

# Sami Jannin

## List of Publications by Year in descending order

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78  
papers

3,441  
citations

109137

35  
h-index

149479

56  
g-index

85  
all docs

85  
docs citations

85  
times ranked

1671  
citing authors

#	ARTICLE	IF	CITATIONS
1	Simple and cost-effective cross-polarization experiments under dissolution-dynamic nuclear polarization conditions with a 3D-printed $^1\text{H}$ - $^{13}\text{C}$ background-free radiofrequency coil. <i>Journal of Magnetic Resonance Open</i> , 2022, 10-11, 100033.	0.5	3
2	Frozen water NMR lineshape analysis enables absolute polarization quantification. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 5956-5964.	1.3	3
3	Pulse sequence and sample formulation optimization for dipolar order mediated $^1\text{H}$ - $^{13}\text{C}$ cross-polarization. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 9457-9465.	1.3	6
4	Direct observation of hyperpolarization breaking through the spin diffusion barrier. <i>Science Advances</i> , 2021, 7, .	4.7	26
5	Boosting dissolution-dynamic nuclear polarization by multiple-step dipolar order mediated $^1\text{H}$ - $^{13}\text{C}$ cross-polarization. <i>Journal of Magnetic Resonance Open</i> , 2021, 8-9, 100018.	0.5	3
6	Solid-state $^1\text{H}$ spin polarimetry by $^{13}\text{C}$ - $^1\text{H}$ nuclear magnetic resonance. <i>Magnetic Resonance</i> , 2021, 2, 643-652.	0.8	7
7	Porous functionalized polymers enable generating and transporting hyperpolarized mixtures of metabolites. <i>Nature Communications</i> , 2021, 12, 4695.	5.8	23
8	Practical dissolution dynamic nuclear polarization. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2021, 126-127, 59-100.	3.9	30
9	An automated system for fast transfer and injection of hyperpolarized solutions. <i>Journal of Magnetic Resonance Open</i> , 2021, 8-9, 100017.	0.5	14
10	Protonation tuned dipolar order mediated $^1\text{H}$ - $^{13}\text{C}$ cross-polarization for dissolution-dynamic nuclear polarization experiments. <i>Solid State Nuclear Magnetic Resonance</i> , 2021, 116, 101762.	1.5	2
11	Sample formulations for dissolution dynamic nuclear polarization. <i>Chemical Physics Reviews</i> , 2021, 2, 041308.	2.6	4
12	Hyperpolarized NMR Metabolomics at Natural $^{13}\text{C}$ Abundance. <i>Analytical Chemistry</i> , 2020, 92, 14867-14871.	3.2	44
13	Dipolar order mediated $^1\text{H}$ - $^{13}\text{C}$ cross-polarization for dissolution-dynamic nuclear polarization. <i>Magnetic Resonance</i> , 2020, 1, 89-96.	0.8	9
14	Transport of hyperpolarized samples in dissolution-DNP experiments. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 13696-13705.	1.3	16
15	Application and methodology of dissolution dynamic nuclear polarization in physical, chemical and biological contexts. <i>Journal of Magnetic Resonance</i> , 2019, 305, 41-50.	1.2	76
16	Tailored Microstructured Hyperpolarizing Matrices for Optimal Magnetic Resonance Imaging. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7453-7457.	7.2	24
17	Dynamic Nuclear Polarization Opens New Perspectives for NMR Spectroscopy in Analytical Chemistry. <i>Analytical Chemistry</i> , 2018, 90, 3639-3650.	3.2	67
18	Hyperpolarized long-lived nuclear spin states in monodeuterated methyl groups. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 9755-9759.	1.3	23

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19	Tailored Microstructured Hyperpolarizing Matrices for Optimal Magnetic Resonance Imaging. <i>Angewandte Chemie</i> , 2018, 130, 7575-7579.	1.6	13
20	Overhauser effects in non-conducting solids at 1.2â€K. <i>Journal of Magnetic Resonance</i> , 2018, 286, 138-142.	1.2	22
21	Hyperpolarized NMR Spectroscopy: <i>d</i> -DNP, PHIP, and SABRE Techniques. <i>Chemistry - an Asian Journal</i> , 2018, 13, 1857-1871.	1.7	180
22	A cryogen-consumption-free system for dynamic nuclear polarization at 9.4â€T. <i>Journal of Magnetic Resonance</i> , 2018, 294, 115-121.	1.2	34
23	Transportable hyperpolarized metabolites. <i>Nature Communications</i> , 2017, 8, 13975.	5.8	86
24	Hyperpolarization of nitrogen-15 nuclei by cross polarization and dissolution dynamic nuclear polarization. <i>Review of Scientific Instruments</i> , 2017, 88, 015109.	0.6	19
25	Tailored Polarizing Hybrid Solids with Nitroxide Radicals Localized in Mesostructured Silica Walls. <i>Helvetica Chimica Acta</i> , 2017, 100, e1700101.	1.0	24
26	Phenylazide Hybridâ€Silica â€ Polarization Platform for Dynamic Nuclear Polarization at Cryogenic Temperatures. <i>Helvetica Chimica Acta</i> , 2017, 100, e1600122.	1.0	6
27	Dynamic Nuclear Polarization of Long-Lived Nuclear Spin States in Methyl Groups. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3549-3555.	2.1	34
28	Dissolution dynamic nuclear polarization of deuterated molecules enhanced by cross-polarization. <i>Journal of Chemical Physics</i> , 2016, 145, 194203.	1.2	12
29	Homonuclear decoupling for spectral simplification of carbon-13 enriched molecules in solution-state NMR enhanced by dissolution DNP. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11480-11487.	1.3	6
30	Hyperpolarization of Frozen Hydrocarbon Gases by Dynamic Nuclear Polarization at 1.2 K. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3235-3239.	2.1	18
31	Cubic three-dimensional hybrid silica solids for nuclear hyperpolarization. <i>Chemical Science</i> , 2016, 7, 6846-6850.	3.7	19
32	Filterable Agents for Hyperpolarization of Water, Metabolites, and Proteins. <i>Chemistry - A European Journal</i> , 2016, 22, 14696-14700.	1.7	31
33	Microwave-gated dynamic nuclear polarization. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 30530-30535.	1.3	42
34	Highly Repeatable Dissolution Dynamic Nuclear Polarization for Heteronuclear NMR Metabolomics. <i>Analytical Chemistry</i> , 2016, 88, 6179-6183.	3.2	57
35	Optimizing dissolution dynamic nuclear polarization. <i>Journal of Magnetic Resonance</i> , 2016, 264, 13-21.	1.2	30
36	Spin Noise Detection of Nuclear Hyperpolarization at 1.2â€...K. <i>ChemPhysChem</i> , 2015, 16, 3859-3864.	1.0	8

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37	Hyperpolarized <i>para</i> -Ethanol. Journal of Physical Chemistry B, 2015, 119, 4048-4052.	1.2	26
38	A magnetic tunnel to shelter hyperpolarized fluids. Review of Scientific Instruments, 2015, 86, 024101.	0.6	77
39	Hyperpolarized NMR of plant and cancer cell extracts at natural abundance. Analyst, The, 2015, 140, 5860-5863.	1.7	87
40	Hyperpolarized Water to Study Protein-Ligand Interactions. Journal of Physical Chemistry Letters, 2015, 6, 1674-1678.	2.1	62
41	Measuring absolute spin polarization in dissolution-DNP by Spin Polarimetry Magnetic Resonance (SPY-MR). Journal of Magnetic Resonance, 2015, 260, 127-135.	1.2	18
42	Challenges in preparing, preserving and detecting <i>para</i> -water in bulk: overcoming proton exchange and other hurdles. Physical Chemistry Chemical Physics, 2015, 17, 26819-26827.	1.3	29
43	Cross polarization from <sup>1</sup> H to quadrupolar <sup>6</sup> Li nuclei for dissolution DNP. Physical Chemistry Chemical Physics, 2014, 16, 24813-24817.	1.3	8
44	Microwave frequency modulation to enhance Dissolution Dynamic Nuclear Polarization. Chemical Physics Letters, 2014, 602, 63-67.	1.2	81
45	Hybrid polarizing solids for pure hyperpolarized liquids through dissolution dynamic nuclear polarization. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14693-14697.	3.3	93
46	Hyperpolarization of Deuterated Metabolites via Remote Cross-Polarization and Dissolution Dynamic Nuclear Polarization. Journal of Physical Chemistry B, 2014, 118, 1411-1415.	1.2	48
47	Toward Quantitative Measurements of Enzyme Kinetics by Dissolution Dynamic Nuclear Polarization. Journal of Physical Chemistry Letters, 2014, 5, 3290-3295.	2.1	36
48	Drug Screening Boosted by Hyperpolarized Long-Lived States in NMR. ChemMedChem, 2014, 9, 2509-2515.	1.6	63
49	Long-Lived States of Magnetically Equivalent Spins Populated by Dissolution-DNP and Revealed by Enzymatic Reactions. Chemistry - A European Journal, 2014, 20, 17113-17118.	1.7	50
50	Boosting Dissolution Dynamic Nuclear Polarization by Cross Polarization. Journal of Physical Chemistry Letters, 2013, 4, 111-114.	2.1	116
51	An apparatus for pulsed ESR and DNP experiments using optically excited triplet states down to liquid helium temperatures. Journal of Magnetic Resonance, 2013, 234, 58-66.	1.2	21
52	Ultrahigh-Resolution Magnetic Resonance in Inhomogeneous Magnetic Fields: Two-Dimensional Long-Lived-Coherence Correlation Spectroscopy. Physical Review Letters, 2012, 109, 047602.	2.9	21
53	Dynamic Nuclear Polarization and Other Magnetic Ideas at EPFL. Chimia, 2012, 66, 734.	0.3	3
54	High field dynamic nuclear polarization at 6.7T: Carbon-13 polarization above 70% within 20min. Chemical Physics Letters, 2012, 549, 99-102.	1.2	107

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55	Cross Polarization for Dissolution Dynamic Nuclear Polarization Experiments at Readily Accessible Temperatures 1.2&lt;math>\text{\AA}</math>&lt;math>\text{\AA}</math>. Applied Magnetic Resonance, 2012, 43, 107-117.	0.6	48
56	Dynamic Nuclear Polarization by Thermal Mixing Under Partial Saturation. Applied Magnetic Resonance, 2012, 43, 59-68.	0.6	44
57	Ultra High-Resolution NMR: Sustained Induction Decays of Long-Lived Coherences. Journal of the American Chemical Society, 2011, 133, 15644-15649.	6.6	22
58	Extending Timescales and Narrowing Linewidths in NMR. Chimia, 2011, 65, 652.	0.3	0
59	NMR of Insensitive Nuclei Enhanced by Dynamic Nuclear Polarization. Chimia, 2011, 65, 260-263.	0.3	8
60	Three-field NMR to preserve hyperpolarized proton magnetization as long-lived states in moderate magnetic fields. Chemical Physics Letters, 2011, 512, 151-154.	1.2	33
61	Low-temperature cross polarization in view of enhancing dissolution Dynamic Nuclear Polarization in NMR. Chemical Physics Letters, 2011, 517, 234-236.	1.2	62
62	A spinning thermometer to monitor microwave heating and glass transitions in dynamic nuclear polarization. Magnetic Resonance in Chemistry, 2011, 49, 689-692.	1.1	10
63	Fractional Spin&lt;sup>1</sup>-Labeling of Polymers for Enhancing NMR Sensitivity by Solvent&lt;sup>1</sup>-Free Dynamic Nuclear Polarization. ChemPhysChem, 2011, 12, 2929-2932.	1.0	67
64	Relaxometry of insensitive nuclei: Optimizing dissolution dynamic nuclear polarization. Journal of Magnetic Resonance, 2011, 210, 137-140.	1.2	47
65	Scavenging Free Radicals To Preserve Enhancement and Extend Relaxation Times in NMR using Dynamic Nuclear Polarization. Angewandte Chemie - International Edition, 2010, 49, 6182-6185.	7.2	89
66	Hyperpolarizing Gases via Dynamic Nuclear Polarization and Sublimation. Physical Review Letters, 2010, 105, 018104.	2.9	35
67	Kinetics of Yttrium&lt;sup>3</sup>-Ligand Complexation Monitored Using Hyperpolarized <sup>89</sup>Y as a Model for Gadolinium in Contrast Agents. Journal of the American Chemical Society, 2010, 132, 5006-5007.	6.6	48
68	Proton hyperpolarisation preserved in long-lived states. Chemical Communications, 2010, 46, 8192.	2.2	55
69	Feasibility of in vivo <sup>15</sup> N MRS detection of hyperpolarized <sup>15</sup> N labeled choline in rats. Physical Chemistry Chemical Physics, 2010, 12, 5818.	1.3	96
70	Long-lived states to sustain hyperpolarized magnetization. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18469-18473.	3.3	173
71	Hyperpolarized lithium&lt;sup>6</sup> as a sensor of nanomolar contrast agents. Magnetic Resonance in Medicine, 2009, 61, 1489-1493.	1.9	53
72	Proton NMR of <sup>15</sup>-Choline Metabolites Enhanced by Dynamic Nuclear Polarization. Journal of the American Chemical Society, 2009, 131, 16014-16015.	6.6	107

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73	Producing over 100ml of highly concentrated hyperpolarized solution by means of dissolution DNP. Journal of Magnetic Resonance, 2008, 194, 152-155.	1.2	39
74	Principles of Operation of a DNP Prepolarizer Coupled to a Rodent MRI Scanner. Applied Magnetic Resonance, 2008, 34, 313-319.	0.6	40
75	A 140GHz prepolarizer for dissolution dynamic nuclear polarization. Journal of Chemical Physics, 2008, 128, 241102.	1.2	98
76	Dynamic nuclear polarization of small labelled molecules in frozen water-alcohol solutions. Journal Physics D: Applied Physics, 2008, 41, 155506.	1.3	90
77	Design and performance of a DNP prepolarizer coupled to a rodent MRI scanner. Concepts in Magnetic Resonance Part B, 2007, 31B, 255-269.	0.3	172
78	Magnetotransport properties depending on the nanostructure of Fe <sub>3</sub> O <sub>4</sub> nanowires. Journal of Physics Condensed Matter, 2006, 18, 6085-6093.	0.7	10