

# Guangjin Hou

## List of Publications by Year in descending order

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69  
papers

2,662  
citations

159585

30  
h-index

206112

48  
g-index

70  
all docs

70  
docs citations

70  
times ranked

2154  
citing authors

#	ARTICLE	IF	CITATIONS
1	Homogeneous and Fast Ion Conduction of PEO-Based Solid-State Electrolyte at Low Temperature. <i>Advanced Functional Materials</i> , 2020, 30, 2007172.	14.9	246
2	Broadband homonuclear correlation spectroscopy driven by combined $^1\text{H}$ and $^{13}\text{C}$ R-symmetry sequences under fast magic angle spinning for NMR structural analysis of organic and biological solids. <i>Journal of Magnetic Resonance</i> , 2013, 232, 18-30.	13.7	87
3	Cyclophilin A stabilizes the HIV-1 capsid through a novel non-canonical binding site. <i>Nature Communications</i> , 2016, 7, 10714.	12.8	126
4	Enhanced Sensitivity by Nonuniform Sampling Enables Multidimensional MAS NMR Spectroscopy of Protein Assemblies. <i>Journal of Physical Chemistry B</i> , 2012, 116, 7416-7427.	2.6	89
5	Expanding the horizons for structural analysis of fully protonated protein assemblies by NMR spectroscopy at MAS frequencies above 100 kHz. <i>Solid State Nuclear Magnetic Resonance</i> , 2017, 87, 117-125.	2.3	88
6	$^{13}\text{C}$ - $^{15}\text{N}$ Heteronuclear Dipolar Recoupling by R-Symmetry Sequences Under Fast Magic Angle Spinning for Dynamics Analysis of Biological and Organic Solids. <i>Journal of the American Chemical Society</i> , 2011, 133, 18646-18655.	13.7	87
7	Motions on the Millisecond Time Scale and Multiple Conformations of HIV-1 Capsid Protein: Implications for Structural Polymorphism of CA Assemblies. <i>Journal of the American Chemical Society</i> , 2012, 134, 6455-6466.	13.7	83
8	Recoupling of chemical shift anisotropy by R-symmetry sequences in magic angle spinning NMR spectroscopy. <i>Journal of Chemical Physics</i> , 2012, 137, 134201.	3.0	78
9	Dynamic allostery governs cyclophilin A-HIV capsid interplay. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14617-14622.	7.1	76
10	Probing Structure and Dynamics of Protein Assemblies by Magic Angle Spinning NMR Spectroscopy. <i>Accounts of Chemical Research</i> , 2013, 46, 2047-2058.	15.6	75
11	Characterizing Phosphorus Speciation of Chesapeake Bay Sediments Using Chemical Extraction, $^{31}\text{P}$ NMR, and X-ray Absorption Fine Structure Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2015, 49, 203-211.	10.0	69
12	Multidimensional Magic Angle Spinning NMR Spectroscopy for Site-Resolved Measurement of Proton Chemical Shift Anisotropy in Biological Solids. <i>Journal of the American Chemical Society</i> , 2013, 135, 1358-1368.	13.7	66
13	Magic Angle Spinning NMR Reveals Sequence-Dependent Structural Plasticity, Dynamics, and the Spacer Peptide 1 Conformation in HIV-1 Capsid Protein Assemblies. <i>Journal of the American Chemical Society</i> , 2013, 135, 17793-17803.	13.7	60
14	Spin Diffusion Driven by R-Symmetry Sequences: Applications to Homonuclear Correlation Spectroscopy in MAS NMR of Biological and Organic Solids. <i>Journal of the American Chemical Society</i> , 2011, 133, 3943-3953.	13.7	58
15	Atomic-resolution structure of HIV-1 capsid tubes by magic-angle spinning NMR. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 863-869.	8.2	58
16	Role of 12-Ring Channels of Mordenite in DME Carbonylation Investigated by Solid-State NMR. <i>Journal of Physical Chemistry C</i> , 2016, 120, 22526-22531.	3.1	56
17	Quenching protein dynamics interferes with HIV capsid maturation. <i>Nature Communications</i> , 2017, 8, 1779.	12.8	56
18	Dynamic Nuclear Polarization Enhanced MAS NMR Spectroscopy for Structural Analysis of HIV-1 Protein Assemblies. <i>Journal of Physical Chemistry B</i> , 2016, 120, 329-339.	2.6	49

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19	HIV-1 Capsid Function Is Regulated by Dynamics: Quantitative Atomic-Resolution Insights by Integrating Magic-Angle-Spinning NMR, QM/MM, and MD. <i>Journal of the American Chemical Society</i> , 2016, 138, 14066-14075.	13.7	48
20	Determination of relative tensor orientations by $\hat{I}^3$ -encoded chemical shift anisotropy/heteronuclear dipolar coupling 3D NMR spectroscopy in biological solids. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 14873.	2.8	47
21	Atomic-resolution structure of the CAP-Gly domain of dynactin on polymeric microtubules determined by magic angle spinning NMR spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14611-14616.	7.1	46
22	Heterogeneous Rh/CPOL-BP&P(OPh) <sub>3</sub> catalysts for hydroformylation of 1-butene: The formation and evolution of the active species. <i>Journal of Catalysis</i> , 2018, 368, 197-206.	6.2	45
23	Characterization of Noninnocent Metal Complexes Using Solid-State NMR Spectroscopy: $\langle i \rangle$ -Dioxolene Vanadium Complexes. <i>Inorganic Chemistry</i> , 2011, 50, 9794-9803.	4.0	43
24	Accurate measurement of heteronuclear dipolar couplings by phase-alternating R-symmetry (PARS) sequences in magic angle spinning NMR spectroscopy. <i>Journal of Chemical Physics</i> , 2014, 141, 104202.	3.0	42
25	Effects of Proximity-Dependent Metal Migration on Bifunctional Composites Catalyzed Syngas to Olefins. <i>ACS Catalysis</i> , 2021, 11, 9729-9737.	11.2	41
26	Superior Na-storage performance of molten-state-blending-synthesized monoclinic NaVPO <sub>4</sub> F nanoplates for Na-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24201-24209.	10.3	39
27	CryoEM Structure Refinement by Integrating NMR Chemical Shifts with Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2017, 121, 3853-3863.	2.6	38
28	RF inhomogeneity and how it controls CPMAS. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 72, 17-26.	2.3	34
29	C <sup>13</sup> Bond Formation in Syngas Conversion over Zinc Sites Grafted on ZSM-5 Zeolite. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6529-6534.	13.8	34
30	Quantitative cross-polarization NMR spectroscopy in uniformly <sup>13</sup> C-labeled solids. <i>Chemical Physics Letters</i> , 2006, 421, 356-360.	2.6	33
31	Sensitivity gains, linearity, and spectral reproducibility in nonuniformly sampled multidimensional MAS NMR spectra of high dynamic range. <i>Journal of Biomolecular NMR</i> , 2014, 59, 57-73.	2.8	31
32	Dynamic Nuclear Polarization Magic-Angle Spinning Nuclear Magnetic Resonance Combined with Molecular Dynamics Simulations Permits Detection of Order and Disorder in Viral Assemblies. <i>Journal of Physical Chemistry B</i> , 2019, 123, 5048-5058.	2.6	31
33	<sup>51</sup> V NMR Crystallography of Vanadium Chloroperoxidase and Its Directed Evolution P395D/L241V/T343A Mutant: Protonation Environments of the Active Site. <i>Journal of the American Chemical Society</i> , 2015, 137, 5618-5628.	13.7	30
34	Improving dipolar recoupling for site-specific structural and dynamics studies in biosolids NMR: windowed RN-symmetry sequences. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 4035-4044.	2.8	27
35	A Magic-Angle-Spinning NMR Spectroscopy Method for the Site-Specific Measurement of Proton Chemical Shift Anisotropy in Biological and Organic Solids. <i>Israel Journal of Chemistry</i> , 2014, 54, 171-183.	2.3	25
36	Measurement of proton chemical shift anisotropy in solid-state NMR spectroscopy. <i>Solid State Nuclear Magnetic Resonance</i> , 2018, 93, 16-28.	2.3	25

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37	Magic angle spinning NMR of viruses. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2015, 86-87, 21-40.	7.5	23
38	Combined zero-quantum and spin-diffusion mixing for efficient homonuclear correlation spectroscopy under fast MAS: broadband recoupling and detection of long-range correlations. <i>Journal of Biomolecular NMR</i> , 2015, 61, 7-20.	2.8	23
39	Solid-State NMR Dipolar and Chemical Shift Anisotropy Recoupling Techniques for Structural and Dynamical Studies in Biological Systems. <i>Chemical Reviews</i> , 2022, 122, 9880-9942.	47.7	23
40	Revisiting of Tetragonal NaVPO <sub>4</sub> : A High Energy Density Cathode for Sodium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 30510-30519.	8.0	22
41	Oxygenate-based routes regulate syngas conversion over oxide-zeolite bifunctional catalysts. <i>Nature Catalysis</i> , 2022, 5, 594-604.	34.4	22
42	Breaking the T1 Constraint for Quantitative Measurement in Magic Angle Spinning Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2010, 132, 5538-5539.	13.7	20
43	Three-Dimensional Structure of CAP-Gly Domain of Mammalian Dynactin Determined by Magic Angle Spinning NMR Spectroscopy: Conformational Plasticity and Interactions with End-Binding Protein EB1. <i>Journal of Molecular Biology</i> , 2013, 425, 4249-4266.	4.2	20
44	Analysis of local molecular motions of aromatic sidechains in proteins by 2D and 3D fast MAS NMR spectroscopy and quantum mechanical calculations. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 28789-28801.	2.8	19
45	Towards uniform enhancement in solid-state cross polarization magic angle spinning NMR: A scheme incorporating cross polarization with rotational resonance. <i>Journal of Chemical Physics</i> , 2006, 124, 234512.	3.0	17
46	Effect of ancillary ligand on electronic structure as probed by 51V solid-state NMR spectroscopy for vanadium- <i>o</i> -dioxolene complexes. <i>CrystEngComm</i> , 2013, 15, 8776.	2.6	17
47	Highly selective methanol-to-olefin reaction on pyridine modified H-mordenite. <i>Journal of Energy Chemistry</i> , 2017, 26, 354-358.	12.9	17
48	Acidity and Local Confinement Effect in Mordenite Probed by Solid-State NMR Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2413-2422.	4.6	17
49	Recent progress in dipolar recoupling techniques under fast MAS in solid-state NMR spectroscopy. <i>Solid State Nuclear Magnetic Resonance</i> , 2021, 112, 101711.	2.3	17
50	The Role of Organic and Inorganic Structure-Directing Agents in Selective Al Substitution of Zeolite. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 9398-9406.	4.6	16
51	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
52	The effect of the position of cross-linkers on the structure and microenvironment of PPh <sub>3</sub> moiety in porous organic polymers. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9165-9174.	10.3	15
53	MAS NMR of HIV-1 protein assemblies. <i>Journal of Magnetic Resonance</i> , 2015, 253, 10-22.	2.1	13
54	A mechanistic study of syngas conversion to light olefins over OXZEO bifunctional catalysts: insights into the initial carbon-carbon bond formation on the oxide. <i>Catalysis Science and Technology</i> , 2022, 12, 1289-1295.	4.1	13

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55	Nerve network-inspired solid polymer electrolytes (NN-SPE) for fast and single-ion lithium conduction. <i>Energy Storage Materials</i> , 2022, 49, 575-582.	18.0	13
56	Fast magic angle spinning NMR with heteronucleus detection for resonance assignments and structural characterization of fully protonated proteins. <i>Journal of Biomolecular NMR</i> , 2014, 60, 219-229.	2.8	12
57	Mapping protein-protein interactions by double-REDOR-filtered magic angle spinning NMR spectroscopy. <i>Journal of Biomolecular NMR</i> , 2017, 67, 95-108.	2.8	12
58	Accurate heteronuclear distance measurements at all magic-angle spinning frequencies in solid-state NMR spectroscopy. <i>Chemical Science</i> , 2021, 12, 11554-11564.	7.4	12
59	Internal Dynamics of Dynactin CAP-Gly Is Regulated by Microtubules and Plus End Tracking Protein EB1. <i>Journal of Biological Chemistry</i> , 2015, 290, 1607-1622.	3.4	11
60	Redox Activity in a Vanadium(V)-Dioxolene Complex Is Modulated by Protonation State As Indicated by <sup>51</sup> V Solid-State NMR Spectroscopy and Density Functional Theory. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 4644-4651.	2.0	9
61	Toward Closing the Gap: Quantum Mechanical Calculations and Experimentally Measured Chemical Shifts of a Microcrystalline Lectin. <i>Journal of Physical Chemistry B</i> , 2017, 121, 3574-3585.	2.6	9
62	Determination of accurate backbone chemical shift tensors in microcrystalline proteins by integrating MAS NMR and QM/MM. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 9543-9553.	2.8	9
63	Insights into the Site-Selective Adsorption of Methanol and Water in Mordenite Zeolite by <sup>129</sup> Xe NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 17368-17374.	3.1	9
64	DNP NMR reveals the hidden surface C-C bond growth mechanism over ZnAlO during syngas conversion. <i>Journal of Energy Chemistry</i> , 2022, 67, 640-644.	12.9	7
65	X Factor in the Structure and Anion Exchange of Layered Yttrium Hydroxides. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7251-7258.	3.1	6
66	Quantitatively Mapping the Distribution of Intrinsic Acid Sites in Mordenite Zeolite by High-Field <sup>23</sup> Na Solid-State Nuclear Magnetic Resonance. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 5186-5194.	4.6	6
67	Magic Angle Spinning NMR Studies of Protein Assemblies: Recent Advances in Methodology and Applications. <i>Annual Reports on NMR Spectroscopy</i> , 2013, , 293-357.	1.5	4
68	<sup>89</sup> Y chemical shift anisotropy: a sensitive structural probe of layered yttrium hydroxides revealed by solid-state NMR spectroscopy and DFT calculations. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 27244-27252.	2.8	3
69	<sup>77</sup> Se- <sup>13</sup> C based dipolar correlation experiments to map selenium sites in microcrystalline proteins. <i>Journal of Biomolecular NMR</i> , 2022, 76, 29.	2.8	0