Allan Dean Sherry

List of Publications by Year
in descending order

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414	22,946	7568 77	14208 128
papers	citations	h-index	g-index

428	428	428	16019
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multifunctional Polymeric Micelles as Cancer-Targeted, MRI-Ultrasensitive Drug Delivery Systems. Nano Letters, 2006, 6, 2427-2430.	9.1	1,180
2	PARACEST Agents:â€‰Modulating MRI Contrast via Water Proton Exchange. Accounts of Chemical Research, 2003, 36, 783-790.	15.6	433
3	Alternatives to Gadolinium-Based Metal Chelates for Magnetic Resonance Imaging. Chemical Reviews, 2010, 110, 2960-3018.	47.7	383
4	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, 4359-4364.	7.1	370
5	Paramagnetic lanthanide complexes as PARACEST agents for medical imaging. Chemical Society Reviews, 2006, 35, 500.	38.1	369
6	Primer on gadolinium chemistry. Journal of Magnetic Resonance Imaging, 2009, 30, 1240-1248.	3.4	335
7	Numerical solution of the Bloch equations provides insights into the optimum design of PARACEST agents for MRI. Magnetic Resonance in Medicine, 2005, 53, 790-799.	3.0	329
8	Chemical Exchange Saturation Transfer Contrast Agents for Magnetic Resonance Imaging. Annual Review of Biomedical Engineering, 2008, 10, 391-411.	12.3	328
9	Composition of adipose tissue and marrow fat in humans by 1H NMR at 7 Tesla. Journal of Lipid Research, 2008, 49, 2055-2062.	4.2	320
10	Mitochondrial metabolism mediates oxidative stress and inflammation in fatty liver. Journal of Clinical Investigation, 2015, 125, 4447-4462.	8.2	320
11	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.	4.0	291
12	Hyperpolarized ¹³ C 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, 19773-19777.	7.1	266
13	A Novel Europium(III)-Based MRI Contrast Agent. Journal of the American Chemical Society, 2001, 123, 1517-1518.	13.7	257
14	CEST: From basic principles to applications, challenges and opportunities. Journal of Magnetic Resonance, 2013, 229, 155-172.	2.1	257
15	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, 2708-2713.	7.1	247
16	Responsive MRI Agents for Sensing Metabolism in Vivo. Accounts of Chemical Research, 2009, 42, 948-957.	15.6	243
17	A Novel pHâ€Sensitive MRI Contrast Agent. Angewandte Chemie - International Edition, 1999, 38, 3192-3194.	13.8	233
18	Cytosolic Phosphoenolpyruvate Carboxykinase Does Not Solely Control the Rate of Hepatic Gluconeogenesis in the Intact Mouse Liver. Cell Metabolism, 2007, 5, 313-320.	16.2	232

#	Article	IF	Citations
19	Metabolic cycling in control of glucose-stimulated insulin secretion. American Journal of Physiology - Endocrinology and Metabolism, 2008, 295, E1287-E1297.	3.5	219
20	A Pyruvate Cycling Pathway Involving Cytosolic NADP-dependent Isocitrate Dehydrogenase Regulates Glucose-stimulated Insulin Secretion. Journal of Biological Chemistry, 2006, 281, 30593-30602.	3.4	204
21	Renal and systemic pH imaging by contrast-enhanced MRI. Magnetic Resonance in Medicine, 2003, 49, 249-257.	3.0	197
22	A Paramagnetic CEST Agent for Imaging Glucose by MRI. Journal of the American Chemical Society, 2003, 125, 15288-15289.	13.7	190
23	A concentration-independent method to measure exchange rates in PARACEST agents. Magnetic Resonance in Medicine, 2010, 63, 625-632.	3.0	176
24	MRI Thermometry Based on PARACEST Agents. Journal of the American Chemical Society, 2005, 127, 17572-17573.	13.7	168
25	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, 4542-4547.	7.1	168
26	High resolution pHe imaging of rat glioma using pH-dependent relaxivity. Magnetic Resonance in Medicine, 2006, 55, 309-315.	3.0	156
27	The in vivo behavior of copper-64-labeled azamacrocyclic complexes. Nuclear Medicine and Biology, 1998, 25, 523-530.	0.6	155
28	Contribution of exogenous substrates to acetyl coenzyme A: measurement by carbon-13 NMR under non-steady-state conditions. Biochemistry, 1990, 29, 6756-6761.	2.5	145
29	Bimodal MRâ€“PET Agent for Quantitative pH Imaging. Angewandte Chemie - International Edition, 2010, 49, 2382-2384.	13.8	145
30	A New Gadolinium-Based MRI Zinc Sensor. Journal of the American Chemical Society, 2009, 131, 11387-11391.	13.7	144
31	Impaired Tricarboxylic Acid Cycle Activity in Mouse Livers Lacking Cytosolic Phosphoenolpyruvate Carboxykinase. Journal of Biological Chemistry, 2004, 279, 48941-48949.	3.4	141
32	Selective Sensing of Zinc Ions with a PARACEST Contrast Agent. Angewandte Chemie - International Edition, 2005, 44, 6920-6923.	13.8	141
33	Basic MR relaxation mechanisms and contrast agent design. Journal of Magnetic Resonance Imaging, 2015, 42, 545-565.	3.4	139
34	Noninvasive MRI of Î²-cell function using a Zn ²⁺ -responsive contrast agent. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18400-18405.	7.1	134
35	Mitochondrial substrate utilization regulates cardiomyocyte cell-cycle progression. Nature Metabolism, 2020, 2, 167-178.	11.9	131
36	Flux through hepatic pyruvate carboxylase and phosphoenolpyruvate carboxykinase detected by hyperpolarized ¹³ C magnetic resonance. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19084-19089.	7.1	129

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37	Synthesis, Relaxometric and Photophysical Properties of a New pH-Responsive MRI Contrast Agent:Â The Effect of Other Ligating Groups on Dissociation of ap-Nitrophenolic Pendant Arm. Journal of the American Chemical Society, 2004, 126, 9248-9256.	13.7	128
38	Compensatory Responses to Pyruvate Carboxylase Suppression in Islet Î²-Cells. Journal of Biological Chemistry, 2006, 281, 22342-22351.	3.4	124
39	Tm(DOTP)5â^': A23Na+ shift agent for perfused rat hearts. Magnetic Resonance in Medicine, 1990, 15, 25-32.	3.0	123
40	CEST and PARACEST MR contrast agents. Acta Radiologica, 2010, 51, 910-923.	1.1	123
41	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, 180-190.	3.0	119
42	Potentiometric and Relaxometric Properties of a Gadolinium-Based MRI Contrast Agent for Sensing Tissue pH. Inorganic Chemistry, 2007, 46, 5260-5270.	4.0	116
43	A simple, one-step fluorometric method for determination of nanomolar concentrations of terbium. Analytical Biochemistry, 1976, 71, 351-352.	2.4	113
44	Influence of global ischemia on intracellular sodium in the perfused rat heart. Magnetic Resonance in Medicine, 1990, 15, 33-44.	3.0	112
45	An integrated²H and¹³C NMR study of gluconeogenesis and TCA cycle flux in humans. American Journal of Physiology - Endocrinology and Metabolism, 2001, 281, E848-E856.	3.5	108
46	Biochemical Mechanism of Lipid-induced Impairment of Glucose-stimulated Insulin Secretion and Reversal with a Malate Analogue. Journal of Biological Chemistry, 2004, 279, 27263-27271.	3.4	106
47	A Responsive Europium(III) Chelate That Provides a Direct Readout of pH by MRI. Journal of the American Chemical Society, 2010, 132, 14002-14003.	13.7	106
48	Multiâ€Chromatic pHâ€Activatable ¹⁹Fâ€MRI Nanoprobes with Binary ON/OFF pH Transitions and Chemicalâ€Shift Barcodes. Angewandte Chemie - International Edition, 2013, 52, 8074-8078.	13.8	106
49	C-NMR: a simple yet comprehensive method for analysis of intermediary metabolism. Trends in Biochemical Sciences, 1991, 16, 5-10.	7.5	105
50	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, 5889-5892.	13.8	105
51	Substrate selection in the isolated working rat heart: effects of reperfusion, afterload, and concentration. Basic Research in Cardiology, 1995, 90, 388-396.	5.9	104
52	Synthesis and Relaxometric Studies of a Dendrimerâ€Based pHâ€Responsive MRI Contrast Agent. Chemistry - A European Journal, 2008, 14, 7250-7258.	3.3	104
53	Mechanisms by Which Liver-Specific PEPCK Knockout Mice Preserve Euglycemia During Starvation. Diabetes, 2003, 52, 1649-1654.	0.6	103
54	Modulation of Water Exchange in Europium(III) DOTAâ^'Tetraamide Complexes via Electronic Substituent Effects. Journal of the American Chemical Society, 2008, 130, 6-7.	13.7	100

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55	Comparison of kinetic models for analysis of pyruvateâ€toâ€lactate exchange by hyperpolarized ¹³C NMR. NMR in Biomedicine, 2012, 25, 1286-1294.	2.8	100
56	Diminished Hepatic Gluconeogenesis via Defects in Tricarboxylic Acid Cycle Flux in Peroxisome Proliferator-activated Receptor Î³ Coactivator-1Î± (PGC-1Î±)-deficient Mice*. Journal of Biological Chemistry, 2006, 281, 19000-19008.	3.4	99
57	Relaxometry, Luminescence Measurement, Electrophoresis, and Animal Biodistribution of Lanthanide(III) Complexes of Some Polyaza Macrocyclic Acetates Containing Pyridine. Inorganic Chemistry, 1995, 34, 2233-2243.	4.0	98
58	Europium(III) DOTA-tetraamide Complexes as Redox-Active MRI Sensors. Journal of the American Chemical Society, 2012, 134, 5798-5800.	13.7	98
59	Glucose production, gluconeogenesis, and hepatic tricarboxylic acid cycle fluxes measured by nuclear magnetic resonance analysis of a single glucose derivative. Analytical Biochemistry, 2004, 327, 149-155.	2.4	97
60	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, 401-420.	1.8	96
61	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, 1767-1772.	7.1	96
62	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, 5129-5138.	2.5	96
63	The importance of water exchange rates in the design of responsive agents for MRI. Current Opinion in Chemical Biology, 2013, 17, 167-174.	6.1	95
64	In vivo Off-Resonance Saturation Magnetic Resonance Imaging of Î±vÎ²3-Targeted Superparamagnetic Nanoparticles. Cancer Research, 2009, 69, 1651-1658.	0.9	94
65	A simplified synthetic route to polyaza macrocycles. Journal of Organic Chemistry, 1989, 54, 2990-2992.	3.2	93
66	The Amide Protons of an Ytterbium(III) dota Tetraamide Complex Act as Efficient Antennae for Transfer of Magnetization to Bulk Water This work was supported in part by grants from the Robert A. Welch Foundation (AT-584), the National Institutes of Health (CA-84697), and the Division of Research Resources, National Institutes of Health (RR-02584). We thank Professor Silvio Aime for providing a copy of his manuscript prior to publication.. Angewandte Chemie - International Edition, 2002, 41, 1919.	13.8	93
67	Synthesis and characterization of the gadolinium(3+) complex of DOTA-propylamide: a model DOTA-protein conjugate. Inorganic Chemistry, 1989, 28, 620-622.	4.0	92
68	Synthesis, protonation sequence, and NMR studies of polyazamacrocyclic methylenephosphonates. Inorganic Chemistry, 1989, 28, 3336-3341.	4.0	92
69	Equilibrium and Formation/Dissociation Kinetics of Some LnIIIPCTA Complexes. Inorganic Chemistry, 2006, 45, 9269-9280.	4.0	92
70	DNP by Thermal Mixing under Optimized Conditions Yields >60â€‰000-fold Enhancement of ⁸⁹Y NMR Signal. Journal of the American Chemical Society, 2011, 133, 8673-8680.	13.7	86
71	Hyperpolarized 15N-pyridine Derivatives as pH-Sensitive MRI Agents. Scientific Reports, 2015, 5, 9104.	3.3	86
72	Inhibition of carbohydrate oxidation during the first minute of reperfusion after brief ischemia: NMR detection of hyperpolarized ¹³CO₂ and H¹³CO. Magnetic Resonance in Medicine, 2008, 60, 1029-1036.	3.0	85

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73	Measurement of gluconeogenesis and pyruvate recycling in the rat liver: a simple analysis of glucose and glutamate isotopomers during metabolism of [1,2,3-13C3]propionate. FEBS Letters, 1997, 412, 131-137.	2.8	84
74	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.	7.1	84
75	³¹Pâ€MRS of healthy human brain: ATP synthesis, metabolite concentrations, pH, and T₁ relaxation times. NMR in Biomedicine, 2015, 28, 1455-1462.	2.8	83
76	Sensitivity Enhancement of Multidimensional NMR Experiments by Paramagnetic Relaxation Effects. Journal of the American Chemical Society, 2006, 128, 13474-13478.	13.7	81
77	Electron spin resonance studies of trityl OX063 at a concentration optimal for DNP. Physical Chemistry Chemical Physics, 2013, 15, 9800.	2.8	81
78	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.	4.0	80
79	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.	4.0	79
80	Channeling of TCA cycle intermediates in cultured Saccharomyces cerevisiae. Biochemistry, 1990, 29, 9106-9110.	2.5	79
81	Review and consensus recommendations on clinical <scp>APT</scp>â€weighted imaging approaches at <scp>3T</scp>: Application to brain tumors. Magnetic Resonance in Medicine, 2022, 88, 546-574.	3.0	79
82	The Gd3+Complex of a Fatty Acid Analogue of DOTP Binds to Multiple Albumin Sites with Variable Water Relaxivities. Inorganic Chemistry, 2001, 40, 6580-6587.	4.0	78
83	Magnetic Resonance Imaging Detects a Specific Peptideâ^'Protein Binding Event. Journal of the American Chemical Society, 2002, 124, 3514-3515.	13.7	78
84	Contribution of various substrates to total citric acid cycle flux and]anaplerosis as determined by13C isotopomer analysis and O2 consumption in the heart. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1996, 4, 35-46.	2.0	76
85	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.	3.3	76
86	Imaging the tissue distribution of glucose in livers using a PARACEST sensor. Magnetic Resonance in Medicine, 2008, 60, 1047-1055.	3.0	76
87	Advances in gadolinium-based MRI contrast agent designs for monitoring biological processes in vivo. Current Opinion in Chemical Biology, 2018, 45, 121-130.	6.1	74
88	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, 1380-1391.	2.8	73
89	Targeted Complexes of Lanthanide(III) Ions as Therapeutic and Diagnostic Pharmaceuticals. Journal of Supramolecular Chemistry, 2002, 2, 1-15.	0.4	72
90	Nephrogenic Systemic Fibrosis: A Chemical Perspective. Radiology, 2008, 247, 608-612.	7.3	72

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91	BDPA: An Efficient Polarizing Agent for Fast Dissolution Dynamic Nuclear Polarization NMR Spectroscopy. Chemistry - A European Journal, 2011, 17, 10825-10827.	3.3	72
92	13C Isotopomer Analysis of Glutamate by Tandem Mass Spectrometry. Analytical Biochemistry, 2002, 300, 192-205.	2.4	71
93	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, 28909-28917.	3.4	71
94	Direct Evidence That Perhexiline Modifies Myocardial Substrate Utilization from Fatty Acids to Lactate. Journal of Cardiovascular Pharmacology, 1995, 25, 469-472.	1.9	70
95	Solution Dynamics and Stability of Lanthanide(III) (S)-2-(p-Nitrobenzyl)DOTA Complexes. Inorganic Chemistry, 2004, 43, 2845-2851.	4.0	70
96	Cyclen-Based Phenylboronate Ligands and Their Eu3+ Complexes for Sensing Glucose by MRI. Bioconjugate Chemistry, 2004, 15, 1431-1440.	3.6	70
97	In vivo Na-23 MR imaging and spectroscopy of rat brain during TmDOTP5â^' infusion. Journal of Magnetic Resonance Imaging, 1992, 2, 385-391.	3.4	69
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.	4.0	69
99	Polymeric PARACEST Agents for Enhancing MRI Contrast Sensitivity. Journal of the American Chemical Society, 2008, 130, 13854-13855.	13.7	69
100	Redoxâ€•and HypoxiaâEResponsive MRI Contrast Agents. ChemMedChem, 2014, 9, 1116-1129.	3.2	68
101	Amplifying the Sensitivity of Zinc(II) Responsive MRI Contrast Agents by Altering Water Exchange Rates. Journal of the American Chemical Society, 2015, 137, 14173-14179.	13.7	67
102	TmDOTP5â^': A substance for NMR temperature measurementsin vivo. Magnetic Resonance in Medicine, 1996, 36, 955-959.	3.0	66
103	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.	2.0	66
104	Toward 20ÂT magnetic resonance for human brain studies: opportunities for discovery and neuroscience rationale. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2016, 29, 617-639.	2.0	66
105	Synthesis, Crystal Structure, and Potentiometry of Pyridine-Containing Tetraaza Macrocyclic Ligands with Acetate Pendant Arms. Inorganic Chemistry, 1995, 34, 2225-2232.	4.0	65
106	{DOTA-bis(amide)}lanthanide Complexes: NMR Evidence for Differences in Water-Molecule Exchange Rates for Coordination Isomers. Chemistry - A European Journal, 2001, 7, 288-296.	3.3	65
107	In vivo behavior of copper-64-labeled methanephosphonate tetraaza macrocyclic ligands. Journal of Biological Inorganic Chemistry, 2003, 8, 217-225.	2.6	65
108	Normal Flux through ATP-Citrate Lyase or Fatty Acid Synthase Is Not Required for Glucose-stimulated Insulin Secretion. Journal of Biological Chemistry, 2007, 282, 31592-31600.	3.4	65

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109	Synthesis, Potentiometric, Kinetic, and NMR Studies of 1,4,7,10-Tetraazacyclododecane-1,7-bis(acetic) Tj ETQq1 1 0.784314 rgBT /Over Lanthanide(III) Ions. Inorganic Chemistry, 2008, 47, 3851-3862.	4.0	65
110	MRI detection of paramagnetic chemical exchange effects in mice kidneys in vivo. Magnetic Resonance in Medicine, 2007, 58, 650-655.	3.0	64
111	Hyperpolarized ⁸⁹Y Complexes as pH Sensitive NMR Probes. Journal of the American Chemical Society, 2010, 132, 1784-1785.	13.7	64
112	Number of inner-sphere water molecules in Gd3+ and Eu3+ complexes of DTPA-amide and -ester conjugates. Magnetic Resonance in Medicine, 1988, 8, 191-199.	3.0	63
113	1H and17O NMR Detection of a Lanthanide-Bound Water Molecule at Ambient Temperatures in Pure Water as Solvent. Inorganic Chemistry, 2001, 40, 4284-4290.	4.0	63
114	Physical characteristics of lanthanide complexes that act as magnetization transfer (MT) contrast agents. Journal of Solid State Chemistry, 2003, 171, 38-43.	2.9	63
115	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.	4.0	61
116	Analytical solutions for 13C isotopomer analysis of complex metabolic conditions: substrate oxidation, multiple pyruvate cycles, and gluconeogenesis. Metabolic Engineering, 2004, 6, 12-24.	7.0	61
117	Europium(III) Macrocyclic Complexes with Alcohol Pendant Groups as Chemical Exchange Saturation Transfer Agents. Journal of the American Chemical Society, 2006, 128, 10155-10162.	13.7	61
118	Size-Induced Enhancement of Chemical Exchange Saturation Transfer (CEST) Contrast in Liposomes. Journal of the American Chemical Society, 2008, 130, 5178-5184.	13.7	61
119	Imaging Insulin Secretion from Mouse Pancreas by MRI Is Improved by Use of a Zinc-Responsive MRI Sensor with Lower Affinity for Zn²⁺ Ions. Journal of the American Chemical Society, 2018, 140, 17456-17464.	13.7	61
120	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.	4.0	60
121	Stimulus/Secretion Coupling Factors in Glucose-Stimulated Insulin Secretion: Insights Gained From a Multidisciplinary Approach. Diabetes, 2002, 51, S389-S393.	0.6	60
122	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, 4226-4227.	13.7	59
123	A multislice gradient echo pulse sequence for CEST imaging. Magnetic Resonance in Medicine, 2010, 63, 253-256.	3.0	59
124	Evaluation of polyaza macrocyclic methylene phosphonate chelates of Gd3+ ions as MRI contrast agents. Magnetic Resonance in Medicine, 1989, 9, 94-104.	3.0	57
125	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-E61.	3.5	57
126	Tmdotp5â^' as a23na shift reagent for thein vivo rat kidney. Magnetic Resonance in Medicine, 1995, 34, 25-31.	3.0	56

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127	NMR conformational study of the lanthanide(III) complexes of DOTA in aqueous solution. Journal of Alloys and Compounds, 1995, 225, 303-307.	5.5	56
128	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, 4634-4640.	3.3	56
129	Modulation of water exchange in Eu(III) DOTAâ€“tetraamide complexes: considerations for in vivo imaging of PARACEST agents. Contrast Media and Molecular Imaging, 2009, 4, 183-191.	0.8	56
130	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-H1564.	3.2	56
131	A general synthesis of 1,7-disubstituted 1,4,7,10-tetraazacyclododecanes. Journal of the Chemical Society Chemical Communications, 1995, , 185.	2.0	55
132	pH-Controlled Selective Protection of Polyaza Macrocycles. Synthesis, 1997, 1997, 759-763.	2.3	55
133	On-resonance low B1 pulses for imaging of the effects of PARACEST agents. Journal of Magnetic Resonance, 2005, 176, 54-63.	2.1	54
134	pH imaging of mouse kidneys in vivo using a frequencyâ€dependent paraCEST agent. Magnetic Resonance in Medicine, 2016, 75, 2432-2441.	3.0	54
135	Synthesis, equilibrium, and kinetic properties of the gadolinium(III) complexes of three triazacyclodecanetriacetate ligands. Inorganic Chemistry, 1991, 30, 2092-2097.	4.0	53
136	Noninvasive evaluation of liver metabolism by 2H and 13C NMR isotopomer analysis of human urine. Analytical Biochemistry, 2003, 312, 228-234.	2.4	53
137	(S)-5-(p-Nitrobenzyl)-PCTA, a Promising Bifunctional Ligand with Advantageous Metal Ion Complexation Kinetics. Bioconjugate Chemistry, 2009, 20, 565-575.	3.6	53
138	Synthesis and Luminescence Studies of Aryl Substituted Tetraamide Complexes of Europium(III):â€‰ A New Approach to pH Responsive Luminescent Europium Probes. Inorganic Chemistry, 2003, 42, 4401-4408.	4.0	51
139	Synthesis and Characterization of 1,4,7-Triazacyclononane Derivatives with Methylphosphinate and Acetate Side Chains for Monitoring Free MgIIby31P and1H NMR Spectroscopy. Journal of the American Chemical Society, 1996, 118, 4396-4404.	13.7	50
140	Hyperpolarized89Y Offers the Potential of Direct Imaging of Metal Ions in Biological Systems by Magnetic Resonance. Journal of the American Chemical Society, 2007, 129, 12942-12943.	13.7	50
141	The detection limit of a Gd3+-based T1 agent is substantially reduced when targeted to a protein microdomain. Magnetic Resonance Imaging, 2008, 26, 608-617.	1.8	50
142	Carbon-13 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, 7896-7904.	2.5	49
143	In vivo determination of human breast fat composition by ¹H magnetic resonance spectroscopy at 7 T. Magnetic Resonance in Medicine, 2012, 67, 20-26.	3.0	49
144	Simultaneous Steady-state and Dynamic 13C NMR Can Differentiate Alternative Routes of Pyruvate Metabolism in Living Cancer Cells. Journal of Biological Chemistry, 2014, 289, 6212-6224.	3.4	49

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145	Mitochondrial Substrate Utilization Regulates Cardiomyocyte Cell Cycle Progression. Nature Metabolism, 2020, 2, 167-178.	11.9	49
146	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.	13.7	48
147	MRI Detection of VEGFR2 in Vivo Using a Low Molecular Weight Peptoidâ^'(Gd)₈-Dendron for Targeting. Journal of the American Chemical Society, 2010, 132, 12829-12831.	13.7	48
148	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, 14904-14907.	13.7	48
149	Alterations in substrate utilization in the reperfused myocardium: a direct analysis by carbon-13 NMR. Biochemistry, 1992, 31, 4833-4837.	2.5	47
150	Structural and Chiroptical Properties of the Two Coordination Isomers of YbDOTA-Type Complexes. Inorganic Chemistry, 2005, 44, 8391-8398.	4.0	47
151	Labeling of Adenovirus Particles with PARACEST Agents. Bioconjugate Chemistry, 2008, 19, 598-606.	3.6	47
152	Synthesis and Characterization of a Hypoxiaâ€Sensitive MRI Probe. Chemistry - A European Journal, 2012, 18, 9669-9676.	3.3	47
153	Linear enthalpy-spectral shift correlation for perfluoro-tert-butyl alcohol. Journal of the American Chemical Society, 1972, 94, 1853-1857.	13.7	46
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