Eduard Y Chekmenev

List of Publications by Year
in descending order

184	8,980	34016	53109
papers	citations	52 h-index	85 g-index

194	194	194	3378
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Gas-Phase NMR of Hyperpolarized Propane with 1H-to-13C Polarization Transfer by PH-INEPT. Applied Magnetic Resonance, 2022, 53, 653-669.	0.6	6
2	Orderâ€Unity ¹³C Nuclear Polarization of [1â€¹³C]Pyruvate in Seconds and the Interplay of Water and SABRE Enhancement. ChemPhysChem, 2022, 23, .	1.0	30
3	Instrumentation for Hydrogenative Parahydrogen-Based Hyperpolarization Techniques. Analytical Chemistry, 2022, 94, 479-502.	3.2	52
4	Scanning Nuclear Spin Level Anticrossings by Constant-Adiabaticity Magnetic Field Sweeping of Parahydrogen-Induced ¹³C Polarization. Journal of Physical Chemistry Letters, 2022, 13, 1925-1930.	2.1	8
5	Pilot Quality-Assurance Study of a Third-Generation Batch-Mode Clinical-Scale Automated Xenon-129 Hyperpolarizer. Molecules, 2022, 27, 1327.	1.7	3
6	Temperature Cycling Enables Efficient ¹³C SABRE-SHEATH Hyperpolarization and Imaging of [1-¹³C]-Pyruvate. Journal of the American Chemical Society, 2022, 144, 282-287.	6.6	39
7	RASER MRI: Magnetic resonance images formed spontaneously exploiting cooperative nonlinear interaction. Science Advances, 2022, 8, .	4.7	12
8	¹⁵N NMR Hyperpolarization of Radiosensitizing Antibiotic Nimorazole by Reversible Parahydrogen Exchange in Microtesla Magnetic Fields. Angewandte Chemie, 2021, 133, 2436-2443.	1.6	6
9	¹⁵N NMR Hyperpolarization of Radiosensitizing Antibiotic Nimorazole by Reversible Parahydrogen Exchange in Microtesla Magnetic Fields. Angewandte Chemie - International Edition, 2021, 60, 2406-2413.	7.2	33
10	Lowâ€Flammable Parahydrogenâ€Polarized MRI Contrast Agents. Chemistry - A European Journal, 2021, 27, 2774-2781.	1.7	8
11	Heterogeneous Parahydrogenâ€Induced Polarization of Diethyl Ether for Magnetic Resonance Imaging Applications. Chemistry - A European Journal, 2021, 27, 1316-1322.	1.7	12
12	SABRE and PHIP pumped RASER and the route to chaos. Journal of Magnetic Resonance, 2021, 322, 106815.	1.2	19
13	Frontispiece: Heterogeneous Parahydrogenâ€Induced Polarization of Diethyl Ether for Magnetic Resonance Imaging Applications. Chemistry - A European Journal, 2021, 27, .	1.7	0
14	High field parahydrogen induced polarization of succinate and phospholactate. Physical Chemistry Chemical Physics, 2021, 23, 2320-2330.	1.3	8
15	Automated Low-Cost In Situ IR and NMR Spectroscopy Characterization of Clinical-Scale 129Xe Spin-Exchange Optical Pumping. Analytical Chemistry, 2021, 93, 3883-3888.	3.2	3
16	Clinical-Scale Production of Nearly Pure (>98.5%) Parahydrogen and Quantification by Benchtop NMR Spectroscopy. Analytical Chemistry, 2021, 93, 3594-3601.	3.2	27
17	PHIP hyperpolarized [1-13C]pyruvate and [1-13C]acetate esters via PH-INEPT polarization transfer monitored by 13C NMR and MRI. Scientific Reports, 2021, 11, 5646.	1.6	19
18	Synthesis and 15 N NMR Signal Amplification by Reversible Exchange of [15 N]Dalfampridine at Microtesla Magnetic Fields. ChemPhysChem, 2021, 22, 960-967.	1.0	8

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19	Bridging the Gap: From Homogeneous to Heterogeneous Parahydrogenâ€induced Hyperpolarization and Beyond. ChemPhysChem, 2021, 22, 710-715.	1.0	3
20	Synthetic Approaches for ¹⁵Nâ€Labeled Hyperpolarized Heterocyclic Molecular Imaging Agents for ¹⁵N NMR Signal Amplification by Reversible Exchange in Microtesla Magnetic Fields. Chemistry - A European Journal, 2021, 27, 9727-9736.	1.7	9
21	Magnetic shielding of parahydrogen hyperpolarization experiments for the masses. Magnetic Resonance in Chemistry, 2021, 59, 1180-1186.	1.1	13
22	Heterogeneous ¹H and ¹³C Parahydrogenâ€Induced Polarization of Acetate and Pyruvate Esters. ChemPhysChem, 2021, 22, 1389-1396.	1.0	9
23	Enabling Clinical Technologies for Hyperpolarized ¹²⁹Xenon Magnetic Resonance Imaging and Spectroscopy. Angewandte Chemie, 2021, 133, 22298-22319.	1.6	3
24	Low-Cost High-Pressure Clinical-Scale 50% Parahydrogen Generator Using Liquid Nitrogen at 77 K. Analytical Chemistry, 2021, 93, 8476-8483.	3.2	20
25	Enabling Clinical Technologies for Hyperpolarized ¹²⁹Xenon Magnetic Resonance Imaging and Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 22126-22147.	7.2	26
26	Hyperpolarization of common antifungal agents with SABRE. Magnetic Resonance in Chemistry, 2021, 59, 1225-1235.	1.1	8
27	Frontispiece: Synthetic Approaches for ¹⁵Nâ€Labeled Hyperpolarized Heterocyclic Molecular Imaging Agents for ¹⁵N NMR Signal Amplification by Reversible Exchange in Microtesla Magnetic Fields. Chemistry - A European Journal, 2021, 27, .	1.7	0
28	A Versatile Compact Parahydrogen Membrane Reactor. ChemPhysChem, 2021, 22, 2526-2534.	1.0	17
29	Backgroundâ€Free Proton NMR Spectroscopy with Radiofrequency Amplification by Stimulated Emission Radiation. Angewandte Chemie - International Edition, 2021, 60, 26298-26302.	7.2	12
30	Innentitelbild: Backgroundâ€Free Proton NMR Spectroscopy with Radiofrequency Amplification by Stimulated Emission Radiation (Angew. Chem. 50/2021). Angewandte Chemie, 2021, 133, 26206-26206.	1.6	0
31	New aspects of parahydrogen-induced polarization for C2â€”C3 hydrocarbons using metal complexes. Russian Chemical Bulletin, 2021, 70, 2382-2389.	0.4	4
32	â€œDirectâ€•¹³C Hyperpolarization of ¹³Câ€Acetate by MicroTesla NMR Signal Amplification by Reversible Exchange (SABRE). Angewandte Chemie - International Edition, 2020, 59, 418-423.	7.2	41
33	â€œDirectâ€•13 C Hyperpolarization of 13 Câ€Acetate by MicroTesla NMR Signal Amplification by Reversible Exchange (SABRE). Angewandte Chemie, 2020, 132, 426-431.	1.6	16
34	Pulse-Programmable Magnetic Field Sweeping of Parahydrogen-Induced Polarization by Side Arm Hydrogenation. Analytical Chemistry, 2020, 92, 1340-1345.	3.2	28
35	XeUS: A second-generation automated open-source batch-mode clinical-scale hyperpolarizer. Journal of Magnetic Resonance, 2020, 319, 106813.	1.2	16
36	Quantifying the effects of quadrupolar sinksvia¹⁵N relaxation dynamics in metronidazoles hyperpolarizedviaSABRE-SHEATH. Chemical Communications, 2020, 56, 9098-9101.	2.2	32

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37	Parahydrogenâ€Induced Polarization of Diethyl Ether Anesthetic. Chemistry - A European Journal, 2020, 26, 13621-13626.	1.7	11
38	Automated pneumatic shuttle for magnetic field cycling and parahydrogen hyperpolarized multidimensional NMR. Journal of Magnetic Resonance, 2020, 312, 106700.	1.2	16
39	High-Pressure Clinical-Scale 87% Parahydrogen Generator. Analytical Chemistry, 2020, 92, 15280-15284.	3.2	16
40	Frontispiece: Parahydrogenâ€Induced Polarization of Diethyl Ether Anesthetic. Chemistry - A European Journal, 2020, 26, .	1.7	0
41	Functional stability of water wireâ€“carbonyl interactions in an ion channel. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11908-11915.	3.3	32
42	Pilot multi-site quality assurance study of batch-mode clinical-scale automated xenon-129 hyperpolarizers. Journal of Magnetic Resonance, 2020, 316, 106755.	1.2	9
43	Parahydrogen-Induced Magnetization of Jovian Planets?. ACS Earth and Space Chemistry, 2020, 4, 495-498.	1.2	3
44	Parahydrogenâ€Induced Radio Amplification by Stimulated Emission of Radiation. Angewandte Chemie - International Edition, 2020, 59, 8654-8660.	7.2	22
45	Parawasserstoffâ€induzierte Hyperpolarisation von Gasen. Angewandte Chemie, 2020, 132, 17940-17949.	1.6	1
46	Parahydrogenâ€Induced Radio Amplification by Stimulated Emission of Radiation. Angewandte Chemie, 2020, 132, 8732-8738.	1.6	14
47	Batch-Mode Clinical-Scale Optical Hyperpolarization of Xenon-129 Using an Aluminum Jacket with Rapid Temperature Ramping. Analytical Chemistry, 2020, 92, 4309-4316.	3.2	19
48	Parahydrogenâ€Induced Hyperpolarization of Gases. Angewandte Chemie - International Edition, 2020, 59, 17788-17797.	7.2	27
49	High Xe density, high photon flux, stopped-flow spin-exchange optical pumping: Simulations versus experiments. Journal of Magnetic Resonance, 2020, 312, 106686.	1.2	12
50	Helium-rich mixtures for improved batch-mode clinical-scale spin-exchange optical pumping of Xenon-129. Journal of Magnetic Resonance, 2020, 315, 106739.	1.2	6
51	Relayed nuclear Overhauser enhancement sensitivity to membrane Cho phospholipids. Magnetic Resonance in Medicine, 2020, 84, 1961-1976.	1.9	16
52	Cyclopropane Hydrogenation vs Isomerization over Pt and Ptâ€“Sn Intermetallic Nanoparticle Catalysts: A Parahydrogen Spin-Labeling Study. Journal of Physical Chemistry C, 2020, 124, 8304-8309.	1.5	14
53	Rational ligand choice extends the SABRE substrate scope. Chemical Communications, 2020, 56, 9336-9339.	2.2	23
54	Quasi-Resonance Fluorine-19 Signal Amplification by Reversible Exchange. Journal of Physical Chemistry Letters, 2019, 10, 4229-4236.	2.1	23

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55	15 N Hyperpolarization of Dalfampridine at Natural Abundance for Magnetic Resonance Imaging. Chemistry - A European Journal, 2019, 25, 12694-12697.	1.7	18
56	NMR for Biological Systems. ChemPhysChem, 2019, 20, 177-177.	1.0	0
57	Unveiling coherentlyÂdriven hyperpolarization dynamics in signal amplification by reversible exchange. Nature Communications, 2019, 10, 395.	5.8	36
58	Parahydrogen-Induced Polarization of 1-¹³C-Acetates and 1-¹³C-Pyruvates Using Sidearm Hydrogenation of Vinyl, Allyl, and Propargyl Esters. Journal of Physical Chemistry C, 2019, 123, 12827-12840.	1.5	28
59	Clinical-Scale Batch-Mode Production of Hyperpolarized Propane Gas for MRI. Analytical Chemistry, 2019, 91, 4741-4746.	3.2	23
60	Hyperpolarizing Concentrated Metronidazole ¹⁵NO₂ Group over Six Chemical Bonds with More than 15â€‰% Polarization and a 20â€…Minute Lifetime. Chemistry - A European Journal, 2019, 25, 8829-8836.	1.7	48
61	Relaxation Dynamics of Nuclear Long-Lived Spin States in Propane and Propane-d6 Hyperpolarized by Parahydrogen. Journal of Physical Chemistry C, 2019, 123, 11734-11744.	1.5	18
62	¹⁵N MRI of SLICâ€SABRE Hyperpolarized ¹⁵Nâ€Labelled Pyridine and Nicotinamide. Chemistry - A European Journal, 2019, 25, 8465-8470.	1.7	33
63	Limits of Spatial Resolution of Phase Encoding Dimensions in MRI of Metals. Journal of Physical Chemistry Letters, 2019, 10, 375-379.	2.1	1
64	Heterogeneous hydrogenation of phenylalkynes with parahydrogen: hyperpolarization, reaction selectivity, and kinetics. Physical Chemistry Chemical Physics, 2019, 21, 26477-26482.	1.3	12
65	A versatile synthetic route to the preparation of ¹⁵N heterocycles. Journal of Labelled Compounds and Radiopharmaceuticals, 2019, 62, 892-902.	0.5	7
66	Unique Insights into the Structural and Functional Biology of Membrane Proteins from Solid State NMR Spectroscopy. Biophysical Journal, 2018, 114, 207a.	0.2	1
67	Parahydrogenâ€Based Hyperpolarization for Biomedicine. Angewandte Chemie - International Edition, 2018, 57, 11140-11162.	7.2	251
68	Spinâ€“Lattice Relaxation of Hyperpolarized Metronidazole in Signal Amplification by Reversible Exchange in Micro-Tesla Fields. Journal of Physical Chemistry C, 2018, 122, 4984-4996.	1.5	45
69	Gramicidin Ion Binding and Conductance: New Insights from 17O Solid State NMR Spectroscopy in a 1.5 GHZ Spectrometer. Biophysical Journal, 2018, 114, 305a-306a.	0.2	0
70	Quasi-Resonance Signal Amplification by Reversible Exchange. Journal of Physical Chemistry Letters, 2018, 9, 6136-6142.	2.1	35
71	Effects of Deuteration of ¹³C-Enriched Phospholactate on Efficiency of Parahydrogen-Induced Polarization by Magnetic Field Cycling. Journal of Physical Chemistry C, 2018, 122, 24740-24749.	1.5	12
72	Chemical Exchange Reaction Effect on Polarization Transfer Efficiency in SLIC-SABRE. Journal of Physical Chemistry A, 2018, 122, 9107-9114.	1.1	33

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73	¹⁹F Hyperpolarization of ¹⁵N-3-¹⁹F-Pyridine via Signal Amplification by Reversible Exchange. Journal of Physical Chemistry C, 2018, 122, 23002-23010.	1.5	23
74	Hyperpolarized NMR Spectroscopy: dâ€DNP, PHIP, and SABRE Techniques. Chemistry - an Asian Journal, 2018, 13, 1857-1871.	1.7	180
75	Facile Removal of Homogeneous SABRE Catalysts for Purifying Hyperpolarized Metronidazole, a Potential Hypoxia Sensor. Journal of Physical Chemistry C, 2018, 122, 16848-16852.	1.5	69
76	Synthesis of Unsaturated Precursors for Parahydrogen-Induced Polarization and Molecular Imaging of 1-¹³C-Acetates and 1-¹³C-Pyruvates via Side Arm Hydrogenation. ACS Omega, 2018, 3, 6673-6682.	1.6	33
77	Heterogeneous Parahydrogen Pairwise Addition to Cyclopropane. ChemPhysChem, 2018, 19, 2621-2626.	1.0	19
78	Parawasserstoffâ€basierte Hyperpolarisierung fÃ¼r die Biomedizin. Angewandte Chemie, 2018, 130, 11310-11333.	1.6	54
79	NMR Spectroscopy Techniques: Hyperpolarization for Sensitivity Enhancement. , 2018, , 168-168.		1
80	Toward Cleavable Metabolic/pH Sensing â€œDouble Agentsâ€•Hyperpolarized by NMR Signal Amplification by Reversible Exchange. Chemistry - A European Journal, 2018, 24, 10641-10645.	1.7	13
81	NMR Hyperpolarization Techniques of Gases. Chemistry - A European Journal, 2017, 23, 724-724.	1.7	1
82	NMR Spin-Lock Induced Crossing (SLIC) dispersion and long-lived spin states of gaseous propane at low magnetic field (0.05 T). Journal of Magnetic Resonance, 2017, 276, 78-85.	1.2	36
83	Generalizing, Extending, and Maximizing Nitrogen-15 Hyperpolarization Induced by Parahydrogen in Reversible Exchange. Journal of Physical Chemistry C, 2017, 121, 6626-6634.	1.5	112
84	Extending the Lifetime of Hyperpolarized Propane Gas through Reversible Dissolution. Journal of Physical Chemistry C, 2017, 121, 4481-4487.	1.5	18
85	2D Mapping of NMR Signal Enhancement and Relaxation for Heterogeneously Hyperpolarized Propane Gas. Journal of Physical Chemistry C, 2017, 121, 10038-10046.	1.5	31
86	Frontispiece: NMR Hyperpolarization Techniques of Gases. Chemistry - A European Journal, 2017, 23, .	1.7	2
87	Direct Hyperpolarization of Nitrogen-15 in Aqueous Media with Parahydrogen in Reversible Exchange. Journal of the American Chemical Society, 2017, 139, 7761-7767.	6.6	80
88	High-resolution hyperpolarized in vivo metabolic 13C spectroscopy at low magnetic field (48.7 mT) following murine tail-vein injection. Journal of Magnetic Resonance, 2017, 281, 246-252.	1.2	26
89	The Absence of Quadrupolar Nuclei Facilitates Efficient ¹³C Hyperpolarization via Reversible Exchange with Parahydrogen. ChemPhysChem, 2017, 18, 1493-1498.	1.0	87
90	Heterogeneous Microtesla SABRE Enhancement of ¹⁵N NMR Signals. Angewandte Chemie - International Edition, 2017, 56, 10433-10437.	7.2	58

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91	Toward Hyperpolarized ¹⁹F Molecular Imaging via Reversible Exchange with Parahydrogen. ChemPhysChem, 2017, 18, 1961-1965.	1.0	57
92	Robust Imidazoleâ€¹⁵N₂ Synthesis for Highâ€Resolution Lowâ€Field (0.05 T) ¹⁵NÂHyperpolarized NMR Spectroscopy. ChemistrySelect, 2017, 2, 4478-4483.	0.7	27
93	Long-Lived ¹³C₂ Nuclear Spin States Hyperpolarized by Parahydrogen in Reversible Exchange at Microtesla Fields. Journal of Physical Chemistry Letters, 2017, 8, 3008-3014.	2.1	63
94	A pulse programmable parahydrogen polarizer using a tunable electromagnet and dual channel NMR spectrometer. Journal of Magnetic Resonance, 2017, 284, 115-124.	1.2	24
95	Imaging of Biomolecular NMR Signals Amplified by Reversible Exchange with Parahydrogen Inside an MRI Scanner. Journal of Physical Chemistry C, 2017, 121, 25994-25999.	1.5	25
96	Spin Relays Enable Efficient Long-Range Heteronuclear Signal Amplification by Reversible Exchange. Journal of Physical Chemistry C, 2017, 121, 28425-28434.	1.5	46
97	Heterogeneous Microtesla SABRE Enhancement of ¹⁵N NMR Signals. Angewandte Chemie, 2017, 129, 10569-10573.	1.6	27
98	Aqueous, Heterogeneous para-Hydrogen-Induced ¹⁵N Polarization. Journal of Physical Chemistry C, 2017, 121, 15304-15309.	1.5	40
99	NMR Hyperpolarization Techniques of Gases. Chemistry - A European Journal, 2017, 23, 725-751.	1.7	140
100	¹⁵N Hyperpolarization of Imidazole-¹⁵N₂ for Magnetic Resonance pH Sensing via SABRE-SHEATH. ACS Sensors, 2016, 1, 640-644.	4.0	111
101	Production of Pure Aqueous ¹³Câ€Hyperpolarized Acetate by Heterogeneous Parahydrogenâ€Induced Polarization. Chemistry - A European Journal, 2016, 22, 16446-16449.	1.7	36
102	Open-Source Automated Parahydrogen Hyperpolarizer for Molecular Imaging Using ¹³C Metabolic Contrast Agents. Analytical Chemistry, 2016, 88, 8279-8288.	3.2	84
103	NMR Signal Amplification by Reversible Exchange of Sulfurâ€Heterocyclic Compounds Found In Petroleum. ChemistrySelect, 2016, 1, 2552-2555.	0.7	34
104	Efficient Batchâ€Mode Parahydrogenâ€Induced Polarization of Propane. ChemPhysChem, 2016, 17, 3395-3398.	1.0	13
105	Toward production of pure ¹³C hyperpolarized metabolites using heterogeneous parahydrogen-induced polarization of ethyl[1-¹³C]acetate. RSC Advances, 2016, 6, 69728-69732.	1.7	28
106	NMR SLIC Sensing of Hydrogenation Reactions Using Parahydrogen in Low Magnetic Fields. Journal of Physical Chemistry C, 2016, 120, 29098-29106.	1.5	21
107	Direct and cost-efficient hyperpolarization of long-lived nuclear spin states on universal ¹⁵ N ₂ -diazirine molecular tags. Science Advances, 2016, 2, e1501438.	4.7	193
108	Efficient Synthesis of Molecular Precursors for Paraâ€Hydrogenâ€Induced Polarization of Ethyl Acetateâ€1â€¹³C and Beyond. Angewandte Chemie - International Edition, 2016, 55, 6071-6074.	7.2	53

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109	Over 20% ¹⁵N Hyperpolarization in Under One Minute for Metronidazole, an Antibiotic and Hypoxia Probe. Journal of the American Chemical Society, 2016, 138, 8080-8083.	6.6	123
110	Aqueous NMR Signal Enhancement by Reversible Exchange in a Single Step Using Water-Soluble Catalysts. Journal of Physical Chemistry C, 2016, 120, 12149-12156.	1.5	63
111	Efficient Synthesis of Molecular Precursors for Paraâ€Hydrogenâ€Induced Polarization of Ethyl Acetateâ€1â€¹³C and Beyond. Angewandte Chemie, 2016, 128, 6175-6178.	1.6	18
112	Efficient Synthesis of Nicotinamide-1-¹⁵N for Ultrafast NMR Hyperpolarization Using Parahydrogen. Bioconjugate Chemistry, 2016, 27, 878-882.	1.8	62
113	MR Imaging Biomarkers in Oncology Clinical Trials. Magnetic Resonance Imaging Clinics of North America, 2016, 24, 11-29.	0.6	33
114	Gas Phase UTE MRI of Propane and Propene. Tomography, 2016, 2, 49-55.	0.8	21
115	Microtesla SABRE Enables 10% Nitrogen-15 Nuclear Spin Polarization. Journal of the American Chemical Society, 2015, 137, 1404-1407.	6.6	275
116	NMR Hyperpolarization Techniques for Biomedicine. Chemistry - A European Journal, 2015, 21, 3156-3166.	1.7	247
117	Nanoscale Catalysts for NMR Signal Enhancement by Reversible Exchange. Journal of Physical Chemistry C, 2015, 119, 7525-7533.	1.5	61
118	Noninvasive Measurements of Glycogen in Perfused Mouse Livers Using Chemical Exchange Saturation Transfer NMR and Comparison to ¹³C NMR Spectroscopy. Analytical Chemistry, 2015, 87, 5824-5830.	3.2	15
119	Hyperpolarization of â€œNeatâ€•Liquids by NMR Signal Amplification by Reversible Exchange. Journal of Physical Chemistry Letters, 2015, 6, 1961-1967.	2.1	85
120	¹⁵N Hyperpolarization by Reversible Exchange Using SABRE-SHEATH. Journal of Physical Chemistry C, 2015, 119, 8786-8797.	1.5	192
121	Inhalable Curcumin: Offering the Potential for Translation to Imaging and Treatment of Alzheimer's Disease. Journal of Alzheimer's Disease, 2015, 44, 283-295.	1.2	40
122	Propane-d₆ Heterogeneously Hyperpolarized by Parahydrogen. Journal of Physical Chemistry C, 2014, 118, 28234-28243.	1.5	71
123	Dephosphorylation and biodistribution of 1â€¹³Câ€phospholactate in vivo. Journal of Labelled Compounds and Radiopharmaceuticals, 2014, 57, 517-524.	0.5	26
124	Imaging amide proton transfer and nuclear overhauser enhancement using chemical exchange rotation transfer (CERT). Magnetic Resonance in Medicine, 2014, 72, 471-476.	1.9	62
125	Subâ€second proton imaging of ¹³C hyperpolarized contrast agents in water. Contrast Media and Molecular Imaging, 2014, 9, 333-341.	0.4	22
126	The Feasibility of Formation and Kinetics of NMR Signal Amplification by Reversible Exchange (SABRE) at High Magnetic Field (9.4 T). Journal of the American Chemical Society, 2014, 136, 3322-3325.	6.6	148

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127	A 3D-Printed High Power Nuclear Spin Polarizer. Journal of the American Chemical Society, 2014, 136, 1636-1642.	6.6	72
128	High-Resolution Structures and Orientations of Antimicrobial Peptides Piscidin 1 and Piscidin 3 in Fluid Bilayers Reveal Tilting, Kinking, and Bilayer Immersion. Journal of the American Chemical Society, 2014, 136, 3491-3504.	6.6	78
129	Irreversible Catalyst Activation Enables Hyperpolarization and Water Solubility for NMR Signal Amplification by Reversible Exchange. Journal of Physical Chemistry B, 2014, 118, 13882-13889.	1.2	131
130	In Situ and Ex Situ Lowâ€Field NMR Spectroscopy and MRI Endowed by SABRE Hyperpolarization. ChemPhysChem, 2014, 15, 4100-4107.	1.0	58
131	Multidimensional Mapping of Spin-Exchange Optical Pumping in Clinical-Scale Batch-Mode 129Xe Hyperpolarizers. Journal of Physical Chemistry B, 2014, 118, 4809-4816.	1.2	32
132	Sodium 3D COncentration MApping (COMA 3D) using 23Na and proton MRI. Journal of Magnetic Resonance, 2014, 247, 88-95.	1.2	0
133	Temperature-Ramped ¹²⁹Xe Spin-Exchange Optical Pumping. Analytical Chemistry, 2014, 86, 8206-8212.	3.2	37
134	LIGHT-SABRE enables efficient in-magnet catalytic hyperpolarization. Journal of Magnetic Resonance, 2014, 248, 23-26.	1.2	151
135	Parahydrogen Induced Polarization of 1-¹³C-Phospholactate-d₂ for Biomedical Imaging with >30,000,000-fold NMR Signal Enhancement in Water. Analytical Chemistry, 2014, 86, 5601-5605.	3.2	83
136	Longâ€Lived Spin States for Lowâ€Field Hyperpolarized Gas MRI. Chemistry - A European Journal, 2014, 20, 14629-14632.	1.7	65
137	High-Resolution Low-Field Molecular Magnetic Resonance Imaging of Hyperpolarized Liquids. Analytical Chemistry, 2014, 86, 9042-9049.	3.2	39
138	Highâ€Resolution 3D Proton MRI of Hyperpolarized Gas Enabled by Parahydrogen and Rh/TiO₂ Heterogeneous Catalyst. Chemistry - A European Journal, 2014, 20, 11597-11597.	1.7	1
139	Toward hyperpolarized molecular imaging of HIV: synthesis and longitudinal relaxation properties of ¹⁵Nâ€Azidothymidine. Journal of Labelled Compounds and Radiopharmaceuticals, 2014, 57, 621-624.	0.5	9
140	Heterogeneous Solution NMR Signal Amplification by Reversible Exchange. Angewandte Chemie - International Edition, 2014, 53, 7495-7498.	7.2	90
141	XeNA: An automated â€˜open-sourceâ€™ 129Xe hyperpolarizer for clinical use. Magnetic Resonance Imaging, 2014, 32, 541-550.	1.0	57
142	Highâ€Resolution 3D Proton MRI of Hyperpolarized Gas Enabled by Parahydrogen and Rh/TiO₂ Heterogeneous Catalyst. Chemistry - A European Journal, 2014, 20, 11636-11639.	1.7	72
143	Demonstration of Heterogeneous Parahydrogen Induced Polarization Using Hyperpolarized Agent Migration from Dissolved Rh(I) Complex to Gas Phase. Analytical Chemistry, 2014, 86, 6192-6196.	3.2	27
144	Low-field MRI can be more sensitive than high-field MRI. Journal of Magnetic Resonance, 2013, 237, 169-174.	1.2	103

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145	Efficient Transformation of Parahydrogen Spin Order into Heteronuclear Magnetization. Journal of Physical Chemistry B, 2013, 117, 1219-1224.	1.2	51
146	Near-unity nuclear polarization with an open-source ¹²⁹ Xe hyperpolarizer for NMR and MRI. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14150-14155.	3.3	193
147	Synthetic approach for unsaturated precursors for parahydrogen induced polarization of choline and its analogs. Journal of Labelled Compounds and Radiopharmaceuticals, 2013, 56, 655-662.	0.5	9
148	Current and emerging quantitative magnetic resonance imaging methods for assessing and predicting the response of breast cancer to neoadjuvant therapy. Breast Cancer: Targets and Therapy, 2012, 2012, 139.	1.0	20
149	A large volume double channel 1Hâ€“X RF probe for hyperpolarized magnetic resonance at 0.0475T. Journal of Magnetic Resonance, 2012, 220, 94-101.	1.2	27
150	PASADENA Hyperpolarized ¹³C Phospholactate. Journal of the American Chemical Society, 2012, 134, 3957-3960.	6.6	70
151	Parahydrogen-Induced Polarization with a Rh-Based Monodentate Ligand in Water. Journal of Physical Chemistry Letters, 2012, 3, 3281-3285.	2.1	25
152	A pulsed injection parahydrogen generator and techniques for quantifying enrichment. Journal of Magnetic Resonance, 2012, 214, 258-262.	1.2	95
153	In Situ Detection of PHIP at 48 mT: Demonstration Using a Centrally Controlled Polarizer. Journal of the American Chemical Society, 2011, 133, 97-101.	6.6	75
154	Analysis of Cancer Metabolism by Imaging Hyperpolarized Nuclei: Prospects for Translation to Clinical Research. Neoplasia, 2011, 13, 81-97.	2.3	623
155	Parahydrogenâ€induced polarization (PHIP) hyperpolarized MR receptor imaging in vivo: a pilot study of ¹³C imaging of atheroma in mice. NMR in Biomedicine, 2011, 24, 1023-1028.	1.6	116
156	Sodium MRI in a rat migraine model and a NEURON simulation study support a role for sodium in migraine. Cephalalgia, 2011, 31, 1254-1265.	1.8	34
157	Can antimicrobial peptides scavenge around a cell in less than a second?. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 228-234.	1.4	21
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