

Alexander B Barnes

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8975810/publications.pdf>

Version: 2024-02-01

44
papers

1,807
citations

361413

20
h-index

265206

42
g-index

44
all docs

44
docs citations

44
times ranked

1278
citing authors

#	ARTICLE	IF	CITATIONS
1	The Clebschâ€“Gordan Coefficients and Their Application to Magnetic Resonance. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2022, 2022, 1-18.	0.5	0
2	Pneumatic angle adjustment for magic angle spinning spherical rotors. Journal of Magnetic Resonance Open, 2021, 6-7, 100014.	1.1	1
3	Two millimeter diameter spherical rotors spinning at 68 kHz for MAS NMR. Journal of Magnetic Resonance Open, 2021, 8-9, 100015.	1.1	3
4	Setting the magic angle using single crystal sapphire rotors. Journal of Magnetic Resonance Open, 2021, 8-9, 100019.	1.1	3
5	Biomolecular Perturbations in In-Cell Dynamic Nuclear Polarization Experiments. Frontiers in Molecular Biosciences, 2021, 8, 743829.	3.5	10
6	In Situ Detection of Endogenous HIV Activation by Dynamic Nuclear Polarization NMR and Flow Cytometry. International Journal of Molecular Sciences, 2020, 21, 4649.	4.1	13
7	Dynamic Nuclear Polarization with Electron Decoupling in Intact Human Cells and Cell Lysates. Journal of Physical Chemistry B, 2020, 124, 2323-2330.	2.6	16
8	Characterization of frequency-chirped dynamic nuclear polarization in rotating solids. Journal of Magnetic Resonance, 2020, 313, 106702.	2.1	8
9	Highly stable magic angle spinning spherical rotors. Magnetic Resonance, 2020, 1, 97-103.	1.9	8
10	Perspectives on microwave coupling into cylindrical and spherical rotors with dielectric lenses for magic angle spinning dynamic nuclear polarization. Journal of Magnetic Resonance, 2019, 308, 106518.	2.1	6
11	Fast electron paramagnetic resonance magic angle spinning simulations using analytical powder averaging techniques. Journal of Chemical Physics, 2019, 151, 114107.	3.0	3
12	Frequency-chirped dynamic nuclear polarization with magic angle spinning using a frequency-agile gyrotron. Journal of Magnetic Resonance, 2019, 308, 106586.	2.1	18
13	Sensitivity analysis of magic angle spinning dynamic nuclear polarization below 6â€“K. Journal of Magnetic Resonance, 2019, 305, 51-57.	2.1	7
14	Electron Decoupling with Chirped Microwave Pulses for Rapid Signal Acquisition and Electron Saturation Recovery. Angewandte Chemie - International Edition, 2019, 58, 7259-7262.	13.8	11
15	Four millimeter spherical rotors spinning at 28â€“kHz with double-saddle coils for cross polarization NMR. Journal of Magnetic Resonance, 2019, 303, 1-6.	2.1	21
16	Electron Decoupling with Chirped Microwave Pulses for Rapid Signal Acquisition and Electron Saturation Recovery. Angewandte Chemie, 2019, 131, 7337-7340.	2.0	4
17	Magic angle spinning NMR with metallized rotors as cylindrical microwave resonators. Magnetic Resonance in Chemistry, 2018, 56, 831-835.	1.9	9
18	Frequency-agile gyrotron for electron decoupling and pulsed dynamic nuclear polarization. Journal of Magnetic Resonance, 2018, 289, 45-54.	2.1	47

#	ARTICLE	IF	CITATIONS
19	REDOR NMR Reveals Multiple Conformers for a Protein Kinase C Ligand in a Membrane Environment. ACS Central Science, 2018, 4, 89-96.	11.3	28
20	Magic angle spinning NMR below 6â€°K with a computational fluid dynamics analysis of fluid flow and temperature gradients. Journal of Magnetic Resonance, 2018, 286, 1-9.	2.1	32
21	A versatile custom cryostat for dynamic nuclear polarization supports multiple cryogenic magic angle spinning transmission line probes. Journal of Magnetic Resonance, 2018, 297, 23-32.	2.1	15
22	Magic angle spinning spheres. Science Advances, 2018, 4, eaau1540.	10.3	40
23	Pulsed Electron Decoupling and Strategies for Time Domain Dynamic Nuclear Polarization with Magic Angle Spinning. Journal of Physical Chemistry Letters, 2018, 9, 5539-5547.	4.6	17
24	Electron decoupling with cross polarization and dynamic nuclear polarization below 6â€°K. Journal of Magnetic Resonance, 2018, 295, 1-5.	2.1	12
25	Dynamic Nuclear Polarization Nuclear Magnetic Resonance in Human Cells Using Fluorescent Polarizing Agents. Biochemistry, 2018, 57, 4741-4746.	2.5	58
26	Electron Decoupling with Dynamic Nuclear Polarization in Rotating Solids. Journal of the American Chemical Society, 2017, 139, 6310-6313.	13.7	57
27	Peptide and Protein Dynamics and Low-Temperature/DNP Magic Angle Spinning NMR. Journal of Physical Chemistry B, 2017, 121, 4997-5006.	2.6	60
28	Instrumentation for cryogenic magic angle spinning dynamic nuclear polarization using 90 L of liquid nitrogen per day. Journal of Magnetic Resonance, 2017, 283, 71-78.	2.1	14
29	Combinations of isoform-targeted histone deacetylase inhibitors and bryostatin analogues display remarkable potency to activate latent HIV without global T-cell activation. Scientific Reports, 2017, 7, 7456.	3.3	32
30	Frequency swept microwaves for hyperfine decoupling and time domain dynamic nuclear polarization. Solid State Nuclear Magnetic Resonance, 2015, 72, 79-89.	2.3	36
31	Dynamic Nuclear Polarization Study of Inhibitor Binding to the M2 _{18â€°60} Proton Transporter from Influenza A. Biochemistry, 2013, 52, 2774-2782.	2.5	66
32	Solid effect dynamic nuclear polarization and polarization pathways. Journal of Chemical Physics, 2012, 136, 015101.	3.0	99
33	A 250 GHz gyrotron with a 3 GHz tuning bandwidth for dynamic nuclear polarization. Journal of Magnetic Resonance, 2012, 221, 147-153.	2.1	87
34	Dynamic nuclear polarization at 700MHz/460GHz. Journal of Magnetic Resonance, 2012, 224, 1-7.	2.1	85
35	330 GHz helically corrugated waveguide. , 2011, , .		4
36	High-Field Dynamic Nuclear Polarization with High-Spin Transition Metal Ions. Journal of the American Chemical Society, 2011, 133, 5648-5651.	13.7	119

#	ARTICLE	IF	CITATIONS
37	THz Dynamic Nuclear Polarization NMR. IEEE Transactions on Terahertz Science and Technology, 2011, 1, 145-163.	3.1	161
38	Microwave field distribution in a magic angle spinning dynamic nuclear polarization NMR probe. Journal of Magnetic Resonance, 2011, 210, 16-23.	2.1	73
39	Continuous-Wave Operation of a Frequency-Tunable 460-GHz Second-Harmonic Gyrotron for Enhanced Nuclear Magnetic Resonance. IEEE Transactions on Plasma Science, 2010, 38, 1150-1159.	1.3	216
40	Resolution and polarization distribution in cryogenic DNP/MAS experiments. Physical Chemistry Chemical Physics, 2010, 12, 5861.	2.8	87
41	Continuous-Wave Operation of a Frequency-Tunable 460-GHz Second-Harmonic Gyrotron for Enhanced Nuclear Magnetic Resonance. IEEE Transactions on Electron Devices, 2010, 38, 1150-1159.	3.0	10
42	Cryogenic sample exchange NMR probe for magic angle spinning dynamic nuclear polarization. Journal of Magnetic Resonance, 2009, 198, 261-270.	2.1	108
43	High-resolution solid-state NMR structure of Alanyl-Prolyl-Glycine. Journal of Magnetic Resonance, 2009, 200, 95-100.	2.1	11
44	Solid-State Photodimerization Kinetics of $\hat{1}\pm$ -trans-Cinnamic Acid to $\hat{1}\pm$ -Truxillic Acid Studied via Solid-State NMR. Journal of Physical Chemistry B, 2006, 110, 6270-6273.	2.6	92