of Biological Chemistry*, **2006**, 281, 22342-22351	5.4	112
195	Paramagnetic lanthanide complexes as PARACEST agents for medical imaging. *Chemical Society Reviews*, **2006**, 35, 500-11	58.5	341
194	Equilibrium and formation/dissociation kinetics of some Ln(III)PCTA complexes. *Inorganic Chemistry* , **2006**, 45, 9269-80	5.1	84
193	Europium(III) macrocyclic complexes with alcohol pendant groups as chemical exchange saturation transfer agents. *Journal of the American Chemical Society*, **2006**, 128, 10155-62	16.4	58
192	Storage and oxidation of long-chain fatty acids in the C57/BL6 mouse heart as measured by NMR spectroscopy. *FEBS Letters*, **2006**, 580, 4282-7	3.8	33
191	Effects of insulin and cytosolic redox state on glucose production pathways in the isolated perfused mouse liver measured by integrated 2H and 13C NMR. *Biochemical Journal*, **2006**, 394, 465-73	3.8	35
190	Sensitivity enhancement of multidimensional NMR experiments by paramagnetic relaxation effects. *Journal of the American Chemical Society*, **2006**, 128, 13474-8	16.4	69
189	Multifunctional polymeric micelles as cancer-targeted, MRI-ultrasensitive drug delivery systems. *Nano Letters*, **2006**, 6, 2427-30	11.5	1113
188	Towards the rational design of MRI contrast agents: a practical approach to the synthesis of gadolinium complexes that exhibit optimal water exchange. *Dalton Transactions*, **2005**, 3829-37	4.3	68
187	Structural and chiroptical properties of the two coordination isomers of YbDOTA-type complexes. *Inorganic Chemistry*, **2005**, 44, 8391-8	5.1	46
186	Water Exchange Is the Key Parameter in the Design of Next-Generation MRI Agents. *ACS Symposium Series*, **2005**, 151-165	0.4	4
185	MRI thermometry based on PARACEST agents. *Journal of the American Chemical Society*, **2005**, 127, 17572-3	12.4	160
184	Metabolic Networks in the Liver by 2H and 13C NMR **2005**, 159-174		1
183	On-resonance low B1 pulses for imaging of the effects of PARACEST agents. *Journal of Magnetic Resonance*, **2005**, 176, 54-63	3	51

182	Modulation of the Lifetime of Water Bound to Lanthanide Metal Ions in Complexes with Ligands Derived from 1,4,7,10-Tetraazacyclododecane Tetraacetate (DOTA). *Helvetica Chimica Acta*, **2005**, 88, 923-935	2	33
181	Selective sensing of zinc ions with a PARACEST contrast agent. *Angewandte Chemie - International Edition*, **2005**, 44, 6920-3	16.4	137
180	Selective Sensing of Zinc Ions with a PARACEST Contrast Agent. *Angewandte Chemie*, **2005**, 117, 7080-7083	3.6	17
179	Numerical solution of the Bloch equations provides insights into the optimum design of PARACEST agents for MRI. *Magnetic Resonance in Medicine*, **2005**, 53, 790-9	4.4	299
178	Comparison of [3,4-13C2]glucose to [6,6-2H2]glucose as a tracer for glucose turnover by nuclear magnetic resonance. *Magnetic Resonance in Medicine*, **2005**, 53, 1479-83	4.4	20
177	Differing mechanisms of hepatic glucose overproduction in triiodothyronine-treated rats vs. Zucker diabetic fatty rats by NMR analysis of plasma glucose. *American Journal of Physiology - Endocrinology and Metabolism*, **2005**, 288, E654-62	6	34
176	Effect of murine strain on metabolic pathways of glucose production after brief or prolonged fasting. *American Journal of Physiology - Endocrinology and Metabolism*, **2005**, 289, E53-61	6	50
175	Inhibition of cardiac lipoprotein utilization by transgenic overexpression of Angptl4 in the heart. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 1767-72	11.5	86
174	Chemistry for DOTA Peptide Labeling at Phenylalanine Residues: On the Road to Preparing Peptide Ligand Tagged Libraries. *Letters in Organic Chemistry*, **2005**, 2, 160-164	0.6	6
173	Concurrent 31P nuclear magnetic resonance spectroscopy and fiber-optic oxygen consumption measurements in perfused rat hearts. *Methods in Enzymology*, **2004**, 381, 735-46	1.7	4
172	Impaired tricarboxylic acid cycle activity in mouse livers lacking cytosolic phosphoenolpyruvate carboxykinase. *Journal of Biological Chemistry*, **2004**, 279, 48941-9	5.4	124
171	Biochemical mechanism of lipid-induced impairment of glucose-stimulated insulin secretion and reversal with a malate analogue. *Journal of Biological Chemistry*, **2004**, 279, 27263-71	5.4	95
170	Engineering lanthanide complexes with controlled water exchange rates for magnetic resonance imaging. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2004**, 2004, 5254-7		3
169	Understanding of basic mechanisms of beta-cell function and survival: prelude to new diabetes therapies. *Cell Biochemistry and Biophysics*, **2004**, 40, 159-68	3.2	4
168	Understanding of basic mechanisms of Ecell function and survival. *Cell Biochemistry and Biophysics*, **2004**, 2004, 159-167	3.2	
167	Glucose production pathways by 2H and 13C NMR in patients with HIV-associated lipoatrophy. *Magnetic Resonance in Medicine*, **2004**, 51, 649-54	4.4	23
166	Solid-phase synthesis of DOTA-peptides. *Chemistry - A European Journal*, **2004**, 10, 1149-55	4.8	40
165	Compartmentation of glycolysis and glycogenolysis in the perfused rat heart. *NMR in Biomedicine*, **2004**, 17, 51-9	4.4	27

164	Comparison of crystal field dependent and independent methods to analyse lanthanide induced NMR shifts in axially symmetric complexes. Part I. Systems with a C3 symmetry axis. *Inorganica Chimica Acta*, **2004**, 357, 381-395	2.7	19
163	Analytical solutions for (13)C isotopomer analysis of complex metabolic conditions: substrate oxidation, multiple pyruvate cycles, and gluconeogenesis. *Metabolic Engineering*, **2004**, 6, 12-24	9.7	54
162	Glucose production, gluconeogenesis, and hepatic tricarboxylic acid cycle fluxes measured by nuclear magnetic resonance analysis of a single glucose derivative. *Analytical Biochemistry*, **2004**, 327, 149-55	3.1	92
161	Solution dynamics and stability of lanthanide(III) (S)-2-(p-nitrobenzyl)DOTA complexes. *Inorganic Chemistry*, **2004**, 43, 2845-51	5.1	68
160	Cyclen-based phenylboronate ligands and their Eu3+ complexes for sensing glucose by MRI. *Bioconjugate Chemistry*, **2004**, 15, 1431-40	6.3	66
159	Synthesis, relaxometric and photophysical properties of a new pH-responsive MRI contrast agent: the effect of other ligating groups on dissociation of a p-nitrophenolic pendant arm. *Journal of the American Chemical Society*, **2004**, 126, 9248-56	16.4	119
158	Toward the Design of MR Agents for Imaging Cell Function. *Current Medicinal Chemistry Immunology, Endocrine & Metabolic Agents*, **2004**, 4, 349-369		19
157	Understanding of Basic Mechanisms of Cell Function and Survival: Prelude to New Diabetes Therapies. *Cell Biochemistry and Biophysics*, **2004**, 40, 159-168	3.2	2
156	Mechanisms by which liver-specific PEPCK knockout mice preserve euglycemia during starvation. *Diabetes*, **2003**, 52, 1649-54	0.9	90
155	Increased hepatic fructose 2,6-bisphosphate after an oral glucose load does not affect gluconeogenesis. *Journal of Biological Chemistry*, **2003**, 278, 28427-33	5.4	29
154	Silencing of phosphonate-gadolinium magnetic resonance imaging contrast by hydroxyapatite binding. *Investigative Radiology*, **2003**, 38, 750-60	10.1	27
153	In vivo behavior of copper-64-labeled methanephosphonate tetraaza macrocyclic ligands. *Journal of Biological Inorganic Chemistry*, **2003**, 8, 217-25	3.7	60
152	Renal and systemic pH imaging by contrast-enhanced MRI. *Magnetic Resonance in Medicine*, **2003**, 49, 249-57	4.4	180
151	Sources of plasma glucose by automated Bayesian analysis of 2H NMR spectra. *Magnetic Resonance in Medicine*, **2003**, 50, 659-63	4.4	8
150	Towards the Rational Design of Magnetic Resonance Imaging Contrast Agents: Isolation of the Two Coordination Isomers of Lanthanide DOTA-Type Complexes. *Angewandte Chemie*, **2003**, 115, 6069-6072	3.6	19
149	pH-sensitive modulation of the second hydration sphere in lanthanide(III) tetraamide-DOTA complexes: a novel approach to smart MR contrast media. *Chemistry - A European Journal*, **2003**, 9, 4634-40	4.8	49
148	Towards the rational design of magnetic resonance imaging contrast agents: isolation of the two coordination isomers of lanthanide DOTA-type complexes. *Angewandte Chemie - International Edition*, **2003**, 42, 5889-92	16.4	97
147	Noninvasive evaluation of liver metabolism by 2H and 13C NMR isotopomer analysis of human urine. *Analytical Biochemistry*, **2003**, 312, 228-34	3.1	51

146	Analysis of gluconeogenic pathways in vivo by distribution of 2H in plasma glucose: comparison of nuclear magnetic resonance and mass spectrometry. *Analytical Biochemistry*, **2003**, 318, 321-4	3.1	37
145	An improved and versatile synthetic route to 6,7:13,14-dibenzo-1,8,4,11-dioxadiazacyclotetradecane. *Inorganica Chimica Acta*, **2003**, 351, 395-398	2.7	2
144	Physical characteristics of lanthanide complexes that act as magnetization transfer (MT) contrast agents. *Journal of Solid State Chemistry*, **2003**, 171, 38-43	3.3	62
143	PARACEST agents: modulating MRI contrast via water proton exchange. *Accounts of Chemical Research*, **2003**, 36, 783-90	24.3	397
142	A paramagnetic CEST agent for imaging glucose by MRI. *Journal of the American Chemical Society*, **2003**, 125, 15288-9	16.4	179
141	Synthesis and luminescence studies of aryl substituted tetraamide complexes of europium(III): a new approach to pH responsive luminescent europium probes. *Inorganic Chemistry*, **2003**, 42, 4401-8	5.1	47
140	13C Isotopomer Analysis of Glutamate A NMR Method to Probe Metabolic Pathways Intersecting in the Citric Acid Cycle **2002**, 59-97		5
139	The Amide Protons of an Ytterbium(III) dota Tetraamide Complex Act as Efficient Antennae for Transfer of Magnetization to Bulk Water. *Angewandte Chemie*, **2002**, 114, 1999	3.6	7
138	The Amide Protons of an Ytterbium(III) dota Tetraamide Complex Act as Efficient Antennae for Transfer of Magnetization to Bulk Water. *Angewandte Chemie - International Edition*, **2002**, 41, 1919	16.4	86
137	13C isotopomer analysis of glutamate by tandem mass spectrometry. *Analytical Biochemistry*, **2002**, 300, 192-205	3.1	56
136	Targeted Complexes of Lanthanide(III) Ions as Therapeutic and Diagnostic Pharmaceuticals. *Journal of Supramolecular Chemistry*, **2002**, 2, 1-15		67
135	Analysis of lanthanide induced NMR shifts using a crystal field independent method: application to complexes of tetraazamacrocyclic ligands. *Inorganica Chimica Acta*, **2002**, 339, 273-282	2.7	21
134	13C NMR isotopomer analysis reveals a connection between pyruvate cycling and glucose-stimulated insulin secretion (GSIS). *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 2708-13	11.5	225
133	Glycogen-targeting subunits and glucokinase differentially affect pathways of glycogen metabolism and their regulation in hepatocytes. *Journal of Biological Chemistry*, **2002**, 277, 1514-23	5.4	28
132	Stimulus/secretion coupling factors in glucose-stimulated insulin secretion: insights gained from a multidisciplinary approach. *Diabetes*, **2002**, 51 Suppl 3, S389-93	0.9	51
131	Unusually sharp dependence of water exchange rate versus lanthanide ionic radii for a series of tetraamide complexes. *Journal of the American Chemical Society*, **2002**, 124, 4226-7	16.4	57
130	In vivo magnetic resonance imaging of tissue pH using a novel pH-sensitive contrast agent, GdDOTA-4AmP. *Academic Radiology*, **2002**, 9 Suppl 2, S481-3	4.3	34
129	Magnetic resonance imaging detects a specific peptide-protein binding event. *Journal of the American Chemical Society*, **2002**, 124, 3514-5	16.4	70

128	The amide protons of an ytterbium(III) dota tetraamide complex act as efficient antennae for transfer of magnetization to bulk water. *Angewandte Chemie - International Edition*, **2002**, 41, 1919-21	16.4	24
127	[DOTA-bis(amide)]lanthanide complexes: NMR evidence for differences in water-molecule exchange rates for coordination isomers. *Chemistry - A European Journal*, **2001**, 7, 288-96	4.8	64
126	NMR indirect detection of glutamate to measure citric acid cycle flux in the isolated perfused mouse heart. *FEBS Letters*, **2001**, 505, 163-7	3.8	25
125	1H and (17)O NMR detection of a lanthanide-bound water molecule at ambient temperatures in pure water as solvent. *Inorganic Chemistry*, **2001**, 40, 4284-90	5.1	61
124	The Gd(3+) complex of a fatty acid analogue of DOTP binds to multiple albumin sites with variable water relaxivities. *Inorganic Chemistry*, **2001**, 40, 6580-7	5.1	74
123	Synthesis and NMR studies of new DOTP-like lanthanide(III) complexes containing a hydrophobic substituent on one phosphonate side arm. *Inorganic Chemistry*, **2001**, 40, 6572-9	5.1	35
122	A novel europium(III)-based MRI contrast agent. *Journal of the American Chemical Society*, **2001**, 123, 1517-8	16.4	238
121	An integrated (2)H and (13)C NMR study of gluconeogenesis and TCA cycle flux in humans. *American Journal of Physiology - Endocrinology and Metabolism*, **2001**, 281, E848-56	6	92
120	Gd3+ complexes with slowly exchanging bound-water molecules may offer advantages in the design of responsive MR agents. *Investigative Radiology*, **2001**, 36, 82-6	10.1	23
119	Use of a single (13)C NMR resonance of glutamate for measuring oxygen consumption in tissue. *American Journal of Physiology - Endocrinology and Metabolism*, **1999**, 277, E1111-21	6	19
118	Kinetics of cyclocreatine and Na(+) cotransport in human breast cancer cells: mechanism of activity. *American Journal of Physiology - Cell Physiology*, **1999**, 277, C708-16	5.4	10
117	A Convenient Synthesis of 1,4,7,10,13-Pentaazacyclopentadecane. *Synthetic Communications*, **1999**, 29, 2817-2822	1.7	12
116	Multiple quantum filtered 23Na NMR spectroscopy of the isolated, perfused rat liver. *Magnetic Resonance in Medicine*, **1999**, 41, 1127-35	4.4	12
115	Multiple bond 13C-13C spin-spin coupling provides complementary information in a 13C NMR isotopomer analysis of glutamate. *Magnetic Resonance in Medicine*, **1999**, 42, 197-200	4.4	16
114	A Novel pH-Sensitive MRI Contrast Agent. *Angewandte Chemie - International Edition*, **1999**, 38, 3192-3194	16.4	212
113	NMR conformational study of diamagnetic complexes of some triazatriacetate macrocycles. *Inorganica Chimica Acta*, **1998**, 273, 288-298	2.7	13
112	Determination of the intracellular sodium concentration in perfused mouse liver by 31P and 23Na magnetic resonance spectroscopy. *Magnetic Resonance in Medicine*, **1998**, 39, 155-9	4.4	15
111	39K NMR measurement of intracellular potassium during ischemia in the perfused guinea pig heart. *Magnetic Resonance in Medicine*, **1998**, 40, 544-50	4.4	3

110	Synthesis, Potentiometry, and NMR Studies of Two New 1,7-Disubstituted Tetraazacyclododecanes and Their Complexes Formed with Lanthanide, Alkaline Earth Metal, Mn(2+), and Zn(2+) Ions. *Inorganic Chemistry*, **1998**, 37, 69-75	5.1	30
109	The in vivo behavior of copper-64-labeled azamacrocyclic complexes. *Nuclear Medicine and Biology*, **1998**, 25, 523-30	2.1	136
108	C isotopomer analysis of glutamate by heteronuclear multiple quantum coherence-total correlation spectroscopy (HMQC-TOCSY). *FEBS Letters*, **1998**, 440, 382-6	3.8	20
107	Co-ordination chemistry and molecular mechanics study of the magnesium(II) and calcium(II) complexes of trisubstituted 1,4,7-triazacyclononane derivatives. *Journal of the Chemical Society Dalton Transactions*, **1998**, 177-184		12
106	Dissociation of intracellular sodium from contractile state in guinea-pig hearts treated with ouabain. *Journal of Molecular and Cellular Cardiology*, **1998**, 30, 639-47	5.8	10
105	13C NMR measurements of human gluconeogenic fluxes after ingestion of [U-13C]propionate, phenylacetate, and acetaminophen. *American Journal of Physiology - Endocrinology and Metabolism*, **1998**, 275, E843-52	6	27
104	Quantitation of intracellular [Na+] in vivo by using TmDOTP5- as an NMR shift reagent and extracellular marker. *Journal of Applied Physiology*, **1998**, 85, 1806-12	3.7	30
103	Effects of dichloroacetate on mechanical recovery and oxidation of physiologic substrates after ischemia and reperfusion in the isolated heart. *Journal of Cardiovascular Pharmacology*, **1998**, 31, 336-44	3.1	16
102	pH-Controlled Selective Protection of Polyaza Macrocycles. *Synthesis*, **1997**, 1997, 759-763	2.9	50
101	Discrimination between magnesium(ii) and calcium(ii) by1,4,7-tris(2-hydroxyalkyl)-1,4,7-triazacyclononane ligands. *Chemical Communications*, **1997**, 845	5.8	3
100	NMR Studies of the Lanthanide(III) Complexes of 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetrakis(methanephosphonic acid mono(2,2,2-trifluoroethyl) ester). *Inorganic Chemistry*, **1997**, 36, 4128-4134	5.1	28
99	Ion-Pairing Interactions between Co(en)(3)(3+) and the (23)Na NMR Frequency Shift Reagent TmDOTP(5)(-). *Inorganic Chemistry*, **1997**, 36, 3493-3498	5.1	12
98	Alkaline Earth Metal and Lanthanide(III) Complexes of Ligands Based upon 1,4,7,10-Tetraazacyclododecane-1,7-bis(acetic acid). *Inorganic Chemistry*, **1997**, 36, 1495-1503	5.1	61
97	MR imaging and spectroscopy applications of lanthanide complexes with macrocyclic phosphonate and phosphonate ester ligands. *Journal of Alloys and Compounds*, **1997**, 249, 153-157	5.7	35
96	Measurement of gluconeogenesis and pyruvate recycling in the rat liver: a simple analysis of glucose and glutamate isotopomers during metabolism of [1,2,3-(13)C3]propionate. *FEBS Letters*, **1997**, 412, 131-7	3.8	81
95	Influence of vanadate on glycolysis, intracellular sodium, and pH in perfused rat hearts. *Molecular and Cellular Biochemistry*, **1997**, 170, 53-63	4.2	11
94	No replenishment of carnitine from trimethyllysine during pivalate-induced carnitine loss in humans. *Journal of Nutritional Biochemistry*, **1997**, 8, 147-151	6.3	4
93	Evaluation of triple quantum-filtered 23Na NMR spectroscopy in the in situ rat liver. *Magnetic Resonance in Medicine*, **1997**, 38, 821-7	4.4	33

92	Formation and Dissociation Kinetics of the Magnesium(II) Complex of 1,4,7-Triazacyclononane-1,4,7-tris(methylenemethylphosphinic acid). *Inorganic Chemistry*, **1996**, 35, 5137-5143	5.1	8
91	Synthesis and Characterization of 1,4,7-Triazacyclononane Derivatives with Methylphosphinate and Acetate Side Chains for Monitoring Free MgII by 31P and 1H NMR Spectroscopy. *Journal of the American Chemical Society*, **1996**, 118, 4396-4404	16.4	39
90	Contribution of various substrates to total citric acid cycle flux and anaplerosis as determined by 13C isotopomer analysis and O2 consumption in the heart. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **1996**, 4, 35-46	2.8	68
89	Substrate selection early after reperfusion of ischemic regions in the working rabbit heart. *Magnetic Resonance in Medicine*, **1996**, 35, 820-6	4.4	13
88	Oxidation of acetate in rabbit skeletal muscle: detection by 13C NMR spectroscopy in vivo. *Magnetic Resonance in Medicine*, **1996**, 36, 451-7	4.4	18
87	TmDOTP5-: a substance for NMR temperature measurements in vivo. *Magnetic Resonance in Medicine*, **1996**, 36, 955-9	4.4	58
86	7Li, 6Li, 23Na and 133Cs multinuclear NMR studies of adducts formed with shift reagent, TmDOTP5. *Inorganica Chimica Acta*, **1996**, 246, 331-341	2.7	30
85	Isotopic methods for probing organization of cellular metabolism. *Cell Biochemistry and Function*, **1996**, 14, 259-68	4.2	11
84	Are Substrates Channeled In The Krebs Citric Acid Cycle?. *Advances in Molecular and Cell Biology*, **1996**, 263-271		
83	Substrate selection in the isolated working rat heart: effects of reperfusion, afterload, and concentration. *Basic Research in Cardiology*, **1995**, 90, 388-96	11.8	97
82	Preparation, physico-chemical characterization, and relaxometry studies of various gadolinium(III)-DTPA-bis(amide) derivatives as potential magnetic resonance contrast agents. *Magnetic Resonance Imaging*, **1995**, 13, 401-20	3.3	86
81	A general synthesis of mono- and disubstituted 1,4,7-triazacyclononanes. *Tetrahedron Letters*, **1995** , 36, 9269-9272	2	32
80	Direct evidence that perhexiline modifies myocardial substrate utilization from fatty acids to lactate. *Journal of Cardiovascular Pharmacology*, **1995**, 25, 469-72	3.1	69
79	Relaxometry, Luminescence Measurement, Electrophoresis, and Animal Biodistribution of Lanthanide(III) Complexes of Some Polyaza Macrocyclic Acetates Containing Pyridine. *Inorganic Chemistry*, **1995**, 34, 2233-2243	5.1	81
78	NMR conformational study of the lanthanide(III) complexes of DOTA in aqueous solution. *Journal of Alloys and Compounds*, **1995**, 225, 303-307	5.7	49
77	A general synthesis of 1,7-disubstituted 1,4,7,10-tetraazacyclododecanes. *Journal of the Chemical Society Chemical Communications*, **1995**, 185		50
76	Synthesis, Crystal Structure, and Potentiometry of Pyridine-Containing Tetraaza Macrocyclic Ligands with Acetate Pendant Arms. *Inorganic Chemistry*, **1995**, 34, 2225-2232	5.1	55
75	The Cooperative Behavior of Krebs Tricarboxylic Acid Cycle Enzymes. *Advances in Molecular and Cell Biology*, **1995**, 11, 125-145		2

74	1H NMR detection of lactate and alanine in perfused rat hearts during global and low pressure ischemia. *Magnetic Resonance in Medicine*, **1995**, 33, 53-60	4.4	14
73	TmDOTP5- as a 23Na shift reagent for the in vivo rat kidney. *Magnetic Resonance in Medicine*, **1995**, 34, 25-31	4.4	49
72	The design of macrocyclic ligands for monitoring magnesium in tissue by 31P NMR. *NMR in Biomedicine*, **1995**, 8, 197-205	4.4	9
71	Effects of oxidant exposure on substrate utilization and high-energy phosphates in isolated rat hearts. *Circulation Research*, **1994**, 75, 97-104	15.7	7
70	NMR study of the inclusion complex formed between Ecyclodextrin and TmDOTP5 *Magnetic Resonance in Chemistry*, **1994**, 32, 361-365	2.1	17
69	13C isotopomer analyses in intact tissue using [13C]homonuclear decoupling. *Magnetic Resonance in Medicine*, **1994**, 31, 374-9	4.4	11
68	Orientation-conserved transfer of symmetric Krebs cycle intermediates in mammalian tissue. *Biochemistry*, **1994**, 33, 6268-75	3.2	35
67	Cardiac Metabolism **1994**, 439-449		3
66	Sources of acetyl-CoA entering the tricarboxylic acid cycle as determined by analysis of succinate 13C isotopomers. *Biochemistry*, **1993**, 32, 12240-4	3.2	23
65	Synthesis and Complexation Properties of l,4,7-Triazacyclononane-1,4,7-tris(2-methylacetate). *Radiochimica Acta*, **1993**, 61, 207-212	1.9	6
64	Synthesis and X-ray crystal structure of three polyazamacrocycles having sulfonate pendant groups: Piperazinyl-monomethanesulfonic acid, sodium hydrogen 1,4,7-triazacyclononane-N,N?-di(methanesulfonate) and 1,4,7,10-tetraazacyclododecane-N,N?-di(methanesulfonic acid). *Journal of Crystallographic and*		2
63	Effects of amino acids on substrate selection, anaplerosis, and left ventricular function in the ischemic reperfused rat heart. *Journal of Clinical Investigation*, **1993**, 92, 831-9	15.9	29
62	Sulfomethylation of Di-, Tri-, and polyazamacrocycles: a new route to entry of mixed-side-chain macrocyclic chelates. *Bioconjugate Chemistry*, **1992**, 3, 524-32	6.3	21
61	Optimized synthesis, structure, and solution dynamics of 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrakis(methylenephosphonic acid) (H8DOTP). *Inorganic Chemistry*, **1992**, 31, 4422-4424	5.1	51
60	Synthesis and complexation properties of a new tetraazatricarboxylate ligand. *Journal of the Chemical Society Dalton Transactions*, **1992**, 2517-2521		8
59	Alterations in substrate utilization in the reperfused myocardium: a direct analysis by 13C NMR. *Biochemistry*, **1992**, 31, 4833-7	3.2	45
58	Metabolism of [3-13C]pyruvate in TCA cycle mutants of yeast. *Biochemistry*, **1992**, 31, 8720-5	3.2	20
57	Direct observation of lactate and alanine by proton double quantum spectroscopy in rat hearts supplied with [3-13C]pyruvate. *FEBS Letters*, **1992**, 303, 247-50	3.8	18

56	NMR and potentiometric studies of 1,4,7-triazacyclononane-N,N?,N?-tris(methylenephosphonate monoethylester) and its complexes with metal ions. *Inorganica Chimica Acta*, **1992**, 195, 89-93	2.7	16
55	Nuclear magnetic relaxation dispersion profiles of aqueous solutions of a series of Gd(NOTA) analogs. *Magnetic Resonance in Medicine*, **1992**, 27, 284-95	4.4	18
54	In vivo Na-23 MR imaging and spectroscopy of rat brain during TmDOTP5- infusion. *Journal of Magnetic Resonance Imaging*, **1992**, 2, 385-91	5.6	63
53	Regulatory consequences of organization of citric acid cycle enzymes. *Current Topics in Cellular Regulation*, **1992**, 33, 249-60		8
52	Influence of cardiac pacing on intracellular sodium in the isolated perfused rat heart. *Investigative Radiology*, **1991**, 26, 1079-82	10.1	14
51	Is there tight channelling in the tricarboxylic acid cycle metabolon?. *Biochemical Society Transactions*, **1991**, 19, 1002-5	5.1	19
50	13C-NMR: a simple yet comprehensive method for analysis of intermediary metabolism. *Trends in Biochemical Sciences*, **1991**, 16, 5-10	10.3	98
49	N,N?,N?-tris(methoxymethyl)-1,4,7-triazacyclononane: a new synthetic tool for the synthesis of tris-N-substituted 1,4,7-triazacyclononane derivatives. *Journal of the Chemical Society Chemical Communications*, **1991**, 1252-1253		3
48	Protonation scheme for some triaza macrocycles studied by potentiometry and NMR spectroscopy. *Journal of the Chemical Society Perkin Transactions II*, **1991**, 137		28
47	Synthesis, equilibrium, and kinetic properties of the gadolinium(III) complexes of three triazacyclodecanetriacetate ligands. *Inorganic Chemistry*, **1991**, 30, 2092-2097	5.1	44
46	Hepatobiliary delivery of polyaminopolycarboxylate chelates: synthesis and characterization of a cholic acid conjugate of EDTA and biodistribution and imaging studies with its indium-111 chelate. *Bioconjugate Chemistry*, **1991**, 2, 117-23	6.3	16
45	Synthesis and complexation properties of a new macrocyclic polyaza polyphosphinate ligand, DOTEP (1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrakis(methyleneethylphosphinate)). *Inorganic Chemistry*, **1991**, 30, 5016-5019	5.1	48
44	NOTPME: a 31P NMR probe for measurement of divalent cations in biological systems. *FEBS Letters* , **1991**, 280, 121-4	3.8	12
43	Tm(DOTP)5-: a 23Na+ shift agent for perfused rat hearts. *Magnetic Resonance in Medicine*, **1990**, 15, 25-32	4.4	115
42	Influence of global ischemia on intracellular sodium in the perfused rat heart. *Magnetic Resonance in Medicine*, **1990**, 15, 33-44	4.4	104
41	Channeling of TCA cycle intermediates in cultured Saccharomyces cerevisiae. *Biochemistry*, **1990**, 29, 9106-10	3.2	74
40	Synthesis and characterization of a series of macrocyclic chelates containing oxygen and nitrogen donors: prospects for use as NMR shift agents for alkali-metal cations. *Inorganic Chemistry*, **1990**, 29, 3645-3649	5.1	31
39	Kinetics of formation and dissociation of the 1,4,7-triazacyclononane-N,N?N"-triacetate complexes of cerium(III), gadolinium(III), and erbium(III) ions. *Inorganic Chemistry*, **1990**, 29, 1555-1559	5.1	64

38	Potentiometry and NMR studies of 1,5,9-triazacyclododecane-N,N′,N″-triacetic acid and its metal ion complexes. *Inorganic Chemistry*, **1990**, 29, 5-9	5.1	33
37	Contribution of exogenous substrates to acetyl coenzyme A: measurement by 13C NMR under non-steady-state conditions. *Biochemistry*, **1990**, 29, 6756-61	3.2	137
36	Evaluation of polyaza macrocyclic methylene phosphonate chelates of Gd3+ ions as MRI contrast agents. *Magnetic Resonance in Medicine*, **1989**, 9, 94-104	4.4	54
35	13C NMR of methylated lysines of fd gene 5 protein: evidence for a conformational change involving lysine 24 upon binding of a negatively charged lanthanide chelate. *Biochemistry*, **1989**, 28, 7896-904	3.2	42
34	A simplified synthetic route to polyaza macrocycles. *Journal of Organic Chemistry*, **1989**, 54, 2990-2992	4.2	75
33	Synthesis and characterization of the gadolinium(3+) complex of DOTA-propylamide: a model DOTA-protein conjugate. *Inorganic Chemistry*, **1989**, 28, 620-622	5.1	78
32	Lanthanide chelates as magnetic resonance imaging contrast agents. *Journal of the Less Common Metals*, **1989**, 149, 133-141		14
31	Synthesis, protonation sequence, and NMR studies of polyazamacrocyclic methylenephosphonates. *Inorganic Chemistry*, **1989**, 28, 3336-3341	5.1	71
30	Stability constants for Gd3+ binding to model DTPA-conjugates and DTPA-proteins: implications for their use as magnetic resonance contrast agents. *Magnetic Resonance in Medicine*, **1988**, 8, 180-90	4.4	109
29	Number of inner-sphere water molecules in Gd3+ and Eu3+ complexes of DTPA-amide and -ester conjugates. *Magnetic Resonance in Medicine*, **1988**, 8, 191-9	4.4	56
28	Thermodynamic study of lanthanide complexes of 1,4,7-triazacyclononane-N,N′,N″-triacetic acid and 1,4,7,10-tetraazacyclododecane-N,N′,N″,N‴-tetraacetic acid. *Inorganic Chemistry*, **1987**, 26, 958-960	5.1	252
27	31P and 23Na NMR lanthanide induced shifts in axially symmetric macrocyclic phosphonate complexes. *Inorganica Chimica Acta*, **1987**, 139, 137-139	2.7	26
26	A NMR study of lanthanide-NOTA chelates as aqueous paramagnetic shift and relaxation probes. *Inorganica Chimica Acta*, **1987**, 139, 311-313	2.7	4
25	Lanthanum-139 nuclear magnetic resonance studies of polyaminocarboxylate-lanthanum complexes in aqueous solution. *Journal of Magnetic Resonance*, **1986**, 66, 274-282		5
24	A NMR method to probe the nature of liquid clathrates. *Journal of Inclusion Phenomena*, **1986**, 4, 429-431		4
23	Line width considerations in 33S nuclear magnetic resonance of aqueous samples. *Magnetic Resonance in Chemistry*, **1985**, 23, 503-505	2.1	8
22	Nuclear magnetic resonance and potentiometric studies of the protonation scheme of a triaza triacetic macrocycle and its complexes with lanthanum and lutetium. *Inorganic Chemistry*, **1985**, 24, 3876-3881	5.1	68
21	Lanthanide-nota chelates as aqueous shift reagents: Interaction with cyclopropane carboxylic acid. *Journal of the Less Common Metals*, **1985**, 112, 255-261		6

20	Reductive methylation of the lysyl residues in the fd gene 5 DNA-binding protein: CD and 13C NMR results on the modified protein. *Journal of Biomolecular Structure and Dynamics*, **1984**, 2, 77-91	3.6	15
19	Lanthanide-induced shift and relaxation-rate studies of aqueous L-proline solutions. *Journal of the American Chemical Society*, **1983**, 105, 4172-4177	16.4	17
18	17O nuclear magnetic resonance studies of lanthanide ion-proline complexes. *Journal of the Less Common Metals*, **1983**, 94, 343-349		4
17	Lanthanide ethylenediaminetetraacetates as aqueous shift reagents: Interaction with cyclopropane carboxylic acid. *Journal of the Less Common Metals*, **1983**, 94, 351-354		5
16	Concanavalin A will not assume the sugar binding conformation in the complete absence of metal ions. *Biochemical and Biophysical Research Communications*, **1982**, 106, 1291-7	3.4	6
15	Conformational equilibrium of demetalized concanavalin A: a reexamination of the kinetics of its interaction with Ca2+-ions and fluorescent saccharide. *Biochemical and Biophysical Research Communications*, **1982**, 109, 1047-53	3.4	4
14	Lanthanide ethylenediaminetetra-acetate chelates as aqueous shift reagents: evidence for effective axial symmetry in bidentate cytidine 5?-monophosphate and alanine complexes. *Journal of the Chemical Society Dalton Transactions*, **1981**, 2078-2082		13
13	Whole organism 31P nuclear magnetic resonance spectroscopy: a potential application in aquatic toxicity evaluations. *Bulletin of Environmental Contamination and Toxicology*, **1981**, 26, 73-6	2.7	12
12	Separation of contact and pseudocontact contributions to carbon-13 lanthanide induced shifts in non-axially-symmetric lanthanide ethylenediaminetetraacetate chelates. *Journal of the American Chemical Society*, **1980**, 102, 5755-5759	16.4	16
11	Metal ion induced conformational changes in concanavalin A: evidence for saccharide binding to one metal free structure. *Biochemical and Biophysical Research Communications*, **1979**, 87, 598-604	3.4	9
10	Proton and carbon lanthanide-induced shifts in aqueous alanine. Evidence for structural changes along the lanthanide series. *Journal of the American Chemical Society*, **1977**, 99, 5871-5876	16.4	44
9	Calorimetric study of the Lewis acid properties of coordinatively unsaturated organoiridium(III) species. *Inorganic Chemistry*, **1977**, 16, 2606-2612	5.1	6
8	Gd(TTHA): An aqueous carbon-13 relaxation reagent. *Journal of Magnetic Resonance*, **1977**, 28, 459-461		1
7	A simple, one-step fluorometric method for determination of nanomolar concentrations of terbium. *Analytical Biochemistry*, **1976**, 71, 351-7	3.1	96
6	Nuclear magnetic resonance study of the interaction of neodymium(III) with amino acids and carboxylic acids. Aqueous shift reagent. *Journal of the American Chemical Society*, **1973**, 95, 3011-3014	16.4	36
5	Linear enthalpy-spectral shift correlation for perfluoro-tert-butyl alcohol. *Journal of the American Chemical Society*, **1972**, 94, 1853-1857	16.4	37
4	Hydrogen bond interactions with sulfur donors. *Journal of the American Chemical Society*, **1972**, 94, 1848-1853	16.4	29
3	Steric hindrance and solvation effect with hydrogen-bonded adducts. *Journal of the American Chemical Society*, **1970**, 92, 6386-6387	16.4	10

2	Carbon-13 Nuclear Magnetic Resonance for Analysis of Metabolic Pathways415-445	2
1	13C-Labeled Diethyl Ketoglutarate Derivatives as Hyperpolarized Probes of 2-Ketoglutarate Dehydrogenase Activity. *Analysis & Sensing*,	0