

Darren H Brouwer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9177560/publications.pdf>

Version: 2024-02-01

43
papers

1,732
citations

304743

22
h-index

276875

41
g-index

43
all docs

43
docs citations

43
times ranked

1616
citing authors

#	ARTICLE	IF	CITATIONS
1	A Solid-State NMR Method for Solution of Zeolite Crystal Structures. <i>Journal of the American Chemical Society</i> , 2005, 127, 10365-10370.	13.7	161
2	Location of the Fluoride Ion in Tetrapropylammonium Fluoride Silicalite-1 Determined by $^1\text{H}/^{19}\text{F}/^{29}\text{Si}$ Triple Resonance CP, REDOR, and TEDOR NMR Experiments. <i>Journal of the American Chemical Society</i> , 2001, 123, 6882-6891.	13.7	143
3	Symmetry-Based ^{29}Si Dipolar Recoupling Magic Angle Spinning NMR Spectroscopy: A New Method for Investigating Three-Dimensional Structures of Zeolite Frameworks. <i>Journal of the American Chemical Society</i> , 2005, 127, 542-543.	13.7	106
4	NMR Crystallography of Zeolites: Refinement of an NMR-Solved Crystal Structure Using ab Initio Calculations of ^{29}Si Chemical Shift Tensors. <i>Journal of the American Chemical Society</i> , 2008, 130, 6306-6307.	13.7	96
5	The Structure of Two Anhydrous Polymorphs of Caffeine from Single-Crystal Diffraction and Ultrahigh-Field Solid-State ^{13}C NMR Spectroscopy. <i>Crystal Growth and Design</i> , 2007, 7, 1406-1410.	3.0	91
6	Combined Solid State NMR and X-ray Diffraction Investigation of the Local Structure of the Five-Coordinate Silicon in Fluoride-Containing As-Synthesized STF Zeolite. <i>Journal of the American Chemical Society</i> , 2002, 124, 7770-7778.	13.7	87
7	Carbohydrate-binding Modules Recognize Fine Substructures of Cellulose. <i>Journal of Biological Chemistry</i> , 2002, 277, 50245-50254.	3.4	81
8	Probing Local Structure in Zeolite Frameworks: Ultrahigh-Field NMR Measurements and Accurate First-Principles Calculations of Zeolite ^{29}Si Magnetic Shielding Tensors. <i>Journal of the American Chemical Society</i> , 2008, 130, 3095-3105.	13.7	79
9	Probing local structures of siliceous zeolite frameworks by solid-state NMR and first-principles calculations of ^{29}Si scalar couplings. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 1825.	2.8	76
10	A General Protocol for Determining the Structures of Molecularly Ordered but Noncrystalline Silicate Frameworks. <i>Journal of the American Chemical Society</i> , 2013, 135, 5641-5655.	13.7	70
11	A structure refinement strategy for NMR crystallography: An improved crystal structure of silica-ZSM-12 zeolite from ^{29}Si chemical shift tensors. <i>Journal of Magnetic Resonance</i> , 2008, 194, 136-146.	2.1	66
12	Comparing quantum-chemical calculation methods for structural investigation of zeolite crystal structures by solid-state NMR spectroscopy. <i>Magnetic Resonance in Chemistry</i> , 2010, 48, S113-S121.	1.9	56
13	Optimization, Standardization, and Testing of a New NMR Method for the Determination of Zeolite Host Organic Guest Crystal Structures. <i>Journal of the American Chemical Society</i> , 2006, 128, 11860-11871.	13.7	50
14	Structural Investigation of Silicalite-I Loaded with n-Hexane by X-ray Diffraction, ^{29}Si MAS NMR, and Molecular Modeling. <i>Chemistry of Materials</i> , 2002, 14, 2192-2198.	6.7	45
15	NMR crystallography of p-tert-butylcalix[4]arene host-guest complexes using ^1H complexation-induced chemical shifts. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 3857.	2.8	45
16	Guest Loading and Multiple Phases in Single Crystals of the van der Waals Host p-tert-Butylcalix[4]arene. <i>Crystal Growth and Design</i> , 2008, 8, 1878-1885.	3.0	43
17	The amblygonite (LiAlPO_4)-montebrasite (LiAlPO_4OH) solid solution: A combined powder and single-crystal neutron diffraction and solid-state ^6Li MAS, CP MAS, and REDOR NMR study. <i>American Mineralogist</i> , 2003, 88, 195-210.	1.9	33
18	Solid-state ^{29}Si NMR spectra of pure silica zeolites for the International Zeolite Association Database of Zeolite Structures. <i>Microporous and Mesoporous Materials</i> , 2020, 297, 110000.	4.4	30

#	ARTICLE	IF	CITATIONS
19	Probing the Local Structure of Pure Ionic Liquid Salts with Solid- and Liquid-State NMR. <i>ChemPhysChem</i> , 2010, 11, 260-268.	2.1	29
20	Structure solution of network materials by solid-state NMR without knowledge of the crystallographic space group. <i>Solid State Nuclear Magnetic Resonance</i> , 2013, 51-52, 37-45.	2.3	24
21	Long- and Short-Range Constraints for the Structure Determination of Layered Silicates with Stacking Disorder. <i>Chemistry of Materials</i> , 2014, 26, 6994-7008.	6.7	24
22	Solid-State NMR Studies of the Fluoride-Containing Zeolite SSZ-44. <i>Chemistry of Materials</i> , 2004, 16, 600-603.	6.7	23
23	High Field Solid-State NMR Spectroscopy Investigation of ¹⁵ N-Labeled Rosette Nanotubes: Hydrogen Bond Network and Channel-Bound Water. <i>Journal of the American Chemical Society</i> , 2016, 138, 6115-6118.	13.7	22
24	Solid-state NMR and X-ray diffraction structural investigations of the p-nitroaniline/ZSM-5 complex. <i>Microporous and Mesoporous Materials</i> , 2000, 39, 291-305.	4.4	21
25	A double quantum ¹²⁹ Xe NMR experiment for probing xenon in multiply-occupied cavities of solid-state inclusion compounds. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 1093.	2.8	20
26	Some New Halogen-containing Hydrate-formers for Structure I and II Clathrate Hydrates ¹ . <i>Supramolecular Chemistry</i> , 1997, 8, 361-367.	1.2	19
27	³⁵ Cl Solid-State NMR of Halide Ionic Liquids at Ultrahigh Fields. <i>Journal of Physical Chemistry A</i> , 2008, 112, 12527-12529.	2.5	19
28	Effect of Molecular Oxygen on the Variable-Temperature ²⁹ Si MAS NMR Spectra of Zeolite [®] Sorbate Complexes. <i>Journal of the American Chemical Society</i> , 2004, 126, 1306-1307.	13.7	18
29	Measurement of NMR Cross-Polarization (CP) Rate Constants in the Slow CP Regime: Relevance to Structure Determinations of Zeolite [®] Sorbate and Other Complexes by CP Magic-Angle Spinning NMR. <i>Journal of Physical Chemistry A</i> , 2005, 109, 6187-6192.	2.5	18
30	Determination of the location of naphthalene in the zeolite ZSM-5 host framework by solid-state ¹ H/ ²⁹ Si CP MAS NMR spectroscopy. <i>Canadian Journal of Chemistry</i> , 2006, 84, 345-355.	1.1	15
31	Nucleation and Growth of Silver at Zeolite A-Modified Electrodes. <i>Journal of Physical Chemistry B</i> , 1997, 101, 10390-10397.	2.6	14
32	An efficient peak assignment algorithm for two-dimensional NMR correlation spectra of framework structures. <i>Journal of Magnetic Resonance</i> , 2003, 164, 10-18.	2.1	14
33	A graph theory approach to structure solution of network materials from two-dimensional solid-state NMR data. <i>CrystEngComm</i> , 2013, 15, 8748.	2.6	14
34	A simulated annealing approach for solving zeolite crystal structures from two-dimensional NMR correlation spectra. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 65, 89-98.	2.3	13
35	Solid state NMR investigation of the structure of AlPO ₄ -14A. <i>Microporous and Mesoporous Materials</i> , 2006, 88, 163-169.	4.4	12
36	Measurement and calculation of ¹³ C chemical shift tensors in ¹ H-glucose and ¹ H-glucose monohydrate. <i>Canadian Journal of Chemistry</i> , 2011, 89, 737-744.	1.1	11

#	ARTICLE	IF	CITATIONS
37	Minimizing the effects of RF inhomogeneity and phase transients allows resolution of two peaks in the ¹ H CRAMPS NMR spectrum of adamantane. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 71, 30-40.	2.3	10
38	NMR crystallography of zeolites: How far can we go without diffraction data?. <i>Magnetic Resonance in Chemistry</i> , 2019, 57, 167-175.	1.9	9
39	Quantifying Site-Specific Proton Dynamics in Phosphate Solid Acids by ¹ H Double Quantum NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25641-25650.	3.1	8
40	¹⁹ F Double Quantum NMR Spectroscopy: A Tool for Probing Dynamics in Proton-Conducting Fluorinated Polymer Materials. <i>Macromolecules</i> , 2016, 49, 7331-7339.	4.8	7
41	Improvements to a Peak Assignment Algorithm for Two-Dimensional NMR Correlation Spectra of Zeolites Using Graph Theory. <i>Journal of Computer Chemistry Japan</i> , 2004, 3, 103-108.	0.1	5
42	A comprehensive collection of solid-state ³¹ P NMR spectra of aluminophosphate zeolites. <i>Microporous and Mesoporous Materials</i> , 2022, 337, 111934.	4.4	4
43	Applications of silicon- ²⁹ NMR spectroscopy. , 2021, , .		1