

# Juergen Haase

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2461824/publications.pdf>

Version: 2024-02-01

87  
papers

1,841  
citations

218677

26  
h-index

330143

37  
g-index

87  
all docs

87  
docs citations

87  
times ranked

2242  
citing authors

#	ARTICLE	IF	CITATIONS
1	Planar Cu and O NMR and the Pseudogap of Cuprate Superconductors. Condensed Matter, 2022, 7, 21.	1.8	0
2	NMR Study of AgInTe <sub>2</sub> at Normal and High Pressures. Journal of Physical Chemistry C, 2022, 126, 8461-8466.	3.1	0
3	Structural independence of hydrogen-bond symmetrisation dynamics at extreme pressure conditions. Nature Communications, 2022, 13, .	12.8	10
4	Application of microimaging to diffusion studies in nanoporous materials. Adsorption, 2021, 27, 819-840.	3.0	6
5	Diffusion Analysis in Pore Hierarchies by the Two-Region Model. Advanced Materials Interfaces, 2021, 8, 2000749.	3.7	14
6	Pulsed field gradient NMR diffusion measurement in nanoporous materials. Adsorption, 2021, 27, 453-484.	3.0	40
7	Unusual Quadrupole NMR of Topological Insulator Bi <sub>2</sub> Te <sub>3</sub> . Journal of Physical Chemistry C, 2021, 125, 6743-6748.	3.1	3
8	Searching for the fundamentals of rehydroxylation dating of archaeological ceramics via NMR and IR microscopy. Journal of the American Ceramic Society, 2021, 104, 5328-5340.	3.8	2
9	Isobutene Transformation to Aromatics on Zn-Modified Zeolite: Particular Effects of Zn <sup>2+</sup> and ZnO Species on the Reaction Occurrence Revealed with Solid-State NMR and FTIR Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 15343-15353.	3.1	17
10	Robust nuclear hyperpolarization driven by strongly coupled nitrogen vacancy centers. Journal of Applied Physics, 2021, 130, 104301.	2.5	2
11	Isobutane Transformation to Aromatics on Zn-Modified Zeolites: Intermediates and the Effect of Zn <sup>2+</sup> and ZnO Species on the Reaction Occurrence Revealed by <sup>13</sup> C MAS NMR. ChemPhysChem, 2021, , .	2.1	5
12	Moissanite anvil cell single crystal NMR at pressures of up to 4.4 GPa. Review of Scientific Instruments, 2021, 92, 113901.	1.3	3
13	NMR Studies of the Dehydroxylation and Rehydroxylation (RHx) of Clays with Respect to the RHx Dating of Ceramic Materials. Journal of Physical Chemistry C, 2021, 125, 26274-26283.	3.1	2
14	Which Species, Zn <sup>2+</sup> Cations or ZnO Clusters, Are More Efficient for Olefin Aromatization? <sup>13</sup> C Solid-State NMR Investigation of <i>n</i> -But-1-ene Transformation on Zn-Modified Zeolite. ACS Catalysis, 2020, 10, 14224-14233.	11.2	29
15	Influence of Alkali Metal Cations on the Photodimerization of Bromo Cinnamates Studied by Solid-State NMR. Journal of Physical Chemistry C, 2020, 124, 27614-27620.	3.1	1
16	<i>n</i> -Butane transformation on Zn/H-BEA. The effect of different Zn species (Zn <sup>2+</sup> and ZnO) on the reaction performance. Journal of Catalysis, 2020, 391, 69-79.	6.2	12
17	Mechanism of H/D Hydrogen Exchange of <i>n</i> -Butane with Brønsted Acid Sites on Zn-Modified Zeolite: The Effect of Different Zn Species (Zn <sup>2+</sup> and ZnO) on the Activation of Alkane C-H Bonds. Journal of Physical Chemistry C, 2020, 124, 20270-20279.	3.1	15
18	Temperature-Independent Cuprate Pseudogap from Planar Oxygen NMR. Condensed Matter, 2020, 5, 66.	1.8	9

#	ARTICLE	IF	CITATIONS
19	NMR Shift and Relaxation and the Electronic Spin of Superconducting Cuprates. Journal of Superconductivity and Novel Magnetism, 2020, 33, 2621-2628.	1.8	4
20	Properties of the Electronic Fluid of Superconducting Cuprates from $^{63}\text{Cu}$ NMR Shift and Relaxation. Journal of Superconductivity and Novel Magnetism, 2019, 32, 3761-3771.	1.8	6
21	$T_c$ and Other Cuprate Properties in Relation to Planar Charges as Measured by NMR. Condensed Matter, 2019, 4, 67.	1.8	9
22	Propylene Transformation on Zn-Modified Zeolite: Is There Any Difference in the Effect of $\text{Zn}^{2+}$ Cations or ZnO Species on the Reaction Occurrence?. Journal of Physical Chemistry C, 2019, 123, 27573-27583.	3.1	23
23	Phenomenology of $^{63}\text{Cu}$ Nuclear Relaxation in Cuprate Superconductors. Journal of Superconductivity and Novel Magnetism, 2019, 32, 3369-3376.	1.8	4
24	Propane activation on Zn-modified zeolite. The effect of the nature of Zn-species on the mechanism of H/D hydrogen exchange of the alkane with Brønsted acid sites. Journal of Catalysis, 2019, 378, 341-352.	6.2	23
25	Unusual $^{209}\text{Bi}$ NMR quadrupole effects in topological insulator $\text{Bi}_2\text{Se}_3$ . Journal of Magnetic Resonance, 2019, 302, 34-42.	2.1	7
26	Propane Transformation on Zn-Modified Zeolite. Effect of the Nature of Zn Species on Alkane Aromatization and Hydrogenolysis. Journal of Physical Chemistry C, 2019, 123, 30473-30485.	3.1	29
27	NMR Study of the Host Structure and Guest Dynamics Investigated with Alkane/Alkene Mixtures in Metal Organic Frameworks ZIF-8. Journal of Physical Chemistry C, 2019, 123, 1904-1912.	3.1	22
28	Revealing the Transient Concentration of $\text{CO}_2$ in a Mixed Matrix Membrane by IR Microimaging and Molecular Modeling. Angewandte Chemie - International Edition, 2018, 57, 5156-5160.	13.8	35
29	Diffusive Spreading of Molecules in Nanoporous Materials. , 2018, , 171-202.		4
30	Proton mobility in sulfonic acid functionalized mesoporous materials studied by MAS PFG NMR diffusometry and impedance spectroscopy. Microporous and Mesoporous Materials, 2018, 255, 140-147.	4.4	11
31	Alkane/alkene mixture diffusion in silicalite-1 studied by MAS PFG NMR. Microporous and Mesoporous Materials, 2018, 257, 128-134.	4.4	23
32	Bulk Charge Ordering in the $\text{CuO}_2$ Plane of the Cuprate Superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{6.9}$ by High-Pressure NMR. Condensed Matter, 2018, 3, 23.	1.8	15
33	Diffusion in Nanoporous Materials: Novel Insights by Combining MAS and PFG NMR. Processes, 2018, 6, 147.	2.8	27
34	Nitric Oxide Adsorption in MIL-100(Al) MOF Studied by Solid-State NMR. Journal of Physical Chemistry C, 2018, 122, 12723-12730.	3.1	30
35	NMR at pressures up to $90\text{ GPa}$ . Journal of Magnetic Resonance, 2018, 292, 44-47.	2.1	21
36	Investigation of room temperature multispin-assisted bulk diamond $^{13}\text{C}$ hyperpolarization at low magnetic fields. Journal of Physics Condensed Matter, 2018, 30, 305803.	1.8	5

#	ARTICLE	IF	CITATIONS
37	At Its Extremes: NMR at Giga-Pascal Pressures. Annual Reports on NMR Spectroscopy, 2018, 93, 1-74.	1.5	14
38	Revising the Concept of Pore Hierarchy for Ionic Transport in Carbon Materials for Supercapacitors. Advanced Energy Materials, 2018, 8, 1800892.	19.5	79
39	Hydrides of Alkaline Earth Tetrel (AeTt) Zintl Phases: Covalent H Bonds from Silicon to Tin. Inorganic Chemistry, 2017, 56, 1061-1071.	4.0	24
40	Uncovering the Rotation and Translational Mobility of Benzene Confined in UiO-66 (Zr) Metal-Organic Framework by the <sup>2</sup> H NMR QENS Experimental Toolbox. Journal of Physical Chemistry C, 2017, 121, 2844-2857.	3.1	35
41	Probing the Guest-Mediated Structural Mobility in the UiO-66(Zr) Framework by 2H NMR Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 11593-11600.	3.1	20
42	NMR of Cuprate Superconductors: Recent Developments. Springer Series in Materials Science, 2017, , 77-97.	0.6	1
43	Anomalous longitudinal relaxation of nuclear spins in CaF <sub>2</sub> . Fortschritte Der Physik, 2017, 65, 1600023.	4.4	1
44	Magnetic flux tailoring through Lenz lenses for ultrasmall samples: A new pathway to high-pressure nuclear magnetic resonance. Science Advances, 2017, 3, eaao5242.	10.3	38
45	Optically induced cross relaxation via nitrogen-related defects for bulk diamond $C^{13}$ hyperpolarization. Physical Review B, 2017, 96, .	3.2	35
46	IR Microimaging of Direction-Dependent Uptake in MFI-Type Crystals. Chemie-Ingenieur-Technik, 2017, 89, 1686-1693.	0.8	5
47	Contrasting Phenomenology of NMR Shifts in Cuprate Superconductors. Condensed Matter, 2017, 2, 16.	1.8	14
48	Perspective on the phase diagram of cuprate high-temperature superconductors. Nature Communications, 2016, 7, 11413.	12.8	92
49	Charge Variations in Cuprate Superconductors from Nuclear Magnetic Resonance. Journal of Superconductivity and Novel Magnetism, 2016, 29, 3017-3022.	1.8	7
50	Ultraslow Dynamics of a Framework Linker in MIL-53 (Al) as a Sensor for Different Isomers of Xylene. Journal of Physical Chemistry C, 2016, 120, 21704-21709.	3.1	27
51	$^{77}\text{Se}$ nuclear magnetic resonance of topological insulator $\text{Bi}_2\text{Se}_3$ . Physical Review B, 2016, 93, .	3.2	17
52	Electronic spin susceptibilities and superconductivity in $\text{HgBa}_2\text{CuO}_4$ from nuclear magnetic resonance. Physical Review B, 2015, 92, .	3.2	16
53	Anvil cell gasket design for high pressure nuclear magnetic resonance experiments beyond 30 GPa. Review of Scientific Instruments, 2015, 86, 123906.	1.3	9
54	Uphill diffusion and overshooting in the adsorption of binary mixtures in nanoporous solids. Nature Communications, 2015, 6, 7697.	12.8	63

#	ARTICLE	IF	CITATIONS
55	<sup>113</sup> Cd Solid-State NMR for Probing the Coordination Sphere in Metal-Organic Frameworks. Chemistry - A European Journal, 2015, 21, 1118-1124.	3.3	27
56	Nuclear magnetic resonance at up to 10.1 GPa pressure detects an electronic topological transition in aluminum metal. Journal of Physics Condensed Matter, 2014, 26, 015501.	1.8	12
57	Moissanite anvil cell design for giga-pascal nuclear magnetic resonance. Review of Scientific Instruments, 2014, 85, 043903.	1.3	15
58	Distribution of electrons and holes in cuprate superconductors as determined from <sup>17</sup> O and <sup>63</sup> Cu nuclear magnetic resonance. Physical Review B, 2014, 90, .	3.2	35
59	Water-Mediated Proton Conduction in a Robust Triazolyl Phosphonate Metal-Organic Framework with Hydrophilic Nanochannels. Chemistry - A European Journal, 2014, 20, 8862-8866.	3.3	35
60	Methane Activation on In-Modified ZSM-5 Zeolite. H/D Hydrogen Exchange of the Alkane with Brønsted Acid Sites. Journal of Physical Chemistry C, 2014, 118, 14427-14432.	3.1	25
61	High-Sensitivity Nuclear Magnetic Resonance at Giga-Pascal Pressures: A New Tool for Probing Electronic and Chemical Properties of Condensed Matter under Extreme Conditions. Journal of Visualized Experiments, 2014, , e52243.	0.3	2
62	Charge Inhomogeneity in Electron-Doped Pr <sub>1.85</sub> Ce <sub>0.15</sub> CuO <sub>4</sub> Determined with <sup>63</sup> Cu NMR. Journal of Superconductivity and Novel Magnetism, 2013, 26, 2685-2688.	1.8	8
63	Time dependent water uptake in Cu <sub>3</sub> (btc) <sub>2</sub> MOF: Identification of different water adsorption states by <sup>1</sup> H MAS NMR. Microporous and Mesoporous Materials, 2013, 180, 8-13.	4.4	41
64	Adsorption of Small Molecules on Cu <sub>3</sub> (btc) <sub>2</sub> and Cu <sub>3</sub> Zn(btc) <sub>2</sub> Metal-Organic Frameworks (MOF) As Studied by Solid-State NMR. Journal of Physical Chemistry C, 2013, 117, 7703-7712.	3.1	47
65	Synthesis, Crystal Structure, and Solid-State NMR Investigations of Heteronuclear Zn/Co Coordination Networks – A Comparative Study. Inorganic Chemistry, 2013, 52, 4431-4442.	4.0	17
66	Magnetic resonance imaging at frequencies below 1 kHz. Magnetic Resonance Imaging, 2013, 31, 171-177.	1.8	33
67	Tracing Water and Cation Diffusion in Hydrated Zeolites of Type Li-LSX by Pulsed Field Gradient NMR. Journal of Physical Chemistry C, 2013, 117, 24866-24872.	3.1	26
68	Eigenmodes in the Long-Time Behavior of a Coupled Spin System Measured with Nuclear Magnetic Resonance. Physical Review Letters, 2012, 108, 177602.	7.8	20
69	Highly proton conducting HgBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> single crystals. Physical Review Letters, 2012, 108, 177602.	3.2	30
70	Formation of Mixed Metal Cu <sub>3</sub> Zn(btc) <sub>2</sub> Frameworks with Different Zinc Contents: Incorporation of Zn <sup>2+</sup> into the Metal-Organic Framework Structure as Studied by Solid-State NMR. Journal of Physical Chemistry C, 2012, 116, 20866-20873.	3.1	58
71	Ethene/ethane mixture diffusion in the MOF sieve ZIF-8 studied by MAS PFG NMR diffusometry. Microporous and Mesoporous Materials, 2012, 147, 135-141.	4.4	100
72	Highly proton conducting sulfonic acid functionalized mesoporous materials studied by impedance spectroscopy, MAS NMR spectroscopy and MAS PFG NMR diffusometry. Microporous and Mesoporous Materials, 2012, 156, 80-89.	4.4	28

#	ARTICLE	IF	CITATIONS
73	Hydrogen H/D Exchange and Activation of C <sub>1</sub> Alkyl Alkanes on Ga-Modified Zeolite BEA Studied with <sup>1</sup> H Magic Angle Spinning Nuclear Magnetic Resonance. Journal of Physical Chemistry C, 2009, 113, 10511-10518.	3.1	34
74	High-pressure spin shifts in the pseudogap regime of superconducting YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> . Physical Review B, 2000, 62, 020407.	3.2	28
75	New Approach to High-Pressure Nuclear Magnetic Resonance with Anvil Cells. Journal of Low Temperature Physics, 2010, 159, 284-287.	1.4	11
76	High sensitivity nuclear magnetic resonance probe for anvil cell pressure experiments. Review of Scientific Instruments, 2009, 80, 073905.	1.3	24
77	First-Satellite Spectroscopy, a New Method for Quadrupolar Spins. Journal of Magnetic Resonance Series A, 1996, 119, 211-218.	1.6	12
78	Aluminum to oxygen cross-polarization in $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (corundum). Solid State Nuclear Magnetic Resonance, 1994, 3, 171-175.	2.3	15
79	Spectral editing: A quantitative application of spin-echo nuclear magnetic resonance spectroscopy to the study of <sup>27</sup> Al in zeolite catalysts. Zeolites, 1994, 14, 89-100.	0.5	17
80	Characterization of zeolites and amorphous silica-aluminas by means of aluminum-27 nuclear magnetic resonance spectroscopy: A multifold, multiparameter investigation. Zeolites, 1994, 14, 101-109.	0.5	34
81	Sensitivity enhancement for NMR of the central transition of quadrupolar nuclei. Chemical Physics Letters, 1993, 209, 287-291.	2.6	79
82	Barium nuclear magnetic resonance spectroscopic study of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> . Physical Review B, 1992, 46, 595-598.	3.2	22
83	<sup>27</sup> Al magic-angle-spinning NMR studies of aluminium nitride ceramics. Chemical Physics Letters, 1989, 156, 328-332.	2.6	17
84	Longitudinal NMR relaxation of <sup>27</sup> Al nuclei in zeolites. Chemical Physics Letters, 1988, 150, 189-193.	2.6	23
85	<sup>1</sup> H MAS NMR In Situ Reaction Monitoring Reveals the Particular Effects of Zn <sup>2+</sup> and ZnO Species on the Kinetics of Isobutane Transformation on Zn-Modified Zeolites. Journal of Physical Chemistry C, 2007, 111, 10511-10518.	3.1	1
86	A Different NMR View of Cuprate Superconductors. Journal of Superconductivity and Novel Magnetism, 2000, 13, 1.	1.8	0
87	<sup>17</sup> O and <sup>89</sup> Y NMR Shift and Relaxation and the Temperature-Independent Pseudogap of the Cuprates. Journal of Superconductivity and Novel Magnetism, 2000, 13, 1.	1.8	0