Simon B Duckett

List of Publications by Year
in descending order

184 papers	8,561 citations	46918 47 h-index	56606 83 g-index
189 all docs	189 docs citations	189 times ranked	3243 citing authors

#	Article	IF	Citations
1	Reversible Interactions with para-Hydrogen Enhance NMR Sensitivity by Polarization Transfer. Science, 2009, 323, 1708-1711.	6.0	761
2	Iridium N-Heterocyclic Carbene Complexes as Efficient Catalysts for Magnetization Transfer from para-Hydrogen. Journal of the American Chemical Society, 2011, 133, 6134-6137.	6.6	318
3	The theory and practice of hyperpolarization in magnetic resonance using parahydrogen. Progress in Nuclear Magnetic Resonance Spectroscopy, 2012, 67, 1-48.	3.9	317
4	Facing and Overcoming Sensitivity Challenges in Biomolecular NMR Spectroscopy. Angewandte Chemie - International Edition, 2015, 54, 9162-9185.	7.2	258
5	Applications of the parahydrogen phenomenon: A chemical perspective. Progress in Nuclear Magnetic Resonance Spectroscopy, 1999, 34, 71-92.	3.9	222
6	Application of Parahydrogen Induced Polarization Techniques in NMR Spectroscopy and Imaging. Accounts of Chemical Research, 2012, 45, 1247-1257.	7.6	198
7	A theoretical basis for spontaneous polarization transfer in non-hydrogenative parahydrogen-induced polarization. Journal of Chemical Physics, 2009, 131, 194505.	1.2	188
8	Observation of New Intermediates in Hydrogenation Catalyzed by Wilkinson's Catalyst, RhCl(PPh3)3, Using Parahydrogen-Induced Polarization. Journal of the American Chemical Society, 1994, 116, 10548-10556.	6.6	170
9	Spontaneous Transfer of Parahydrogen Derived Spin Order to Pyridine at Low Magnetic Field. Journal of the American Chemical Society, 2009, 131, 13362-13368.	6.6	165
10	A hyperpolarized equilibrium for magnetic resonance. Nature Communications, 2013, 4, 2946.	5.8	126
11	Optimization of SABRE for polarization of the tuberculosis drugs pyrazinamide and isoniazid. Journal of Magnetic Resonance, 2013, 237, 73-78.	1.2	122
12	Parahydrogen-based NMR methods as a mechanistic probe in inorganic chemistry. Coordination Chemistry Reviews, 2008, 252, 2278-2291.	9.5	117
13	Delivering strong ¹ H nuclear hyperpolarization levels and long magnetic lifetimes through signal amplification by reversible exchange. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3188-E3194.	3.3	115
14	Manganese(I)â€Catalyzed Câ^'H Activation: The Key Role of a 7â€Membered Manganacycle in Hâ€Transfer and Reductive Elimination. Angewandte Chemie - International Edition, 2016, 55, 12455-12459.	7.2	111
15	Utilization of SABRE-Derived Hyperpolarization To Detect Low-Concentration Analytes via 1D and 2D NMR Methods. Journal of the American Chemical Society, 2012, 134, 12904-12907.	6.6	110
16	Using para hydrogen to hyperpolarize amines, amides, carboxylic acids, alcohols, phosphates, and carbonates. Science Advances, 2018, 4, eaao6250.	4.7	109
17	Toward Biocompatible Nuclear Hyperpolarization Using Signal Amplification by Reversible Exchange: Quantitative in Situ Spectroscopy and High-Field Imaging. Analytical Chemistry, 2014, 86, 1767-1774.	3.2	105
18	Para-Hydrogen Induced Polarization without Incorporation of Para-Hydrogen into the Analyte. Inorganic Chemistry, 2009, 48, 663-670.	1.9	104

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19	Signal Amplification by Reversible Exchange (SABRE): From Discovery to Diagnosis. Angewandte Chemie - International Edition, 2018, 57, 6742-6753.	7.2	101
20	Strategies for the Hyperpolarization of Acetonitrile and Related Ligands by SABRE. Journal of Physical Chemistry B, 2015, 119, 1416-1424.	1.2	87
21	Hyperpolarising Pyruvate through Signal Amplification by Reversible Exchange (SABRE). Angewandte Chemie - International Edition, 2019, 58, 10271-10275.	7.2	87
22	Only para-hydrogen spectroscopy (OPSY), a technique for the selective observation of para-hydrogen enhanced NMR signals. Chemical Communications, 2007, , 1183-1185.	2.2	84
23	Manganese Alkane Complexes: An IR and NMR Spectroscopic Investigation. Journal of the American Chemical Society, 2011, 133, 2303-2310.	6.6	84
24	Hyperpolarisation through reversible interactions with parahydrogen. Catalysis Science and Technology, 2014, 4, 3544-3554.	2.1	84
25	A continuousâ€flow, highâ€throughput, highâ€pressure parahydrogen converter for hyperpolarization in a clinical setting. NMR in Biomedicine, 2013, 26, 124-131.	1.6	83
26	Probing signal amplification by reversible exchange using an NMR flow system. Magnetic Resonance in Chemistry, 2014, 52, 358-369.	1.1	81
27	Exchange Processes in Complexes with Two Ruthenium (Î·2-Silane) Linkages:Â Role of the Secondary Interactions between Silicon and Hydrogen Atoms. Organometallics, 2002, 21, 5347-5357.	1.1	75
28	Preparing High Purity Initial States for Nuclear Magnetic Resonance Quantum Computing. Physical Review Letters, 2004, 93, 040501.	2.9	74
29	Para-hydrogen induced polarisation effects in liquid phase hydrogenations catalysed by supported metal nanoparticles. Dalton Transactions, 2009, , 5074.	1.6	73
30	More than INEPT: parahydrogen and INEPT + give unprecedented resonance enhancement to carbon-13 by direct proton polarization transfer. Journal of the American Chemical Society, 1993, 115, 1156-1157.	6.6	72
31	Hydrogen Activation by an Aromatic Triphosphabenzene. Journal of the American Chemical Society, 2014, 136, 13453-13457.	6.6	71
32	Fine-tuning the efficiency of para-hydrogen-induced hyperpolarization by rational N-heterocyclic carbene design. Nature Communications, 2018, 9, 4251.	5.8	71
33	Applications of the parahydrogen phenomenon in inorganic chemistry. Dalton Transactions, 2004, , 2601.	1.6	70
34	Iridium(III) Hydrido N-Heterocyclic Carbeneâ€“Phosphine Complexes as Catalysts in Magnetization Transfer Reactions. Inorganic Chemistry, 2013, 52, 13453-13461.	1.9	69
35	Platinum Bis(tricyclohexylphosphine) Silyl Hydride Complexes. Organometallics, 2004, 23, 5744-5756.	1.1	68
36	A Model Iridium Hydroformylation System with the Large Bite Angle Ligand Xantphos:â€‰ Reactivity with Parahydrogen and Implications for Hydroformylation Catalysis. Inorganic Chemistry, 2006, 45, 7197-7209.	1.9	67

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37	Improving the Hyperpolarization of ³¹P Nuclei by Synthetic Design. Journal of Physical Chemistry B, 2015, 119, 5020-5027.	1.2	65
38	A para-Hydrogen Investigation of Palladium-Catalyzed Alkyne Hydrogenation. Journal of the American Chemical Society, 2007, 129, 6513-6527.	6.6	60
39	SABRE-Relay: A Versatile Route to Hyperpolarization. Journal of Physical Chemistry Letters, 2018, 9, 1112-1117.	2.1	57
40	The Study of Inorganic Systems by NMR Spectroscopy in Conjunction with Parahydrogenâ€Induced Polarisation. European Journal of Inorganic Chemistry, 2003, 2003, 2901-2912.	1.0	55
41	Manganese(I)â€Catalyzed Câ^'H Activation: The Key Role of a 7â€Membered Manganacycle in Hâ€Transfer and Reductive Elimination. Angewandte Chemie, 2016, 128, 12643-12647.	1.6	54
42	Achieving High Levels of NMRâ€Hyperpolarization in Aqueous Media With Minimal Catalyst Contamination Using SABRE. Chemistry - A European Journal, 2017, 23, 10491-10495.	1.7	54
43	Selective detection of hyperpolarized NMR signals derived from para-hydrogen using the Only Para-hydrogen SpectroscopY (OPSY) approach. Journal of Magnetic Resonance, 2011, 208, 49-57.	1.2	53
44	Direct and indirect hyperpolarisation of amines using parahydrogen. Chemical Science, 2018, 9, 3677-3684.	3.7	53
45	Hyperpolarising Pyruvate through Signal Amplification by Reversible Exchange (SABRE). Angewandte Chemie, 2019, 131, 10377-10381.	1.6	52
46	Long-lived states to sustain SABRE hyperpolarised magnetisation. Physical Chemistry Chemical Physics, 2016, 18, 24905-24911.	1.3	50
47	Observation of H2 oxidative addition to chlorocarbonylbis(triphenylphosphine)rhodium(I) using parahydrogen induced polarization. Journal of the American Chemical Society, 1993, 115, 5292-5293.	6.6	49
48	Utilisation of water soluble iridium catalysts for signal amplification by reversible exchange. Dalton Transactions, 2015, 44, 7870-7880.	1.6	49
49	SABRE hyperpolarization enables high-sensitivity ¹H and ¹³C benchtop NMR spectroscopy. Analyst, The, 2018, 143, 3442-3450.	1.7	49
50	Using signal amplification by reversible exchange (SABRE) to hyperpolarise ¹¹⁹Sn and ²⁹Si NMR nuclei. Chemical Communications, 2016, 52, 14482-14485.	2.2	48
51	Structure and dynamics in metal phosphine complexes using advanced NMR studies with para-hydrogen induced polarisation. Journal of the Chemical Society Dalton Transactions, 1999, , 1429.	1.1	44
52	Photoinduced N2 loss as a route to long-lived organometallic alkane complexes: A time-resolved IR and NMR study. Chemical Science, 2010, 1, 622.	3.7	44
53	Deactivation of signal amplification by reversible exchange catalysis, progress towards in vivo application. Chemical Communications, 2015, 51, 9857-9859.	2.2	44
54	NMR Studies of Ru3(CO)10(PMe2Ph)2and Ru3(CO)10(PPh3)2and Their H2Addition Products:Â Detection of New Isomers with Complex Dynamic Behavior. Journal of the American Chemical Society, 2001, 123, 9760-9768.	6.6	43

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55	Investigating pyridazine and phthalazine exchange in a series of iridium complexes in order to define their role in the catalytic transfer of magnetisation from para-hydrogen. Chemical Science, 2015, 6, 3981-3993.	3.7	43
56	SABRE hyperpolarisation of vitamin B3 as a function of pH. Chemical Science, 2017, 8, 2257-2266.	3.7	43
57	Hydrogenation Studies Involving Halobis(phosphine)â€“Rhodium(i) Dimers: Use of Parahydrogen Induced Polarisation To Detect Species Present at Low Concentration. Chemistry - A European Journal, 2004, 10, 2459-2474.	1.7	42
58	Definitive Evidence for a Pairwise Addition of Hydrogen to a Platinum Bis(phosphine) Complex Using Parahydrogen-Induced Polarization. Organometallics, 1996, 15, 2863-2865.	1.1	41
59	Direct Comparison of Hydrogenation Catalysis by Intact versus Fragmented Triruthenium Clusters. Angewandte Chemie - International Edition, 2001, 40, 3874-3877.	7.2	41
60	Catalytic Hydrogenation by Triruthenium Clusters: A Mechanistic Study with Parahydrogen-Induced Polarization. Chemistry - A European Journal, 2003, 9, 1045-1061.	1.7	41
61	Optimisation of pyruvate hyperpolarisation using SABRE by tuning the active magnetisation transfer catalyst. Catalysis Science and Technology, 2020, 10, 1343-1355.	2.1	41
62	Ruthenium Dihydride Complexes:Â NMR Studies of Intramolecular Isomerization and Fluxionality Including the Detection of Minor Isomers by Parahydrogen-Induced Polarization. Inorganic Chemistry, 2002, 41, 2960-2970.	1.9	40
63	The reaction of M(CO)3(Ph2PCH2CH2PPh2) (M = Fe, Ru) with parahydrogen: probing the electronic structure of reaction intermediates and the internal rearrangement mechanism for the dihydride products. Dalton Transactions, 2004, , 3218-3224.	1.6	39
64	Detection of Intermediates in Cobalt-Catalyzed Hydroformylation Using para-Hydrogen-Induced Polarization. Journal of the American Chemical Society, 2005, 127, 4994-4995.	6.6	39
65	Photochemical Pump and NMR Probe: Chemically Created NMR Coherence on a Microsecond Time Scale. Journal of the American Chemical Society, 2014, 136, 10124-10131.	6.6	39
66	Computational Studies Explain the Importance of Two Different Substituents on the Chelating Bis(amido) Ligand for Transfer Hydrogenation by Bifunctional Cp*Rh(III) Catalysts. Organometallics, 2014, 33, 3433-3442.	1.1	39
67	Reaction Monitoring Using SABRE-Hyperpolarized Benchtop (1 T) NMR Spectroscopy. Analytical Chemistry, 2019, 91, 6695-6701.	3.2	39
68	Detection of Picomole Amounts of Biological Substrates by para-Hydrogen-Enhanced NMR Methods in Conjunction with a Suitable Receptor Complex. Journal of the American Chemical Society, 2007, 129, 11012-11013.	6.6	38
69	Molecular MRI in the Earthâ€™s Magnetic Field Using Continuous Hyperpolarization of a Biomolecule in Water. Journal of Physical Chemistry B, 2016, 120, 5670-5677.	1.2	37
70	Luminescent Iridium(I) Diethyldithiocarbamate Complexes:â€‰ Synthesis, Structure, and Reactivity Including Stereoselective Hydrogen Oxidative Addition. Journal of the American Chemical Society, 1997, 119, 7716-7725.	6.6	36
71	A Hyperpolarizable ¹H Magnetic Resonance Probe for Signal Detection 15â€…Minutes after Spin Polarization Storage. Angewandte Chemie - International Edition, 2016, 55, 15642-15645.	7.2	36
72	Achieving Biocompatible SABRE: An inâ€…vitro Cytotoxicity Study. ChemMedChem, 2018, 13, 352-359.	1.6	36

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73	A Simple Route to Strong Carbonâ€13 NMR Signals Detectable for Several Minutes. Chemistry - A European Journal, 2017, 23, 10496-10500.	1.7	34
74	Direct enhancement of nitrogen-15 targets at high-field by fast ADAPT-SABRE. Journal of Magnetic Resonance, 2017, 285, 55-60.	1.2	34
75	Extending the Scope of ¹⁹F Hyperpolarization through Signal Amplification by Reversible Exchange in MRI and NMR Spectroscopy. ChemistryOpen, 2018, 7, 97-105.	0.9	34
76	Parahydrogenâ€Induced Polarization of Amino Acids. Angewandte Chemie - International Edition, 2021, 60, 23496-23507.	7.2	34
77	Palladium-Catalyzed Hydrogenation:Â Detection of Palladium Hydrides. A Joint Study Using Para-Hydrogen-Enhanced NMR Spectroscopy and Density Functional Theory. Journal of the American Chemical Society, 2006, 128, 9596-9597.	6.6	33
78	Remarkable Levels of ¹⁵N Polarization Delivered through SABRE into Unlabeled Pyridine, Pyrazine, or Metronidazole Enable Single Scan NMR Quantification at the mM Level. Journal of Physical Chemistry B, 2020, 124, 4573-4580.	1.2	33
79	New perspectives in hydroformylation : a para-hydrogen study. Chemical Communications, 2004, , 1826-1827.	2.2	32
80	Observation of New Intermediates in the Reaction of Dihydrogen with Iridium, Rhodium, and Mixed Metal A-Frame Complexes with Parahydrogen-Induced Polarization. Organometallics, 2000, 19, 2985-2993.	1.1	31
81	A combined parahydrogen and theoretical study of H2 activation by 16-electron d8 ruthenium(0) complexes and their subsequent catalytic behaviour. Dalton Transactions, 2004, , 3616.	1.6	31
82	Generation and interrogation of a pure nuclear spin state by parahydrogen-enhanced NMR spectroscopy: a defined initial state for quantum computation. Magnetic Resonance in Chemistry, 2005, 43, 200-208.	1.1	31
83	Quantification of hyperpolarisation efficiency in SABRE and SABRE-Relay enhanced NMR spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 26362-26371.	1.3	31
84	The reaction of an iridium PNP complex with parahydrogen facilitates polarisation transfer without chemical change. Dalton Transactions, 2015, 44, 1077-1083.	1.6	30
85	The use of yttrium in medical imaging and therapy: historical background and future perspectives. Chemical Society Reviews, 2020, 49, 6169-6185.	18.7	30
86	An NMR study of cobalt-catalyzed hydroformylation using para-hydrogen induced polarisation. Dalton Transactions, 2009, , 2496.	1.6	29
87	Dalton communications. Rapid characterisation of rhodium dihydrides by nuclear magnetic resonance spectroscopy using indirect two-dimensional methods and para-hydrogen. Journal of the Chemical Society Dalton Transactions, 1995, , 3427.	1.1	28
88	Detection of Ïƒ-alkane complexes of manganese by NMR and IR spectroscopy in solution: (Î·⁵-C₅H₅)Mn(CO)₂(ethane) and (Î·⁵-C₅H₅)Mn(CO)₂(isopentane). Chemical Science, 2015, 6, 418-424.	3.7	28
89	Harnessing polarisation transfer to indazole and imidazole through signal amplification by reversible exchange to improve their NMR detectability. Magnetic Resonance in Chemistry, 2017, 55, 944-957.	1.1	28
90	A systematic approach to the generation of long-lived metal alkane complexes: combined IR and NMR study of (Tp)Re(CO)2(cyclopentane). Chemical Communications, 2009, , 1401.	2.2	27

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91	Relayed hyperpolarization from para-hydrogen improves the NMR detectability of alcohols. Chemical Science, 2019, 10, 7709-7717.	3.7	27
92	Parahydrogenâ€Induced Hyperpolarization of Gases. Angewandte Chemie - International Edition, 2020, 59, 17788-17797.	7.2	27
93	NMR characterisation of unstable solvent and dihydride complexes generated at low temperature by in-situ UV irradiation. Chemical Communications, 2002, , 2836-2837.	2.2	26
94	Detection and Reactivity of Pd((C8H14)PCH2CH2P(C8H14))(CHPhCH2Ph)(H) as Determined by Parahydrogen-Enhanced NMR Spectroscopy. Journal of the American Chemical Society, 2004, 126, 16708-16709.	6.6	26
95	Coordination Chemistry and Diphenylacetylene Hydrogenation Catalysis of Planar Chiral Ferrocenylphosphane-Thioether Ligands with Cyclooctadieneiridium(I). European Journal of Inorganic Chemistry, 2006, 2006, 1803-1816.	1.0	26
96	Rapid¹³C NMR hyperpolarization delivered frompara-hydrogen enables the low concentration detection and quantification of sugars. Chemical Science, 2019, 10, 10607-10619.	3.7	26
97	Implementation of NMR quantum computation with parahydrogen-derived high-purity quantum states. Physical Review A, 2004, 70, .	1.0	25
98	Dipyridylketone binding and subsequent Câ€“C bond insertion reactions at cyclopentadienylrhodium. Chemical Communications, 2003, , 2332-2333.	2.2	24
99	Creating a hyperpolarised pseudo singlet state through polarisation transfer from parahydrogen under SABRE. Chemical Communications, 2016, 52, 7842-7845.	2.2	24
100	Unlocking a Diazirine Long-Lived Nuclear Singlet State via Photochemistry: NMR Detection and Lifetime of an Unstabilized Diazo-Compound. Journal of the American Chemical Society, 2018, 140, 16855-16864.	6.6	24
101	Characterisation and kinetic behaviour of H2Rh(PPh3)2(Î¼-Cl)2Rh(PPh3)(alkene) and related binuclear complexes detected during hydrogenation studies involving parahydrogen induced polarisation. Chemical Communications, 2000, , 685-686.	2.2	23
102	A DFT Study on the Mechanism of Palladium-Catalyzed Alkyne Hydrogenation: Neutral versus Cationic Pathways. Organometallics, 2008, 27, 43-52.	1.1	23
103	Catalytic Transfer of Magnetism Using a Neutral Iridium Phenoxide Complex. Organometallics, 2015, 34, 2997-3006.	1.1	23
104	New products in an old reaction: isomeric products from H2 addition to Vaskaâ€™s complex and its analogues. Chemical Communications, 1999, , 1717-1718.	2.2	22
105	Harnessing asymmetric N-heterocyclic carbene ligands to optimise SABRE hyperpolarisation. Catalysis Science and Technology, 2018, 8, 4925-4933.	2.1	22
106	NMR studies on ligand exchange at [IrH2Cl(CO)(PPh3)2] and [IrH2Cl(PPh3)3] by para-hydrogen induced polarisation. Chemical Communications, 1996, , 2395.	2.2	21
107	New insights into catalytic hydrogenation by phosphido-substituted triruthenium clusters: confirmation of intact cluster catalysis by parahydrogen NMR. Dalton Transactions, 2004, , 2108-2114.	1.6	21
108	Photochemical-mediated solid-state [2+2]-cycloaddition reactions of an unsymmetrical dibenzylidene acetone (monothiophos-dba). CrystEngComm, 2012, 14, 5564.	1.3	21

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109	SignalverstÃrkung durch reversiblen Austausch (SABRE): von der Entdeckung zur diagnostischen Anwendung. Angewandte Chemie, 2018, 130, 6854-6866.	1.6	21
110	Equilibria between isomers of ruthenium dihydride complexes: detection of minor isomers by parahydrogen induced polarisation. Chemical Communications, 1996, , 383.	2.2	20
111	Photochemical Isomerization of N-Heterocyclic Carbene Ruthenium Hydride Complexes:Â In situ Photolysis, Parahydrogen, and Computational Studies. Journal of the American Chemical Society, 2006, 128, 7452-7453.	6.6	20
112	Palladium catalysed alkyne hydrogenation and oligomerisation: a parahydrogen based NMR investigation. Dalton Transactions, 2008, , 4270.	1.6	20
113	A parahydrogen based NMR study of Pt catalysed alkyne hydrogenation. Dalton Transactions, 2010, 39, 3495.	1.6	20
114	Using coligands to gain mechanistic insight into iridium complexes hyperpolarized with para-hydrogen. Chemical Science, 2019, 10, 5235-5245.	3.7	20
115	Activation of H2 by halogenocarbonylbis(phosphine)rhodium(I) complexes. The use of parahydrogen induced polarisation to detect species present at low concentration. Journal of the Chemical Society Dalton Transactions, 1999, , 3949-3960.	1.1	19
116	NMR detection of thermal and photochemical dihydrogen addition products of mono- and tri-nuclear ruthenium complexes containing carbonyl and triphenylphosphine ligands through para-hydrogen induced polarisation. Chemical Communications, 1999, , 1223-1224.	2.2	19
117	Nucleophilic attack on Î·3-allyl and Î·2-tetrahydroborate complexes of ruthenium(ii). Dalton Transactions, 2003, , 2603-2614.	1.6	19
118	Achieving High ¹H Nuclear Hyperpolarization Levels with Long Lifetimes in a Range of Tuberculosis Drug Scaffolds. Chemistry - A European Journal, 2017, 23, 16990-16997.	1.7	18
119	A simple handâ€held magnet array for efficient and reproducible <scp>SABRE</scp> hyperpolarisation using manual sample shaking. Magnetic Resonance in Chemistry, 2018, 56, 641-650.	1.1	18
120	Mechanistic insight into novel sulfoxide containing SABRE polarisation transfer catalysts. Dalton Transactions, 2019, 48, 15198-15206.	1.6	18
121	Parahydrogen enhanced NMR studies on thermally and photochemically generated products from [IrH3(CO)(PPh3)2]. Chemical Communications, 1998, , 923-924.	2.2	17
122	Parahydrogen studies of H2addition to Ir(i) complexes containing chiral phosphineâ€“thioether ligands: implications for catalysis. Dalton Transactions, 2006, , 3350-3359.	1.6	17
123	Iridium Î±â€Carboxyimine Complexes Hyperpolarized with paraâ€Hydrogen Exist in Nuclear Singlet States before Conversion into Iridium Carbonates. ChemPhysChem, 2019, 20, 241-245.	1.0	17
124	Bridging the Gap from Mononuclear Pd^{II} Precatalysts to Pd Nanoparticles: Identification of Intermediate Linear [Pd₃(XPh₃)₄]²⁺ Clusters as Catalytic Species for Suzukiâ€“Miyaura Couplings (X = P, As). Organometallics, 2021, 40, 3560-3570.	1.1	17
125	Activation of H2 by halocarbonyl bis-phosphine and bis-arsine iridium(i) complexes. The use of parahydrogen induced polarisation to detect species present at low concentration and investigate their reactivityBased on the presentation given at Dalton Discussion No. 4, 10â€“13th January 2002, Kloster Banz, Germany.. Dalton Transactions RSC, 2002, , 743-751.	2.3	16
126	Contrasting photochemical and thermal reactivity of Ru(CO)2(PPh3)(dppe) towards hydrogen rationalised by parahydrogen NMR and DFT studies. Dalton Transactions, 2006, , 2072.	1.6	16

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127	Improving NMR and MRI Sensitivity with Parahydrogen. Topics in Current Chemistry, 2012, 338, 75-103.	4.0	16
128	Photochemical pump and NMR probe to monitor the formation and kinetics of hyperpolarized metal dihydrides. Chemical Science, 2016, 7, 7087-7093.	3.7	16
129	A Hyperpolarizable ¹H Magnetic Resonance Probe for Signal Detection 15â€...Minutes after Spin Polarization Storage. Angewandte Chemie, 2016, 128, 15871-15874.	1.6	16
130	Reversible photo-isomerization of cis-[Pd(L-Î²S,O)₂] (HL =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 637 T trans-[Pd(L-Î²S,O)₂] and the unprecedented formation of trans-[Pd(L-Î²S,N)₂] in solution. Dalton Transactions, 2019, 48, 17241-17251.	1.6	16
131	Parahydrogen derived illumination of pyridine based coordination products obtained from reactions involving rhodium phosphine complexes. Dalton Transactions, 2005, , 3773.	1.6	15
132	Using SABRE Hyperpolarized ¹³C NMR Spectroscopy to Interrogate Organic Transformations of Pyruvate. Analytical Chemistry, 2020, 92, 9095-9103.	3.2	15
133	Diastereoselective Oxidative Addition of Dihydrogen to IrI(CO)((R)-BINAP) and [Ir(CO)2((R)-BINAP)][SbF6]. Inorganic Chemistry, 2007, 46, 1196-1204.	1.9	14
134	Iridium Cyclooctene Complex That Forms a Hyperpolarization Transfer Catalyst before Converting to a Binuclear Câ€“H Bond Activation Product Responsible for Hydrogen Isotope Exchange. Inorganic Chemistry, 2016, 55, 11639-11643.	1.9	14
135	Zintl cluster supported low coordinate Rh(<scp>i</scp>) centers for catalytic H/D exchange between H₂and D₂. Chemical Science, 2022, 13, 7626-7633.	3.7	14
136	Activation of H2by chlorocarbonylbis(trimethylphosphine)rhodium(I) labilizes CO and produces the new binuclear complex H(Cl)Rh(PMe3)2(Âµ-H)(Âµ-Cl)RH(PMe3)(CO). Journal of the Chemical Society Chemical Communications, 1993, , 1185-1187.	2.0	13
137	Low temperature in situ UV irradiation of [(Î·5-C5H5)Co(C2H4)2] in the NMR probe: formation of Co(iii) silyl hydride complexes. Dalton Transactions, 2007, , 2993-2996.	1.6	13
138	Photochemical studies of (Î·⁵-C₅H₅)Ru(PPh₃)₂Cl and (Î·⁵-C₅H₅)Ru(PPh₃)₂Me: formation of Siâ€“H and Câ€“H bond activation products. Dalton Transactions, 2014, 43, 1162-1171.	1.6	13
139	Using ²H labelling to improve the NMR detectability of pyridine and its derivatives by SABRE. Magnetic Resonance in Chemistry, 2018, 56, 663-671.	1.1	13
140	Pharmacokinetics of the SABRE agent 4,6-d2-nicotinamide and also nicotinamide in rats following oral and intravenous administration. European Journal of Pharmaceutical Sciences, 2019, 135, 32-37.	1.9	13
141	Kinetic and mechanistic examination of NBu4[IrH2(CO)2I2] and NBu4[RhH2(CO)2I2] via para-hydrogen enhanced NMR spectroscopy. Chemical Communications, 1999, , 889-890.	2.2	12
142	The Detection and Reactivity of Silanols and Silanes Using Hyperpolarized 29 Si Nuclear Magnetic Resonance. Angewandte Chemie - International Edition, 2020, 59, 2710-2714.	7.2	12
143	Reaction of iodocarbonylbis(trimethylphosphine)rhodium(I) with parahydrogen leads to the observation of five characterisable H2 addition products. Journal of the Chemical Society Dalton Transactions, 1998, , 3363-3366.	1.1	11
144	A Parahydrogen Study of Catalytic Hydrogenation by Diphosphane-Substituted Triruthenium Clusters. European Journal of Inorganic Chemistry, 2004, 2004, 4381-4387.	1.0	11

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145	Use of the tetrahydroborate ligand as â€œgate-keeperâ€• and protected hydride ligand: preparation and study of alkyl hydride and acyl hydride complexes of ruthenium(ii). Dalton Transactions, 2006, , 2661-2670.	1.6	11
146	Solvent responsive catalyst improves NMR sensitivity via efficient magnetisation transfer. Chemical Communications, 2016, 52, 8467-8470.	2.2	11
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