Juergen Haase

List of Publications by Year
in descending order

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	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
2	Perspective on the phase diagram of cuprate high-temperature superconductors. Nature Communications, 2016, 7, 11413.	12.8	92
3	Sensitivity enhancement for NMR of the central transition of quadrupolar nuclei. Chemical Physics Letters, 1993, 209, 287-291.	2.6	79
4	Revising the Concept of Pore Hierarchy for Ionic Transport in Carbon Materials for Supercapacitors. Advanced Energy Materials, 2018, 8, 1800892.	19.5	79
5	Uphill diffusion and overshooting in the adsorption of binary mixtures in nanoporous solids. Nature Communications, 2015, 6, 7697.	12.8	63
6	Formation of Mixed Metal Cu_{3â€“<i>x</i>}Zn_{<i>x</i>}(btc)₂ Frameworks with Different Zinc Contents: Incorporation of Zn²⁺ into the Metalâ€“Organic Framework Structure as Studied by Solid-State NMR. Journal of Physical Chemistry C, 2012, 116, 20866-20873.	3.1	58
7	Adsorption of Small Molecules on Cu₃(btc)₂ and Cu_{3â€“<i>x</i>}Zn_{<i>x</i>}(btc)₂ Metalâ€“Organic Frameworks (MOF) As Studied by Solid-State NMR. Journal of Physical Chemistry C, 2013, 117, 7703-7712.	3.1	47
8	Time dependent water uptake in Cu3(btc)2 MOF: Identification of different water adsorption states by 1H MAS NMR. Microporous and Mesoporous Materials, 2013, 180, 8-13.	4.4	41
9	Pulsed field gradient NMR diffusion measurement in nanoporous materials. Adsorption, 2021, 27, 453-484.	3.0	40
10	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
11	Distribution of electrons and holes in cuprate superconductors as determined from17OandCu63nuclear magnetic resonance. Physical Review B, 2014, 90, .	3.2	35
12	Waterâ€Mediated Proton Conduction in a Robust Triazolyl Phosphonate Metalâ€“Organic Framework with Hydrophilic Nanochannels. Chemistry - A European Journal, 2014, 20, 8862-8866.	3.3	35
13	Uncovering the Rotation and Translational Mobility of Benzene Confined in UiO-66 (Zr) Metalâ€“Organic Framework by the ²H NMRâ€“QENS Experimental Toolbox. Journal of Physical Chemistry C, 2017, 121, 2844-2857.	3.1	35
14	Optically induced cross relaxation via nitrogen-related defects for bulk diamond <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mn>13</mml:mn></mml:mmultiscripts></mml:math> hyperpolarization. Physical Review B, 2017, 96, .	3.2	35
15	Revealing the Transient Concentration of CO₂ in a Mixedâ€Matrix Membrane by IR Microimaging and Molecular Modeling. Angewandte Chemie - International Edition, 2018, 57, 5156-5160.	13.8	35
16	Characterization of zeolites and amorphous silicaâ€"aluminas by means of aluminum-27 nuclear magnetic resonance spectroscopy: A multifield, multiparameter investigation. Zeolites, 1994, 14, 101-109.	0.5	34
17	Hydrogen H/D Exchange and Activation of C₁â€“<i>n-</i>C₄ Alkanes on Ga-Modified Zeolite BEA Studied with ¹H Magic Angle Spinning Nuclear Magnetic Resonance in Situ. Journal of Physical Chemistry C, 2011, 115, 13877-13886.	3.1	34
18	Magnetic resonance imaging at frequencies below 1 kHz. Magnetic Resonance Imaging, 2013, 31, 171-177.	1.8	33

#	ARTICLE	IF	CITATIONS
19	Two-component uniform spin susceptibility of superconducting HgBa<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>CuO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>4</mml:mn><mml:mo>+</mml:mo><mml:mi>Î´</mml:mi></mml:mrow></mml:msub></mml:math>single crystals measured using<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline	3.2	30
20	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
21	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
22	Which Species, Zn²⁺ Cations or ZnO Clusters, Are More Efficient for Olefin Aromatization? ¹³C 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
23	[illegible] superconducting YBa<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>Cu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow [illegible]	3.2	28
24	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
25	¹¹³Cd Solidâ€State NMR for Probing the Coordination Sphere in Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2015, 21, 1118-1124.	3.3	27
26	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
27	Diffusion in Nanoporous Materials: Novel Insights by Combining MAS and PFG NMR. Processes, 2018, 6, 147.	2.8	27
28	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
29	Methane Activation on In-Modified ZSM-5 Zeolite. H/D Hydrogen Exchange of the Alkane with BrÃ¸nsted Acid Sites. Journal of Physical Chemistry C, 2014, 118, 14427-14432.	3.1	25
30	High sensitivity nuclear magnetic resonance probe for anvil cell pressure experiments. Review of Scientific Instruments, 2009, 80, 073905.	1.3	24
31	Hydrides of Alkaline Earthâ€“Tetrel (AeTt) Zintl Phases: Covalent Ttâ€“H Bonds from Silicon to Tin. Inorganic Chemistry, 2017, 56, 1061-1071.	4.0	24
32	Longitudinal NMR relaxation of 27Al nuclei in zeolites. Chemical Physics Letters, 1988, 150, 189-193.	2.6	23
33	Alkane/alkene mixture diffusion in silicalite-1 studied by MAS PFG NMR. Microporous and Mesoporous Materials, 2018, 257, 128-134.	4.4	23
34	Propylene Transformation on Zn-Modified Zeolite: Is There Any Difference in the Effect of Zn²⁺ Cations or ZnO Species on the Reaction Occurrence?. Journal of Physical Chemistry C, 2019, 123, 27573-27583.	3.1	23
35	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 BrÃ¸nsted acid sites. Journal of Catalysis, 2019, 378, 341-352.	6.2	23
36	Barium nuclear magnetic resonance spectroscopic study ofYBa2Cu3O7. Physical Review B, 1992, 46, 595-598.	3.2	22

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37	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
38	NMR at pressures up to 90â€¯GPa. Journal of Magnetic Resonance, 2018, 292, 44-47.	2.1	21
39	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
40	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
41	27Al magic-angle-spinning NMR studies of aluminium nitride ceramics. Chemical Physics Letters, 1989, 156, 328-332.	2.6	17
42	Spectral editing: A quantitative application of spin-echo nuclear magnetic resonance spectroscopy to the study of 27Al in zeolite catalysts. Zeolites, 1994, 14, 89-100.	0.5	17
43	Synthesis, Crystal Structure, and Solid-State NMR Investigations of Heteronuclear Zn/Co Coordination Networks â€" A Comparative Study. Inorganic Chemistry, 2013, 52, 4431-4442.	4.0	17
44	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Se</mml:mi><mml:mprescripts /><mml:none /><mml:mn>77</mml:mn></mml:mmultiscripts></mml:math>nuclear magnetic resonance of topological insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:n Physical Review B, 2016, 93, .	3.2	17
45	Isobutene Transformation to Aromatics on Zn-Modified Zeolite: Particular Effects of Zn²⁺ 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
46	Electronic spin susceptibilities and superconductivity inHgBa2CuO4+Î´from nuclear magnetic resonance. Physical Review B, 2015, 92, .	3.2	16
47	Aluminum to oxygen cross-polarization in Î±-Al2O3 (corundum). Solid State Nuclear Magnetic Resonance, 1994, 3, 171-175.	2.3	15
48	Moissanite anvil cell design for giga-pascal nuclear magnetic resonance. Review of Scientific Instruments, 2014, 85, 043903.	1.3	15
49	Bulk Charge Ordering in the CuO2 Plane of the Cuprate Superconductor YBa2Cu3O6.9 by High-Pressure NMR. Condensed Matter, 2018, 3, 23.	1.8	15
50	Mechanism of H/D Hydrogen Exchange of <i>n</i>-Butane with BrÃ¸nsted Acid Sites on Zn-Modified Zeolite: The Effect of Different Zn Species (Zn²⁺ and ZnO) on the Activation of Alkane Câ€"H Bonds. Journal of Physical Chemistry C, 2020, 124, 20270-20279.	3.1	15
51	Contrasting Phenomenology of NMR Shifts in Cuprate Superconductors. Condensed Matter, 2017, 2, 16.	1.8	14
52	At Its Extremes: NMR at Giga-Pascal Pressures. Annual Reports on NMR Spectroscopy, 2018, 93, 1-74.	1.5	14
53	Diffusion Analysis in Pore Hierarchies by the Twoâ€Region Model. Advanced Materials Interfaces, 2021, 8, 2000749.	3.7	14
54	First-Satellite Spectroscopy, a New Method for Quadrupolar Spins. Journal of Magnetic Resonance Series A, 1996, 119, 211-218.	1.6	12

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55	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
56	n-Butane transformation on Zn/H-BEA. The effect of different Zn species (Zn2+ and ZnO) on the reaction performance. Journal of Catalysis, 2020, 391, 69-79.	6.2	12
57	New Approach to High-Pressure Nuclear Magnetic Resonance with Anvil Cells. Journal of Low Temperature Physics, 2010, 159, 284-287.	1.4	11
58	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
59	Structural independence of hydrogen-bond symmetrisation dynamics at extreme pressure conditions. Nature Communications, 2022, 13, .	12.8	10
60	Anvil cell gasket design for high pressure nuclear magnetic resonance experiments beyond 30 GPa. Review of Scientific Instruments, 2015, 86, 123906.	1.3	9
61	Tc and Other Cuprate Properties in Relation to Planar Charges as Measured by NMR. Condensed Matter, 2019, 4, 67.	1.8	9
62	Temperature-Independent Cuprate Pseudogap from Planar Oxygen NMR. Condensed Matter, 2020, 5, 66.	1.8	9
63	Charge Inhomogeneity in Electron-Doped Pr1.85Ce0.15CuO4 Determined with 63Cu NMR. Journal of Superconductivity and Novel Magnetism, 2013, 26, 2685-2688.	1.8	8
64	Charge Variations in Cuprate Superconductors from Nuclear Magnetic Resonance. Journal of Superconductivity and Novel Magnetism, 2016, 29, 3017-3022.	1.8	7
65	Unusual 209Bi NMR quadrupole effects in topological insulator Bi2Se3. Journal of Magnetic Resonance, 2019, 302, 34-42.	2.1	7
66	Properties of the Electronic Fluid of Superconducting Cuprates from 63Cu NMR Shift and Relaxation. Journal of Superconductivity and Novel Magnetism, 2019, 32, 3761-3771.	1.8	6
67	Application of microimaging to diffusion studies in nanoporous materials. Adsorption, 2021, 27, 819-840.	3.0	6
68	IR Microimaging of Directionâ€Dependent Uptake in MFIâ€Type Crystals. Chemie-Ingenieur-Technik, 2017, 89, 1686-1693.	0.8	5
69	Investigation of room temperature multispin-assisted bulk diamond ¹³C hyperpolarization at low magnetic fields. Journal of Physics Condensed Matter, 2018, 30, 305803.	1.8	5
70	Isobutane Transformation to Aromatics on Znâ€Modified Zeolites: Intermediates and the Effect of Zn 2+ and ZnO Species on the Reaction Occurrence Revealed by 13 C MAS NMR. ChemPhysChem, 2021, , .	2.1	5
71	Diffusive Spreading of Molecules in Nanoporous Materials. , 2018, , 171-202.		4
72	Phenomenology of 63Cu Nuclear Relaxation in Cuprate Superconductors. Journal of Superconductivity and Novel Magnetism, 2019, 32, 3369-3376.	1.8	4

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73	NMR Shift and Relaxation and the Electronic Spin of Superconducting Cuprates. Journal of Superconductivity and Novel Magnetism, 2020, 33, 2621-2628.	1.8	4
74	Unusual Quadrupole NMR of Topological Insulator Bi₂Te₃. Journal of Physical Chemistry C, 2021, 125, 6743-6748.	3.1	3
75	Moissanite anvil cell single crystal NMR at pressures of up to 4.4 GPa. Review of Scientific Instruments, 2021, 92, 113901.	1.3	3
76	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
77	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
78	Robust nuclear hyperpolarization driven by strongly coupled nitrogen vacancy centers. Journal of Applied Physics, 2021, 130, 104301.	2.5	2
79	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
80	NMR of Cuprate Superconductors: Recent Developments. Springer Series in Materials Science, 2017, , 77-97.	0.6	1
81	Anomalous longitudinal relaxation of nuclear spins in CaF₂. Fortschritte Der Physik, 2017, 65, 1600023.	4.4	1
82	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
83	1H MAS NMR In Situ Reaction Monitoring Reveals the Particular Effects of Zn2+ and ZnO Species on the Kinetics of Isobutane Transformation on Zn-Modified Zeolites. Journal of Physical Chemistry C, 0, , .	3.1	1
84	Planar Cu and O NMR and the Pseudogap of Cuprate Superconductors. Condensed Matter, 2022, 7, 21.	1.8	0
85	A Different NMR View of Cuprate Superconductors. Journal of Superconductivity and Novel Magnetism, 0, , 1.	1.8	0
86	NMR Study of AgInTe₂ at Normal and High Pressures. Journal of Physical Chemistry C, 2022, 126, 8461-8466.	3.1	0
87	^{17}O and ^{89}Y NMR Shift and Relaxation and the Temperature-Independent Pseudogap of the Cuprates. Journal of Superconductivity and Novel Magnetism, 0, , .	1.8	0