

# Darren H Brouwer

## List of Publications by Year in descending order

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43  
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304743

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43  
docs citations

43  
times ranked

1616  
citing authors

#	ARTICLE	IF	CITATIONS
1	A comprehensive collection of solid-state $^{31}\text{P}$ NMR spectra of aluminophosphate zeolites. Microporous and Mesoporous Materials, 2022, 337, 111934.	4.4	4
2	Applications of silicon-29 NMR spectroscopy. , 2021, , .		1
3	Solid-state $^{29}\text{Si}$ NMR spectra of pure silica zeolites for the International Zeolite Association Database of Zeolite Structures. Microporous and Mesoporous Materials, 2020, 297, 110000.	4.4	30
4	NMR crystallography of zeolites: How far can we go without diffraction data?. Magnetic Resonance in Chemistry, 2019, 57, 167-175.	1.9	9
5	Quantifying Site-Specific Proton Dynamics in Phosphate Solid Acids by $^1\text{H}$ Double Quantum NMR Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 25641-25650.	3.1	8
6	High Field Solid-State NMR Spectroscopy Investigation of $^{15}\text{N}$ -Labeled Rosette Nanotubes: Hydrogen Bond Network and Channel-Bound Water. Journal of the American Chemical Society, 2016, 138, 6115-6118.	13.7	22
7	$^{19}\text{F}$ Double Quantum NMR Spectroscopy: A Tool for Probing Dynamics in Proton-Conducting Fluorinated Polymer Materials. Macromolecules, 2016, 49, 7331-7339.	4.8	7
8	Minimizing the effects of RF inhomogeneity and phase transients allows resolution of two peaks in the $^1\text{H}$ CRAMPS NMR spectrum of adamantane. Solid State Nuclear Magnetic Resonance, 2015, 71, 30-40.	2.3	10
9	A simulated annealing approach for solving zeolite crystal structures from two-dimensional NMR correlation spectra. Solid State Nuclear Magnetic Resonance, 2015, 65, 89-98.	2.3	13
10	Long- and Short-Range Constraints for the Structure Determination of Layered Silicates with Stacking Disorder. Chemistry of Materials, 2014, 26, 6994-7008.	6.7	24
11	A graph theory approach to structure solution of network materials from two-dimensional solid-state NMR data. CrystEngComm, 2013, 15, 8748.	2.6	14
12	Structure solution of network materials by solid-state NMR without knowledge of the crystallographic space group. Solid State Nuclear Magnetic Resonance, 2013, 51-52, 37-45.	2.3	24
13	A General Protocol for Determining the Structures of Molecularly Ordered but Noncrystalline Silicate Frameworks. Journal of the American Chemical Society, 2013, 135, 5641-5655.	13.7	70
14	Measurement and calculation of $^{13}\text{C}$ chemical shift tensors in $\beta$ -D-glucose and $\beta$ -D-glucose monohydrate. Canadian Journal of Chemistry, 2011, 89, 737-744.	1.1	11
15	Probing the Local Structure of Pure Ionic Liquid Salts with Solid- and Liquid-State NMR. ChemPhysChem, 2010, 11, 260-268.	2.1	29
16	Comparing quantum-chemical calculation methods for structural investigation of zeolite crystal structures by solid-state NMR spectroscopy. Magnetic Resonance in Chemistry, 2010, 48, S113-S121.	1.9	56
17	Probing local structures of siliceous zeolite frameworks by solid-state NMR and first-principles calculations of $^{29}\text{Si}$ - $^{29}\text{Si}$ scalar couplings. Physical Chemistry Chemical Physics, 2009, 11, 1825.	2.8	76
18	A structure refinement strategy for NMR crystallography: An improved crystal structure of silica-ZSM-12 zeolite from $^{29}\text{Si}$ chemical shift tensors. Journal of Magnetic Resonance, 2008, 194, 136-146.	2.1	66

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19	NMR crystallography of p-tert-butylcalix[4]arene host-guest complexes using $^1\text{H}$ complexation-induced chemical shifts. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 3857.	2.8	45
20	NMR Crystallography of Zeolites: Refinement of an NMR-Solved Crystal Structure Using ab Initio Calculations of $^{29}\text{Si}$ Chemical Shift Tensors. <i>Journal of the American Chemical Society</i> , 2008, 130, 6306-6307.	13.7	96
21	$^{35}\text{Cl}$ Solid-State NMR of Halide Ionic Liquids at Ultrahigh Fields. <i>Journal of Physical Chemistry A</i> , 2008, 112, 12527-12529.	2.5	19
22	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
23	Probing Local Structure in Zeolite Frameworks: Ultrahigh-Field NMR Measurements and Accurate First-Principles Calculations of Zeolite $^{29}\text{Si}$ Magnetic Shielding Tensors. <i>Journal of the American Chemical Society</i> , 2008, 130, 3095-3105.	13.7	79
24	A double quantum $^{129}\text{Xe}$ 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
25	The Structure of Two Anhydrous Polymorphs of Caffeine from Single-Crystal Diffraction and Ultrahigh-Field Solid-State $^{13}\text{C}$ NMR Spectroscopy. <i>Crystal Growth and Design</i> , 2007, 7, 1406-1410.	3.0	91
26	Determination of the location of naphthalene in the zeolite ZSM-5 host framework by solid-state $^1\text{H}/^{29}\text{Si}$ CP MAS NMR spectroscopy. <i>Canadian Journal of Chemistry</i> , 2006, 84, 345-355.	1.1	15
27	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
28	Solid state NMR investigation of the structure of $\text{AlPO}_4\text{-14A}$ . <i>Microporous and Mesoporous Materials</i> , 2006, 88, 163-169.	4.4	12
29	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
30	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
31	Symmetry-Based $^{29}\text{Si}$ 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
32	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
33	Solid-State NMR Studies of the Fluoride-Containing Zeolite SSZ-44. <i>Chemistry of Materials</i> , 2004, 16, 600-603.	6.7	23
34	Effect of Molecular Oxygen on the Variable-Temperature $^{29}\text{Si}$ MAS NMR Spectra of Zeolite-Sorbate Complexes. <i>Journal of the American Chemical Society</i> , 2004, 126, 1306-1307.	13.7	18
35	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
36	The amblygonite ( $\text{LiAlPO}_4\text{F}$ )-montebrasite ( $\text{LiAlPO}_4\text{OH}$ ) solid solution: A combined powder and single-crystal neutron diffraction and solid-state $^6\text{Li}$ MAS, CP MAS, and REDOR NMR study. <i>American Mineralogist</i> , 2003, 88, 195-210.	1.9	33

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37	Carbohydrate-binding Modules Recognize Fine Substructures of Cellulose. <i>Journal of Biological Chemistry</i> , 2002, 277, 50245-50254.	3.4	81
38	Structural Investigation of Silicalite-I Loaded with n-Hexane by X-ray Diffraction, $^{29}\text{Si}$ MAS NMR, and Molecular Modeling. <i>Chemistry of Materials</i> , 2002, 14, 2192-2198.	6.7	45
39	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
40	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
41	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
42	Nucleation and Growth of Silver at Zeolite A-Modified Electrodes. <i>Journal of Physical Chemistry B</i> , 1997, 101, 10390-10397.	2.6	14
43	Some New Halogen-containing Hydrate-formers for Structure I and II Clathrate Hydrates <sup>1</sup> . <i>Supramolecular Chemistry</i> , 1997, 8, 361-367.	1.2	19