Hans J Jakobsen

List of Publications by Year
in descending order

63	2,586	218677	189892
papers	citations	26 h-index	50 g-index

63	63	63	1871
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Exciting Opportunities for Solid-State 95Mo NMR Studies of MoS2 Nanostructures in Materials Research from a Low to an Ultrahigh Magnetic Field (35.2 T). Journal of Physical Chemistry C, 2021, 125, 7824-7838.	3.1	1
2	Dynamic Solid-State NMR Experiments Reveal Structural Changes for a Methyl Silicate Nanostructure on Deuterium Substitution. Journal of Physical Chemistry C, 2017, 121, 26507-26518.	3.1	1
3	NMR and EPR Studies of Free-Radical Intermediates from Experiments Mimicking the Winds on Mars: A Sink for Methane and Other Gases. Journal of Physical Chemistry C, 2016, 120, 26138-26149.	3.1	11
4	High-Field17O MAS NMR Reveals1J(17O-127I) with its Sign and the NMR Crystallography of the Scheelite Structures for NaIO4and KIO4. Journal of Physical Chemistry C, 2015, , 150612155518000.	3.1	9
5	Low-Temperature ²³Na MAS NMR Reveals Dynamic Effects and Compositions for the Large and Small Channels in the Zeolite-Like Ge-Framework of Na_{1â€“x}Ge_{3+z} Materials. Journal of Physical Chemistry C, 2014, 118, 28890-28897.	3.1	4
6	A sink for methane on Mars? The answer is blowing in the wind. Icarus, 2014, 236, 24-27.	2.5	67
7	Magic-angle spinning solid-state multinuclear NMR on low-field instrumentation. Journal of Magnetic Resonance, 2014, 238, 20-25.	2.1	6
8	Quantitative Dynamics and Structure for Crystalline Cs₂WO₄ and KMnO₄ Determined from High-Field ¹⁷O Variable-Temperature MAS NMR Experiments. Journal of Physical Chemistry C, 2014, 118, 20639-20646.	3.1	11
9	Direct observation of 17Oâ€“185/187Re 1J-coupling in perrhenates by solid-state 17O VT MAS NMR: Temperature and self-decoupling effects. Journal of Magnetic Resonance, 2013, 230, 98-110.	2.1	14
10	Synthesis of ¹⁷O-Labeled Cs₂WO₄ and Its Ambient- and Low-Temperature Solid-State ¹⁷O MAS NMR Spectra. Inorganic Chemistry, 2011, 50, 7676-7684.	4.0	10
11	Experimental aspects in acquisition of wide bandwidth solid-state MAS NMR spectra of low-Î³ nuclei with different opportunities on two commercial NMR spectrometers. Journal of Magnetic Resonance, 2011, 211, 195-206.	2.1	7
12	Mixedâ€Anion and Mixedâ€Cation Borohydride KZn(BH₄)Cl₂: Synthesis, Structure and Thermal Decomposition. European Journal of Inorganic Chemistry, 2010, 2010, 1608-1612.	2.0	48
13	A strategy for acquisition and analysis of complex natural abundance 33S solid-state NMR spectra of a disordered tetrathio transition-metal anion. Journal of Magnetic Resonance, 2010, 202, 173-179.	2.1	12
14	Solid-state 51V MAS NMR spectroscopy determines component concentration and crystal phase in co-crystallised mixtures of vanadium complexes. CrystEngComm, 2010, 12, 2826.	2.6	11
15	Natural abundance solid-state 95Mo MAS NMR of MoS2 reveals precise 95Mo anisotropic parameters from its central and satellite transitions. Chemical Communications, 2010, 46, 2103.	4.1	8
16	Structure and Dynamics of Hydrous Surface Species on Aluminaâ€'Boria Catalysts and Their Precursors from ¹H, ²H, ¹¹B, and ²⁷Al MAS NMR Spectroscopy. Journal of Physical Chemistry C, 2009, 113, 2475-2486.	3.1	11
17	Site Preferences of NH4+in Its Solid Solutions with Cs2WS4and Rb2WS4from Multinuclear Solid-State MAS NMR. Inorganic Chemistry, 2009, 48, 1787-1789.	4.0	11
18	New opportunities in acquisition and analysis of natural abundance complex solid-state 33S MAS NMR spectra: (CH3NH3)2WS4. Physical Chemistry Chemical Physics, 2009, 11, 6981.	2.8	19

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19	Sensitivity enhancement in natural-abundance solid-state 33S MAS NMR spectroscopy employing adiabatic inversion pulses to the satellite transitions. Journal of Magnetic Resonance, 2008, 190, 316-326.	2.1	39
20	Advancements in natural abundance solid-state33S MAS NMR: characterization of transition-metal Mî€S bonds in ammonium tetrathiometallates. Chemical Communications, 2007, , 1629-1631.	4.1	17
21	Long-term stability of rotor-controlled MAS frequencies to 0.1Hz proved by 14N MAS NMR experiments and simulations. Journal of Magnetic Resonance, 2007, 185, 159-163.	2.1	25
22	Evaluation of27Al and51V Electric Field Gradients and the Crystal Structure for Aluminum Orthovanadate (AlVO4) by Density Functional Theory Calculations. Journal of Physical Chemistry B, 2006, 110, 5975-5983.	2.6	34
23	Probing Crystal Structures and Transformation Reactions of Ammonium Molybdates by14N MAS NMR Spectroscopy. Inorganic Chemistry, 2006, 45, 10873-10881.	4.0	24
24	Satellite transitions in natural abundance solid-state 33S MAS NMR of alumsâ€"Sign change with zero-crossing of CQ in a variable temperature study. Journal of Magnetic Resonance, 2006, 180, 170-177.	2.1	18
25	Solid-state14N MAS NMR of ammonium ions as a spy to structural insights for ammonium salts. Magnetic Resonance in Chemistry, 2006, 44, 348-356.	1.9	34
26	Effects of T2-relaxation in MAS NMR spectra of the satellite transitions for quadrupolar nuclei: a 27Al MAS and single-crystal NMR study of alum KAl(SO4)2Â·12H2O. Journal of Magnetic Resonance, 2005, 173, 209-217.	2.1	5
27	Structure refinement of CsNO3(II) by coupling of 14N MAS NMR experiments with WIEN2k DFT calculations. Chemical Physics Letters, 2005, 402, 133-137.	2.6	40
28	A solid-state 14N magic-angle spinning NMR study of some amino acids. Journal of Magnetic Resonance, 2004, 166, 262-272.	2.1	70
29	The Complete 51V MAS NMR Spectrum of Surface Vanadia Nanoparticles on Anatase (TiO2):â€‰ Vanadia Surface Structure of a DeNOx Catalyst. Journal of the American Chemical Society, 2004, 126, 4926-4933.	13.7	51
30	2H chemical shift anisotropies from high-field 2H MAS NMR spectroscopy. Journal of Magnetic Resonance, 2003, 165, 282-292.	2.1	20
31	Determination of nitrogen chemical shift anisotropy from the second-order cross-term in 14N MAS NMR spectroscopy. Chemical Physics Letters, 2003, 377, 426-432.	2.6	19
32	29Si cross-polarization magic-angle spinning NMR spectroscopyâ€"â€“an efficient tool for quantification of thaumasite in cement-based materials. Cement and Concrete Composites, 2003, 25, 823-829.	10.7	14
33	Unusual observation of nitrogen chemical shift anisotropies in tetraalkylammonium halides by 14N MAS NMR spectroscopy. Solid State Nuclear Magnetic Resonance, 2003, 24, 218-235.	2.3	27
34	14N MAS NMR Spectroscopy and Quadrupole Coupling Data in Characterization of the IV â†" III Phase Transition in Ammonium Nitrate. Journal of Physical Chemistry B, 2002, 106, 3026-3032.	2.6	37
35	Î²-VO2â€"a V(IV) or a mixed-valence V(III)â€“V(V) oxideâ€"studied by 51V MAS NMR spectroscopy. Chemical Physics Letters, 2002, 356, 73-78.	2.6	17
36	Crystal structure of ÃŽÂ±-Mg2V2O7 from synchrotron X-ray powder diffraction and characterization by 51V MAS NMR spectroscopy. Dalton Transactions RSC, 2001, , 3214-3218.	2.3	24

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37	Resolving multiple 27Al sites in AlVO4 by 27Al MAS NMR spectroscopy at 21.15 Tesla. Chemical Communications, 2001, , 2690-2691.	4.1	6
38	14N MAS NMR Spectroscopy:Â The Nitrate Ion. Journal of the American Chemical Society, 2001, 123, 5098-5099.	13.7	68
39	51V MAS NMR Investigation of51V Quadrupole Coupling and Chemical Shift Anisotropy in Divalent Metal Pyrovanadates. Journal of Physical Chemistry B, 2001, 105, 420-429.	2.6	66
40	59Co Chemical Shift Anisotropy and Quadrupole Coupling for K3Co(CN)6 from MQMAS and MAS NMR Spectroscopy. Solid State Nuclear Magnetic Resonance, 2001, 20, 23-34.	2.3	15
41	SOLID-STATE 13 C AND 31 P NMR ANALYSIS OF URINARY STONES. Journal of Urology, 2000, 164, 856-863.	0.4	47
42	Characterization of Divalent Metal Metavanadates by51V Magic-Angle Spinning NMR Spectroscopy of the Central and Satellite Transitions. Inorganic Chemistry, 2000, 39, 2135-2145.	4.0	57
43	A two-axis goniometer for sensitivity enhancement in single-crystal nuclear magnetic resonance spectroscopy. Review of Scientific Instruments, 1999, 70, 1771-1779.	1.3	21
44	Phase Transitions in KNO3 Studied by Variable-Temperature 15N Magic-Angle Spinning NMR Spectroscopy. Journal of Solid State Chemistry, 1999, 145, 10-14.	2.9	16
45	Characterization of Mo(CO)6by95Mo Single-Crystal NMR Spectroscopy. Journal of Physical Chemistry A, 1999, 103, 9144-9149.	2.5	25
46	Variable-Temperature 87Rb Magic-Angle Spinning NMR Spectroscopy of Inorganic Rubidium Salts. Journal of Physical Chemistry A, 1999, 103, 7958-7971.	2.5	35
47	Solid-state29Si MAS NMR studies of illite and illite-smectite from shale. American Mineralogist, 1999, 84, 1433-1438.	1.9	24
48	Molecular dynamics from 2H Quadrupolar Carrâ€“Purcellâ€“Meiboomâ€“Gill solid-state NMR spectroscopy. Chemical Physics Letters, 1998, 292, 467-473.	2.6	57
49	QCPMG-MAS NMR of Half-Integer Quadrupolar Nuclei. Journal of Magnetic Resonance, 1998, 131, 144-147.	2.1	135
50	51V Chemical Shielding and Quadrupole Coupling in Ortho- and Metavanadates from51V MAS NMR Spectroscopy. Inorganic Chemistry, 1998, 37, 3083-3092.	4.0	76
51	High-field QCPMG-MAS NMR of half-integer quadrupolar nuclei with large quadrupole couplings. Molecular Physics, 1998, 95, 1185-1195.	1.7	68
52	Sensitivity-Enhanced Quadrupolar-Echo NMR of Half-Integer Quadrupolar Nuclei. Magnitudes and Relative Orientation of Chemical Shielding and Quadrupolar Coupling Tensors. Journal of Physical Chemistry A, 1997, 101, 8597-8606.	2.5	323
53	Characterization of the Two Rubidium Sites in Rb2CrO4by87Rb Single-Crystal NMR. Journal of Physical Chemistry B, 1997, 101, 8955-8958.	2.6	21
54	133Cs Chemical Shielding Anisotropies and Quadrupole Couplings from Magic-Angle Spinning NMR of Cesium Saltsâ€. The Journal of Physical Chemistry, 1996, 100, 14872-14881.	2.9	62

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55	A new goniometer design for singleâ€crystal nuclear magnetic resonance spectroscopy. Review of Scientific Instruments, 1996, 67, 2130-2133.	1.3	26
56	Combined Effect of Second-Order Quadrupole Coupling and Chemical Shielding Anisotropy on the Central Transition in MAS NMR of Quadrupolar Nuclei. 87Rb MAS NMR of RbClO4. The Journal of Physical Chemistry, 1995, 99, 10731-10735.	2.9	35
57	23Na Magic-angle spinning nuclear magnetic resonance of central and satellite transitions in the characterization of the anhydrous, dihydrate, and mixed phases of sodium molybdate and tungstate. Solid State Nuclear Magnetic Resonance, 1994, 3, 29-38.	2.3	17
58	Magnitudes and relative orientation of vanadium-51 quadrupole coupling and anisotropic shielding tensors in metavanadates and potassium vanadium oxide (KV3O8) from vanadium-51 MAS NMR spectra. Sodium-23 quadrupole coupling parameters for .alpha.- and .beta.-NaVO3. Journal of the American Chemical Society, 1993, 115, 7351-7362.	13.7	104
59	Characterization of calcium aluminate phases in cements by aluminum-27 MAS NMR spectroscopy. Inorganic Chemistry, 1993, 32, 1013-1027.	4.0	265
60	51V MAS NMR spectroscopy: determination of quadrupole and anisotropic shielding tensors, including the relative orientation of their principal-axis systems. Chemical Physics Letters, 1992, 188, 405-412.	2.6	155
61	Magic-angle spinning NMR spectra of satellite transitions for quadrupolar nuclei in solids. Journal of Magnetic Resonance, 1989, 85, 173-180.	0.5	55
62	A natural abundance15N NMR investigation of bilirubin IX-Î±. Magnetic Resonance in Chemistry, 1984, 22, 668-670.	0.7	9
63	Natural abundance proton-coupled15N NMR spectra of pyridines observed from proton polarization transfer experiments. Magnetic Resonance in Chemistry, 1981, 17, 290-295.	0.7	22