

Amir Goldbourt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5892613/publications.pdf>

Version: 2024-02-01

72
papers

2,053
citations

218677

26
h-index

254184

43
g-index

82
all docs

82
docs citations

82
times ranked

1860
citing authors

#	ARTICLE	IF	CITATIONS
1	Sensitivity enhancement of the MQMAS NMR experiment by fast amplitude modulation of the pulses. <i>Chemical Physics Letters</i> , 1999, 307, 41-47.	2.6	213
2	Filamentous Phage Studied by Magic-Angle Spinning NMR: \hat{A} Resonance Assignment and Secondary Structure of the Coat Protein in Pf1. <i>Journal of the American Chemical Society</i> , 2007, 129, 2338-2344.	13.7	97
3	The NMR "Rosetta capsid model of M13 bacteriophage reveals a quadrupled hydrophobic packing epitope. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 971-976.	7.1	91
4	Fast radio-frequency amplitude modulation in multiple-quantum magic-angle-spinning nuclear magnetic resonance: Theory and experiments. <i>Journal of Chemical Physics</i> , 2000, 112, 2377-2391.	3.0	90
5	Chemical Shifts for the Unusual DNA Structure in Pf1 Bacteriophage from Dynamic-Nuclear-Polarization-Enhanced Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2011, 133, 20208-20217.	13.7	89
6	Magic Angle Spinning NMR Spectroscopy: A Versatile Technique for Structural and Dynamic Analysis of Solid-Phase Systems. <i>Analytical Chemistry</i> , 2015, 87, 5458-5469.	6.5	86
7	Improvement of hydrothermal stability of Pt/SAPO-11 catalyst in hydrodeoxygenation "isomerization" aromatization of vegetable oil. <i>Journal of Catalysis</i> , 2015, 332, 164-176.	6.2	72
8	Enhanced conversion of triple to single-quantum coherence in the triple-quantum MAS NMR spectroscopy of spin-5/2 nuclei. <i>Chemical Physics Letters</i> , 2000, 320, 448-456.	2.6	65
9	Interatomic Distance Measurement in Solid-State NMR between a Spin-1/2 and a Spin-5/2 Using a Universal REAPDOR Curve. <i>Journal of the American Chemical Society</i> , 2003, 125, 11194-11195.	13.7	61
10	Multiple-Quantum Magic-Angle Spinning: High-Resolution Solid-State NMR of Half-Integer Spin Quadrupolar Nuclei. <i>Annual Reports on NMR Spectroscopy</i> , 2004, 54, 81-153.	1.5	50
11	Phase-modulated LA-REDOR: A robust, accurate and efficient solid-state NMR technique for distance measurements between a spin-1/2 and a quadrupole spin. <i>Journal of Magnetic Resonance</i> , 2014, 244, 107-113.	2.1	49
12	Selective Synthesis of a Salt and a Cocrystal of the Ethionamide "Salicylic Acid System. <i>Crystal Growth and Design</i> , 2020, 20, 906-915.	3.0	49
13	Internuclear Distance Determination of S=1, I=1/2 Spin Pairs Using REAPDOR NMR. <i>Journal of Magnetic Resonance</i> , 2002, 156, 230-241.	2.1	47
14	A Possible 2D H x WO ₃ Superconductor with a T _c of 120 K. <i>Journal of Superconductivity and Novel Magnetism</i> , 2009, 22, 343-346.	1.8	46
15	Multiple-Quantum Magic-Angle Spinning: High-Resolution Solid State NMR Spectroscopy of Half-Integer Quadrupolar Nuclei. <i>Monatshefte für Chemie</i> , 2002, 133, 1497-1534.	1.8	45
16	Control of surface acidity and catalytic activity of \hat{I}^3 -Al ₂ O ₃ by adjusting the nanocrystalline contact interface. <i>Journal of Catalysis</i> , 2011, 282, 215-227.	6.2	43
17	Deuterium REDOR: Principles and Applications for Distance Measurements. <i>Journal of Magnetic Resonance</i> , 1999, 138, 54-65.	2.1	41
18	Characterization of Aluminum Species in Alumina Multilayer Grafted MCM-41 Using ²⁷ Al FAM(II)-MQMAS NMR. <i>Journal of Physical Chemistry B</i> , 2003, 107, 724-731.	2.6	41

#	ARTICLE	IF	CITATIONS
19	Determination of the Lithium Binding Site in Inositol Monophosphatase, the Putative Target for Lithium Therapy, by Magic-Angle-Spinning Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2012, 134, 5647-5651.	13.7	38
20	Efficient rotational echo double resonance recoupling of a spin-1/2 and a quadrupolar spin at high spinning rates and weak irradiation fields. <i>Journal of Magnetic Resonance</i> , 2010, 206, 52-58.	2.1	37
21	Bottom-Up Synthesis of Advanced Carbonaceous Anode Materials Containing Sulfur for Na-Ion Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2000592.	14.9	37
22	Complete Chemical Shift Assignment of the ssDNA in the Filamentous Bacteriophage fd Reports on Its Conformation and on Its Interface with the Capsid Shell. <i>Journal of the American Chemical Society</i> , 2014, 136, 2292-2301.	13.7	33
23	Accurate ¹ H- ¹⁴ N distance measurements by phase-modulated RESPDOR at ultra-fast MAS. <i>Journal of Magnetic Resonance</i> , 2019, 308, 106559.	2.1	32
24	Intersubunit Hydrophobic Interactions in Pf1 Filamentous Phage. <i>Journal of Biological Chemistry</i> , 2010, 285, 37051-37059.	3.4	31
25	Biomolecular magic-angle spinning solid-state NMR: recent methods and applications. <i>Current Opinion in Biotechnology</i> , 2013, 24, 705-715.	6.6	29
26	Evaluation of ion-transport in composite polymer-in-ceramic electrolytes. Case study of active and inert ceramics. <i>Electrochimica Acta</i> , 2019, 304, 447-455.	5.2	29
27	Cryo-electron microscopy structure of the filamentous bacteriophage IKe. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 5493-5498.	7.1	29
28	Assignment of congested NMR spectra: Carbonyl backbone enrichment via the Entner-Doudoroff pathway. <i>Journal of Magnetic Resonance</i> , 2007, 189, 157-165.	2.1	27
29	Signal Enhancement in 5QMAS Spectra of Spin-5/2 Quadrupolar Nuclei. <i>Journal of Magnetic Resonance</i> , 2002, 154, 280-286.	2.1	25
30	Magic-Angle Spinning NMR of a Class I Filamentous Bacteriophage Virus. <i>Journal of Physical Chemistry B</i> , 2011, 115, 9671-9680.	2.6	25
31	Insights into the spin dynamics of a large anisotropy spin subjected to long-pulse irradiation under a modified REDOR experiment. <i>Journal of Magnetic Resonance</i> , 2012, 225, 130-141.	2.1	25
32	Similarities and Differences within Members of the Ff Family of Filamentous Bacteriophage Viruses. <i>Journal of Physical Chemistry B</i> , 2011, 115, 15370-15379.	2.6	24
33	The Influence of the Radiofrequency Excitation and Conversion Pulses on the Lineshapes and Intensities of the Triple-Quantum MAS NMR Spectra of I=3/2 Nuclei. <i>Solid State Nuclear Magnetic Resonance</i> , 2000, 18, 1-16.	2.3	22
34	Magic-angle spinning NMR of intact bacteriophages: Insights into the capsid, DNA and their interface. <i>Journal of Magnetic Resonance</i> , 2015, 253, 80-90.	2.1	19
35	Facile Monolayer Formation on SiO ₂ Surfaces via Organoboron Functionalities. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7415-7418.	13.8	18
36	Site-Resolved Backbone and Side-Chain Intermediate Dynamics in a Carbohydrate-Binding Module Protein Studied by Magic-Angle Spinning NMR Spectroscopy. <i>Chemistry - A European Journal</i> , 2015, 21, 10778-10785.	3.3	18

#	ARTICLE	IF	CITATIONS
37	High resolution heteronuclear correlation NMR spectroscopy between quadrupolar nuclei and protons in the solid state. <i>Journal of Magnetic Resonance</i> , 2004, 169, 342-350.	2.1	16
38	Distance measurements between boron and carbon at natural abundance using magic angle spinning REAPDOR NMR and a universal curve. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 13437.	2.8	16
39	Nucleotide-type chemical shift assignment of the encapsulated 40 kbp dsDNA in intact bacteriophage T7 by MAS solid-state NMR. <i>Journal of Biomolecular NMR</i> , 2014, 59, 219-230.	2.8	16
40	Hexameric Capsules Studied by Magic Angle Spinning Solid-State NMR Spectroscopy: Identifying Solvent Molecules in Pyrogallol[4]arene Capsules. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 904-907.	13.8	16
41	Pushing the limit of NMR-based distance measurements – retrieving dipolar couplings to spins with extensively large quadrupolar frequencies. <i>Solid State Nuclear Magnetic Resonance</i> , 2018, 92, 19-24.	2.3	16
42	NMR Crystallography for Structural Characterization of Oxovanadium(V) Complexes: Deriving Coordination Geometry and Detecting Weakly Coordinated Ligands at Atomic Resolution in the Solid State. <i>Inorganic Chemistry</i> , 2015, 54, 1363-1374.	4.0	15
43	Analysis of large-anisotropy-spin recoupling pulses for distance measurement under magic-angle spinning NMR shows the superiority and robustness of a phase modulated saturation pulse. <i>Journal of Chemical Physics</i> , 2017, 146, 124202.	3.0	15
44	Structural Effects of Single Mutations in a Filamentous Viral Capsid Across Multiple Length Scales. <i>Biomacromolecules</i> , 2017, 18, 2258-2266.	5.4	13
45	Structural characterization of bacteriophage viruses by NMR. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2019, 114-115, 192-210.	7.5	13
46	Virus Structures and Dynamics by Magic-Angle Spinning NMR. <i>Annual Review of Virology</i> , 2021, 8, 219-237.	6.7	13
47	Distance Measurements to Metal Ions and Other Quadrupolar Spins by Magic Angle Spinning Solid State NMR. <i>Israel Journal of Chemistry</i> , 2014, 54, 125-135.	2.3	11
48	Composition processing property relationship of vitrimers Based on polyethyleneimine. <i>Polymer Chemistry</i> , 2021, 12, 3307-3320.	3.9	9
49	Filamentous Bacteriophage Viruses: Preparation, Magic-Angle Spinning Solid-State NMR Experiments, and Structure Determination. <i>Methods in Molecular Biology</i> , 2018, 1688, 67-97.	0.9	9
50	A Kinetic Isotope Effect in the Formation of Lanthanide Phosphate Nanocrystals. <i>Journal of the American Chemical Society</i> , 2022, 144, 9451-9457.	13.7	9
51	Characterization of lithium coordination sites with magic-angle spinning NMR. <i>Journal of Magnetic Resonance</i> , 2015, 254, 131-138.	2.1	8
52	Saturation capability of short phase modulated pulses facilitates the measurement of longitudinal relaxation times of quadrupolar nuclei. <i>Solid State Nuclear Magnetic Resonance</i> , 2017, 84, 196-203.	2.3	8
53	Effect of Surface Chemistry and Crystallographic Parameters of TiO ₂ Anatase Nanocrystals on Photocatalytic Degradation of Bisphenol A. <i>Catalysts</i> , 2019, 9, 447.	3.5	8
54	Solid state NMR chemical shift assignment and conformational analysis of a cellulose binding protein facilitated by optimized glycerol enrichment. <i>Journal of Biomolecular NMR</i> , 2014, 59, 185-197.	2.8	7

#	ARTICLE	IF	CITATIONS
55	Dynamics and Rigidity of an Intact Filamentous Bacteriophage Virus Probed by Magic Angle Spinning NMR. <i>Chemistry - A European Journal</i> , 2018, 24, 8737-8741.	3.3	7
56	¹ H-Detected quadrupolar spin-lattice relaxation measurements under magic-angle spinning solid-state NMR. <i>Chemical Communications</i> , 2019, 55, 5643-5646.	4.1	6
57	Assessment of Non-Uniform Sampling Schemes in Solid State NMR of Bacteriophage Viruses. <i>Israel Journal of Chemistry</i> , 2019, 59, 1027-1038.	2.3	6
58	How does the mood stabilizer lithium bind ATP, the energy currency of the cell: Insights from solid-state NMR. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2020, 1864, 129456.	2.4	6
59	Protein expression and isotopic enrichment based on induction of the Entner-Doudoroff pathway in <i>Escherichia coli</i> . <i>Biochemical and Biophysical Research Communications</i> , 2012, 427, 154-158.	2.1	4
60	Distance measurements between carbon and bromine using a split-pulse PM-RESPDOR solid-state NMR experiment. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 21022-21030.	2.8	4
61	Distance measurements to quadrupolar nuclei: Evolution of the rotational echo double resonance technique. <i>Magnetic Resonance in Chemistry</i> , 2021, 59, 908-919.	1.9	4
62	An optimal double-magic flip angle for performing the distance measurement REDOR experiment on a spin S=1. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 72, 127-131.	2.3	3
63	The combined effect of quadrupolar and dipolar interactions on the excitation and evolution of triple quantum coherences in ⁷ Li solid state magic angle spinning NMR. <i>Journal of Magnetic Resonance</i> , 2013, 230, 227-235.	2.1	2
64	Site-resolved multiple-quantum filtered correlations and distance measurements by magic-angle spinning NMR: Theory and applications to spins with weak to vanishing quadrupolar couplings. <i>Journal of Chemical Physics</i> , 2016, 144, 024201.	3.0	2
65	Editorial for Special Issue "Structure and dynamics of biomolecular assemblies by solid-state NMR". <i>Journal of Structural Biology</i> , 2019, 207, 103.	2.8	2
66	Multiple-Quantum Magic-Angle Spinning: High-Resolution Solid State NMR Spectroscopy of Half-Integer Quadrupolar Nuclei. , 2002, , 17-54.		2
67	Pulse induced resonance with angular dependent total enhancement of multi-dimensional solid-state NMR correlation spectra. <i>Journal of Magnetic Resonance</i> , 2022, 338, 107191.	2.1	2
68	Solid state NMR chemical shift assignment of the non-structural single-stranded DNA binding protein gVp from fd bacteriophage. <i>Biomolecular NMR Assignments</i> , 2022, 16, 181-185.	0.8	2
69	Conformational Changes in Ff Phage Protein gVp upon Complexation with Its Viral Single-Stranded DNA Revealed Using Magic-Angle Spinning Solid-State NMR. <i>Viruses</i> , 2022, 14, 1264.	3.3	2
70	Rapid automated determination of chemical shift anisotropy values in the carbonyl and carboxyl groups of fd-γ21m bacteriophage using solid state NMR. <i>Journal of Biomolecular NMR</i> , 2018, 72, 55-67.	2.8	1
71	Nonuniformly sampled exclusively ¹³ C/ ¹⁵ N 4D solid-state NMR experiments: Assignment and characterization of IKe phage capsid. <i>Magnetic Resonance in Chemistry</i> , 2021, 59, 237-246.	1.9	1
72	Characterizing hydrogen bonds in intact RNA from MS2 bacteriophage using magic angle spinning NMR. <i>Biophysical Reports</i> , 2021, 1, 100027.	1.2	1