

Allan Dean Sherry

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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
4 ¹⁵	Multifunctional polymeric micelles as cancer-targeted, MRI-ultrasensitive drug delivery systems. <i>Nano Letters</i> , 2006 , 6, 2427-30	11.5	1113
4 ¹⁴	PARACEST agents: modulating MRI contrast via water proton exchange. <i>Accounts of Chemical Research</i> , 2003 , 36, 783-90	24.3	397
4 ¹³	Alternatives to gadolinium-based metal chelates for magnetic resonance imaging. <i>Chemical Reviews</i> , 2010 , 110, 2960-3018	68.1	346
4 ¹²	Paramagnetic lanthanide complexes as PARACEST agents for medical imaging. <i>Chemical Society Reviews</i> , 2006 , 35, 500-11	58.5	341
4 ¹¹	MRI detection of glycogen in vivo by using chemical exchange saturation transfer imaging (glycoCEST). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 4359-64	11.5	329
4 ¹⁰	Numerical solution of the Bloch equations provides insights into the optimum design of PARACEST agents for MRI. <i>Magnetic Resonance in Medicine</i> , 2005 , 53, 790-9	4.4	299
4 ⁰⁹	Chemical exchange saturation transfer contrast agents for magnetic resonance imaging. <i>Annual Review of Biomedical Engineering</i> , 2008 , 10, 391-411	12	295
4 ⁰⁸	Primer on gadolinium chemistry. <i>Journal of Magnetic Resonance Imaging</i> , 2009 , 30, 1240-8	5.6	292
4 ⁰⁷	Composition of adipose tissue and marrow fat in humans by ¹ H NMR at 7 Tesla. <i>Journal of Lipid Research</i> , 2008 , 49, 2055-62	6.3	281
4 ⁰⁶	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. <i>Inorganic Chemistry</i> , 1987 , 26, 958-960	5.1	252
4 ⁰⁵	A novel europium(III)-based MRI contrast agent. <i>Journal of the American Chemical Society</i> , 2001 , 123, 1517-8	16.4	238
4 ⁰⁴	Hyperpolarized ¹³ C allows a direct measure of flux through a single enzyme-catalyzed step by NMR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 19773-7	11.5	237
4 ⁰³	Mitochondrial metabolism mediates oxidative stress and inflammation in fatty liver. <i>Journal of Clinical Investigation</i> , 2015 , 125, 4447-62	15.9	234
4 ⁰²	Responsive MRI agents for sensing metabolism in vivo. <i>Accounts of Chemical Research</i> , 2009 , 42, 948-57	24.3	229
4 ⁰¹	¹³ C NMR isotopomer analysis reveals a connection between pyruvate cycling and glucose-stimulated insulin secretion (GSIS). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 2708-13	11.5	225
4 ⁰⁰	A Novel pH-Sensitive MRI Contrast Agent. <i>Angewandte Chemie - International Edition</i> , 1999 , 38, 3192-3194	16.4	212
399	CEST: from basic principles to applications, challenges and opportunities. <i>Journal of Magnetic Resonance</i> , 2013 , 229, 155-72	3	210

398	Cytosolic phosphoenolpyruvate carboxykinase does not solely control the rate of hepatic gluconeogenesis in the intact mouse liver. <i>Cell Metabolism</i> , 2007 , 5, 313-20	24.6	203
397	Metabolic cycling in control of glucose-stimulated insulin secretion. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2008 , 295, E1287-97	6	182
396	Renal and systemic pH imaging by contrast-enhanced MRI. <i>Magnetic Resonance in Medicine</i> , 2003 , 49, 249-57	4.4	180
395	A paramagnetic CEST agent for imaging glucose by MRI. <i>Journal of the American Chemical Society</i> , 2003 , 125, 15288-9	16.4	179
394	A pyruvate cycling pathway involving cytosolic NADP-dependent isocitrate dehydrogenase regulates glucose-stimulated insulin secretion. <i>Journal of Biological Chemistry</i> , 2006 , 281, 30593-602	5.4	169
393	MRI thermometry based on PARACEST agents. <i>Journal of the American Chemical Society</i> , 2005 , 127, 17572-3	16.4	160
392	A concentration-independent method to measure exchange rates in PARACEST agents. <i>Magnetic Resonance in Medicine</i> , 2010 , 63, 625-32	4.4	148
391	High resolution pH(e) imaging of rat glioma using pH-dependent relaxivity. <i>Magnetic Resonance in Medicine</i> , 2006 , 55, 309-15	4.4	148
390	In vivo chemical exchange saturation transfer imaging allows early detection of a therapeutic response in glioblastoma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 4542-7	11.5	140
389	Selective sensing of zinc ions with a PARACEST contrast agent. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 6920-3	16.4	137
388	Contribution of exogenous substrates to acetyl coenzyme A: measurement by ¹³ C NMR under non-steady-state conditions. <i>Biochemistry</i> , 1990 , 29, 6756-61	3.2	137
387	The in vivo behavior of copper-64-labeled azamacrocyclic complexes. <i>Nuclear Medicine and Biology</i> , 1998 , 25, 523-30	2.1	136
386	Bimodal MR-PET agent for quantitative pH imaging. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 2382-4	16.4	132
385	A new gadolinium-based MRI zinc sensor. <i>Journal of the American Chemical Society</i> , 2009 , 131, 11387-91	16.4	130
384	Impaired tricarboxylic acid cycle activity in mouse livers lacking cytosolic phosphoenolpyruvate carboxykinase. <i>Journal of Biological Chemistry</i> , 2004 , 279, 48941-9	5.4	124
383	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. <i>Journal of the American Chemical Society</i> , 2004 , 126, 9248-56	16.4	119
382	Noninvasive MRI of cell function using a Zn ²⁺ -responsive contrast agent. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 18400-5	11.5	118
381	Tm(DOTP)5-: a ²³ Na ⁺ shift agent for perfused rat hearts. <i>Magnetic Resonance in Medicine</i> , 1990 , 15, 25-32	4.4	115

380	Compensatory responses to pyruvate carboxylase suppression in islet beta-cells. Preservation of glucose-stimulated insulin secretion. <i>Journal of Biological Chemistry</i> , 2006 , 281, 22342-22351	5.4	112
379	Basic MR relaxation mechanisms and contrast agent design. <i>Journal of Magnetic Resonance Imaging</i> , 2015 , 42, 545-65	5.6	109
378	Stability constants for Gd ³⁺ binding to model DTPA-conjugates and DTPA-proteins: implications for their use as magnetic resonance contrast agents. <i>Magnetic Resonance in Medicine</i> , 1988 , 8, 180-90	4.4	109
377	Flux through hepatic pyruvate carboxylase and phosphoenolpyruvate carboxykinase detected by hyperpolarized ¹³ C magnetic resonance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 19084-9	11.5	108
376	CEST and PARACEST MR contrast agents. <i>Acta Radiologica</i> , 2010 , 51, 910-23	2	104
375	Influence of global ischemia on intracellular sodium in the perfused rat heart. <i>Magnetic Resonance in Medicine</i> , 1990 , 15, 33-44	4.4	104
374	A responsive europium(III) chelate that provides a direct readout of pH by MRI. <i>Journal of the American Chemical Society</i> , 2010 , 132, 14002-3	16.4	103
373	Potentiometric and relaxometric properties of a gadolinium-based MRI contrast agent for sensing tissue pH. <i>Inorganic Chemistry</i> , 2007 , 46, 5260-70	5.1	102
372	¹³ C-NMR: a simple yet comprehensive method for analysis of intermediary metabolism. <i>Trends in Biochemical Sciences</i> , 1991 , 16, 5-10	10.3	98
371	Towards the rational design of magnetic resonance imaging contrast agents: isolation of the two coordination isomers of lanthanide DOTA-type complexes. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 5889-92	16.4	97
370	Substrate selection in the isolated working rat heart: effects of reperfusion, afterload, and concentration. <i>Basic Research in Cardiology</i> , 1995 , 90, 388-96	11.8	97
369	Modulation of water exchange in europium(III) DOTA-tetraamide complexes via electronic substituent effects. <i>Journal of the American Chemical Society</i> , 2008 , 130, 6-7	16.4	96
368	Synthesis and relaxometric studies of a dendrimer-based pH-responsive MRI contrast agent. <i>Chemistry - A European Journal</i> , 2008 , 14, 7250-8	4.8	96
367	A simple, one-step fluorometric method for determination of nanomolar concentrations of terbium. <i>Analytical Biochemistry</i> , 1976 , 71, 351-7	3.1	96
366	Multi-chromatic pH-activatable ¹⁹ F-MRI nanoprobe with binary ON/OFF pH transitions and chemical-shift barcodes. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 8074-8	16.4	95
365	Diminished hepatic gluconeogenesis via defects in tricarboxylic acid cycle flux in peroxisome proliferator-activated receptor gamma coactivator-1alpha (PGC-1alpha)-deficient mice. <i>Journal of Biological Chemistry</i> , 2006 , 281, 19000-8	5.4	95
364	Biochemical mechanism of lipid-induced impairment of glucose-stimulated insulin secretion and reversal with a malate analogue. <i>Journal of Biological Chemistry</i> , 2004 , 279, 27263-71	5.4	95
363	Glucose production, gluconeogenesis, and hepatic tricarboxylic acid cycle fluxes measured by nuclear magnetic resonance analysis of a single glucose derivative. <i>Analytical Biochemistry</i> , 2004 , 327, 149-55	3.1	92

362	An integrated (2)H and (13)C NMR study of gluconeogenesis and TCA cycle flux in humans. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2001 , 281, E848-56	6	92
361	Mechanisms by which liver-specific PEPCCK knockout mice preserve euglycemia during starvation. <i>Diabetes</i> , 2003 , 52, 1649-54	0.9	90
360	Comparison of kinetic models for analysis of pyruvate-to-lactate exchange by hyperpolarized 13 C NMR. <i>NMR in Biomedicine</i> , 2012 , 25, 1286-94	4.4	89
359	Europium(III) DOTA-tetraamide complexes as redox-active MRI sensors. <i>Journal of the American Chemical Society</i> , 2012 , 134, 5798-800	16.4	86
358	The Amide Protons of an Ytterbium(III) dota Tetraamide Complex Act as Efficient Antennae for Transfer of Magnetization to Bulk Water. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 1919	16.4	86
357	Inhibition of cardiac lipoprotein utilization by transgenic overexpression of Angptl4 in the heart. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 1767-72	11.5	86
356	Preparation, physico-chemical characterization, and relaxometry studies of various gadolinium(III)-DTPA-bis(amide) derivatives as potential magnetic resonance contrast agents. <i>Magnetic Resonance Imaging</i> , 1995 , 13, 401-20	3.3	86
355	The importance of water exchange rates in the design of responsive agents for MRI. <i>Current Opinion in Chemical Biology</i> , 2013 , 17, 167-74	9.7	85
354	In vivo off-resonance saturation magnetic resonance imaging of alphavbeta3-targeted superparamagnetic nanoparticles. <i>Cancer Research</i> , 2009 , 69, 1651-8	10.1	85
353	Impact of Gd3+ on DNP of [1-13C]pyruvate doped with trityl OX063, BDPA, or 4-oxo-TEMPO. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 5129-38	2.8	84
352	Equilibrium and formation/dissociation kinetics of some Ln(III)PCTA complexes. <i>Inorganic Chemistry</i> , 2006 , 45, 9269-80	5.1	84
351	DNP by thermal mixing under optimized conditions yields >60,000-fold enhancement of 89Y NMR signal. <i>Journal of the American Chemical Society</i> , 2011 , 133, 8673-80	16.4	82
350	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. <i>FEBS Letters</i> , 1997 , 412, 131-7	3.8	81
349	Inhibition of carbohydrate oxidation during the first minute of reperfusion after brief ischemia: NMR detection of hyperpolarized 13CO2 and H13CO3-. <i>Magnetic Resonance in Medicine</i> , 2008 , 60, 1029-36	4.4	81
348	Relaxometry, Luminescence Measurement, Electrophoresis, and Animal Biodistribution of Lanthanide(III) Complexes of Some Polyaza Macrocyclic Acetates Containing Pyridine. <i>Inorganic Chemistry</i> , 1995 , 34, 2233-2243	5.1	81
347	Synthesis and characterization of the gadolinium(3+) complex of DOTA-propylamide: a model DOTA-protein conjugate. <i>Inorganic Chemistry</i> , 1989 , 28, 620-622	5.1	78
346	A simplified synthetic route to polyaza macrocycles. <i>Journal of Organic Chemistry</i> , 1989 , 54, 2990-2992	4.2	75
345	Hyperpolarized 15N-pyridine derivatives as pH-sensitive MRI agents. <i>Scientific Reports</i> , 2015 , 5, 9104	4.9	74

344	The Gd(3+) complex of a fatty acid analogue of DTPA binds to multiple albumin sites with variable water relaxivities. <i>Inorganic Chemistry</i> , 2001 , 40, 6580-7	5.1	74
343	Channeling of TCA cycle intermediates in cultured <i>Saccharomyces cerevisiae</i> . <i>Biochemistry</i> , 1990 , 29, 9106-10	3.2	74
342	Imaging the tissue distribution of glucose in livers using a PARACEST sensor. <i>Magnetic Resonance in Medicine</i> , 2008 , 60, 1047-55	4.4	71
341	Synthesis, protonation sequence, and NMR studies of polyazamacrocyclic methylenephosphonates. <i>Inorganic Chemistry</i> , 1989 , 28, 3336-3341	5.1	71
340	Electron spin resonance studies of trityl OX063 at a concentration optimal for DNP. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 9800-7	3.6	70
339	Magnetic resonance imaging detects a specific peptide-protein binding event. <i>Journal of the American Chemical Society</i> , 2002 , 124, 3514-5	16.4	70
338	Zinc-sensitive MRI contrast agent detects differential release of Zn(II) ions from the healthy vs. malignant mouse prostate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E5464-71	11.5	69
337	Sensitivity enhancement of multidimensional NMR experiments by paramagnetic relaxation effects. <i>Journal of the American Chemical Society</i> , 2006 , 128, 13474-8	16.4	69
336	Direct evidence that perhexiline modifies myocardial substrate utilization from fatty acids to lactate. <i>Journal of Cardiovascular Pharmacology</i> , 1995 , 25, 469-72	3.1	69
335	Imaging the extracellular pH of tumors by MRI after injection of a single cocktail of T1 and T2 contrast agents. <i>NMR in Biomedicine</i> , 2011 , 24, 1380-91	4.4	68
334	BDPA: an efficient polarizing agent for fast dissolution dynamic nuclear polarization NMR spectroscopy. <i>Chemistry - A European Journal</i> , 2011 , 17, 10825-7	4.8	68
333	Towards the rational design of MRI contrast agents: a practical approach to the synthesis of gadolinium complexes that exhibit optimal water exchange. <i>Dalton Transactions</i> , 2005 , 3829-37	4.3	68
332	Solution dynamics and stability of lanthanide(III) (S)-2-(p-nitrobenzyl)DOTA complexes. <i>Inorganic Chemistry</i> , 2004 , 43, 2845-51	5.1	68
331	Contribution of various substrates to total citric acid cycle flux and anaplerosis as determined by ¹³ C isotopomer analysis and O ₂ consumption in the heart. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 1996 , 4, 35-46	2.8	68
330	Nuclear magnetic resonance and potentiometric studies of the protonation scheme of a triaza triacetic macrocycle and its complexes with lanthanum and lutetium. <i>Inorganic Chemistry</i> , 1985 , 24, 3876-3881	5.1	68
329	Polymeric PARACEST agents for enhancing MRI contrast sensitivity. <i>Journal of the American Chemical Society</i> , 2008 , 130, 13854-5	16.4	67
328	Targeted Complexes of Lanthanide(III) Ions as Therapeutic and Diagnostic Pharmaceuticals. <i>Journal of Supramolecular Chemistry</i> , 2002 , 2, 1-15		67
327	Cyclen-based phenylboronate ligands and their Eu ³⁺ complexes for sensing glucose by MRI. <i>Bioconjugate Chemistry</i> , 2004 , 15, 1431-40	6.3	66

326	[DOTA-bis(amide)]lanthanide complexes: NMR evidence for differences in water-molecule exchange rates for coordination isomers. <i>Chemistry - A European Journal</i> , 2001 , 7, 288-96	4.8	64
325	Kinetics of formation and dissociation of the 1,4,7-triazacyclononane-N,NQN"-triacetate complexes of cerium(III), gadolinium(III), and erbium(III) ions. <i>Inorganic Chemistry</i> , 1990 , 29, 1555-1559	5.1	64
324	In vivo Na-23 MR imaging and spectroscopy of rat brain during TmDOTP5- infusion. <i>Journal of Magnetic Resonance Imaging</i> , 1992 , 2, 385-91	5.6	63
323	Physical characteristics of lanthanide complexes that act as magnetization transfer (MT) contrast agents. <i>Journal of Solid State Chemistry</i> , 2003 , 171, 38-43	3.3	62
322	Alkaline Earth Metal and Lanthanide(III) Complexes of Ligands Based upon 1,4,7,10-Tetraazacyclododecane-1,7-bis(acetic acid). <i>Inorganic Chemistry</i> , 1997 , 36, 1495-1503	5.1	61
321	Silencing of cytosolic or mitochondrial isoforms of malic enzyme has no effect on glucose-stimulated insulin secretion from rodent islets. <i>Journal of Biological Chemistry</i> , 2008 , 283, 28909-17	5.1	61
320	¹ H and (¹⁷ O) NMR detection of a lanthanide-bound water molecule at ambient temperatures in pure water as solvent. <i>Inorganic Chemistry</i> , 2001 , 40, 4284-90	5.1	61
319	Hyperpolarized 89Y complexes as pH sensitive NMR probes. <i>Journal of the American Chemical Society</i> , 2010 , 132, 1784-5	16.4	60
318	Normal flux through ATP-citrate lyase or fatty acid synthase is not required for glucose-stimulated insulin secretion. <i>Journal of Biological Chemistry</i> , 2007 , 282, 31592-600	5.4	60
317	In vivo behavior of copper-64-labeled methanephosphonate tetraaza macrocyclic ligands. <i>Journal of Biological Inorganic Chemistry</i> , 2003 , 8, 217-25	3.7	60
316	Redox- and hypoxia-responsive MRI contrast agents. <i>ChemMedChem</i> , 2014 , 9, 1116-29	3.7	59
315	(31)P-MRS of healthy human brain: ATP synthesis, metabolite concentrations, pH, and T1 relaxation times. <i>NMR in Biomedicine</i> , 2015 , 28, 1455-62	4.4	59
314	Synthesis and Characterization of DOTA-(amide)(4) Derivatives: Equilibrium and Kinetic Behavior of Their Lanthanide(III) Complexes. <i>European Journal of Inorganic Chemistry</i> , 2007 , 2007, 4340-4349	2.3	59
313	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. <i>Inorganic Chemistry</i> , 2008 , 47, 3851-62	5.1	58
312	MRI detection of paramagnetic chemical exchange effects in mice kidneys in vivo. <i>Magnetic Resonance in Medicine</i> , 2007 , 58, 650-5	4.4	58
311	Europium(III) macrocyclic complexes with alcohol pendant groups as chemical exchange saturation transfer agents. <i>Journal of the American Chemical Society</i> , 2006 , 128, 10155-62	16.4	58
310	TmDOTP5-: a substance for NMR temperature measurements in vivo. <i>Magnetic Resonance in Medicine</i> , 1996 , 36, 955-9	4.4	58
309	Size-induced enhancement of chemical exchange saturation transfer (CEST) contrast in liposomes. <i>Journal of the American Chemical Society</i> , 2008 , 130, 5178-84	16.4	57

308	Unusually sharp dependence of water exchange rate versus lanthanide ionic radii for a series of tetraamide complexes. <i>Journal of the American Chemical Society</i> , 2002 , 124, 4226-7	16.4	57
307	Amplifying the sensitivity of zinc(II) responsive MRI contrast agents by altering water exchange rates. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14173-9	16.4	56
306	¹³ C isotopomer analysis of glutamate by tandem mass spectrometry. <i>Analytical Biochemistry</i> , 2002 , 300, 192-205	3.1	56
305	Number of inner-sphere water molecules in Gd ³⁺ and Eu ³⁺ complexes of DTPA-amide and -ester conjugates. <i>Magnetic Resonance in Medicine</i> , 1988 , 8, 191-9	4.4	56
304	A multislice gradient echo pulse sequence for CEST imaging. <i>Magnetic Resonance in Medicine</i> , 2010 , 63, 253-6	4.4	55
303	Synthesis, Crystal Structure, and Potentiometry of Pyridine-Containing Tetraaza Macrocyclic Ligands with Acetate Pendant Arms. <i>Inorganic Chemistry</i> , 1995 , 34, 2225-2232	5.1	55
302	Competition of pyruvate with physiological substrates for oxidation by the heart: implications for studies with hyperpolarized [¹³ C]pyruvate. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010 , 298, H1556-64	5.2	54
301	Analytical solutions for (¹³ C) isotopomer analysis of complex metabolic conditions: substrate oxidation, multiple pyruvate cycles, and gluconeogenesis. <i>Metabolic Engineering</i> , 2004 , 6, 12-24	9.7	54
300	Evaluation of polyaza macrocyclic methylene phosphonate chelates of Gd ³⁺ ions as MRI contrast agents. <i>Magnetic Resonance in Medicine</i> , 1989 , 9, 94-104	4.4	54
299	Modulation of water exchange in Eu(III) DOTA-tetraamide complexes: considerations for in vivo imaging of PARACEST agents. <i>Contrast Media and Molecular Imaging</i> , 2009 , 4, 183-91	3.2	53
298	Noninvasive evaluation of liver metabolism by ² H and ¹³ C NMR isotopomer analysis of human urine. <i>Analytical Biochemistry</i> , 2003 , 312, 228-34	3.1	51
297	On-resonance low B ₁ pulses for imaging of the effects of PARACEST agents. <i>Journal of Magnetic Resonance</i> , 2005 , 176, 54-63	3	51
296	Stimulus/secretion coupling factors in glucose-stimulated insulin secretion: insights gained from a multidisciplinary approach. <i>Diabetes</i> , 2002 , 51 Suppl 3, S389-93	0.9	51
295	Optimized synthesis, structure, and solution dynamics of 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrakis(methylenephosphonic acid) (H ₈ DOTP). <i>Inorganic Chemistry</i> , 1992 , 31, 4422-4424	5.1	51
294	Mitochondrial substrate utilization regulates cardiomyocyte cell-cycle progression. <i>Nature Metabolism</i> , 2020 , 2, 167-178	14.6	50
293	(S)-5-(p-nitrobenzyl)-PCTA, a promising bifunctional ligand with advantageous metal ion complexation kinetics. <i>Bioconjugate Chemistry</i> , 2009 , 20, 565-75	6.3	50
292	pH-Controlled Selective Protection of Polyaza Macrocycles. <i>Synthesis</i> , 1997 , 1997, 759-763	2.9	50
291	Effect of murine strain on metabolic pathways of glucose production after brief or prolonged fasting. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2005 , 289, E53-61	6	50

290	A general synthesis of 1,7-disubstituted 1,4,7,10-tetraazacyclododecanes. <i>Journal of the Chemical Society Chemical Communications</i> , 1995 , 185		50
289	pH-sensitive modulation of the second hydration sphere in lanthanide(III) tetraamide-DOTA complexes: a novel approach to smart MR contrast media. <i>Chemistry - A European Journal</i> , 2003 , 9, 4634-40	4.8	49
288	NMR conformational study of the lanthanide(III) complexes of DOTA in aqueous solution. <i>Journal of Alloys and Compounds</i> , 1995 , 225, 303-307	5.7	49
287	TmDOTP5- as a ²³ Na shift reagent for the in vivo rat kidney. <i>Magnetic Resonance in Medicine</i> , 1995 , 34, 25-31	4.4	49
286	pH imaging of mouse kidneys in vivo using a frequency-dependent paraCEST agent. <i>Magnetic Resonance in Medicine</i> , 2016 , 75, 2432-41	4.4	49
285	Advances in gadolinium-based MRI contrast agent designs for monitoring biological processes in vivo. <i>Current Opinion in Chemical Biology</i> , 2018 , 45, 121-130	9.7	48
284	Synthesis and complexation properties of a new macrocyclic polyaza polyphosphinate ligand, DOTE ⁺ P (1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrakis(methyleneethylphosphinate)). <i>Inorganic Chemistry</i> , 1991 , 30, 5016-5019	5.1	48
283	In vivo determination of human breast fat composition by ¹ H magnetic resonance spectroscopy at 7 T. <i>Magnetic Resonance in Medicine</i> , 2012 , 67, 20-6	4.4	47
282	Synthesis and luminescence studies of aryl substituted tetraamide complexes of europium(III): a new approach to pH responsive luminescent europium probes. <i>Inorganic Chemistry</i> , 2003 , 42, 4401-8	5.1	47
281	Imaging Insulin Secretion from Mouse Pancreas by MRI Is Improved by Use of a Zinc-Responsive MRI Sensor with Lower Affinity for Zn Ions. <i>Journal of the American Chemical Society</i> , 2018 , 140, 17456-17464	16.4	47
280	Labeling of adenovirus particles with PARACEST agents. <i>Bioconjugate Chemistry</i> , 2008 , 19, 598-606	6.3	46
279	Structural and chiroptical properties of the two coordination isomers of YbDOTA-type complexes. <i>Inorganic Chemistry</i> , 2005 , 44, 8391-8	5.1	46
278	Toward 20T magnetic resonance for human brain studies: opportunities for discovery and neuroscience rationale. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2016 , 29, 617-39	2.8	46
277	Hyperpolarized (89)Y offers the potential of direct imaging of metal ions in biological systems by magnetic resonance. <i>Journal of the American Chemical Society</i> , 2007 , 129, 12942-3	16.4	45
276	Alterations in substrate utilization in the reperfused myocardium: a direct analysis by ¹³ C NMR. <i>Biochemistry</i> , 1992 , 31, 4833-7	3.2	45
275	Simultaneous steady-state and dynamic ¹³ C NMR can differentiate alternative routes of pyruvate metabolism in living cancer cells. <i>Journal of Biological Chemistry</i> , 2014 , 289, 6212-24	5.4	44
274	MRI detection of VEGFR2 in vivo using a low molecular weight peptoid-(Gd)8-dendron for targeting. <i>Journal of the American Chemical Society</i> , 2010 , 132, 12829-31	16.4	44
273	Chronic suppression of acetyl-CoA carboxylase 1 in beta-cells impairs insulin secretion via inhibition of glucose rather than lipid metabolism. <i>Journal of Biological Chemistry</i> , 2008 , 283, 14248-56	5.4	44

272	Synthesis, equilibrium, and kinetic properties of the gadolinium(III) complexes of three triazacyclodecanetriacetate ligands. <i>Inorganic Chemistry</i> , 1991 , 30, 2092-2097	5.1	44
271	Proton and carbon lanthanide-induced shifts in aqueous alanine. Evidence for structural changes along the lanthanide series. <i>Journal of the American Chemical Society</i> , 1977 , 99, 5871-5876	16.4	44
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