

# Jörn Schmedt auf der GÃ¼nne

## List of Publications by Year in descending order

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78  
papers

3,279  
citations

185998

28  
h-index

149479

56  
g-index

78  
all docs

78  
docs citations

78  
times ranked

4137  
citing authors

#	ARTICLE	IF	CITATIONS
1	Li <sub>10</sub> Sn <sub>2</sub> S <sub>12</sub> : An Affordable Lithium Superionic Conductor. Journal of the American Chemical Society, 2013, 135, 15694-15697.	6.6	527
2	Catalytic Dehydrocoupling/Dehydrogenation of <i>N</i> -Methylamine-Borane and Ammonia-Borane: Synthesis and Characterization of High Molecular Weight Polyaminoboranes. Journal of the American Chemical Society, 2010, 132, 13332-13345.	6.6	280
3	SrAlSi <sub>4</sub> N <sub>7</sub> :Eu <sup>2+</sup> A Nitridoalumosilicate Phosphor for Warm White Light (pc)LEDs with Edge-Sharing Tetrahedra. Chemistry of Materials, 2009, 21, 1595-1601.	3.2	214
4	The Mechanism of Borane-Amine Dehydrocoupling with Bifunctional Ruthenium Catalysts. Journal of the American Chemical Society, 2013, 135, 13342-13355.	6.6	141
5	Highly Active Iron Catalyst for Ammonia Borane Dehydrocoupling at Room Temperature. ACS Catalysis, 2015, 5, 7214-7217.	5.5	135
6	Formation of a Strandlike Polycatenane of Icosahedral Cages for Reversible One-Dimensional Encapsulation of Guests. Journal of the American Chemical Society, 2011, 133, 10018-10021.	6.6	114
7	Heteronuclear polarization transfer by symmetry-based recoupling sequences in solid-state NMR. Solid State Nuclear Magnetic Resonance, 2004, 26, 57-64.	1.5	106
8	Highly Stereoselective Proton/Hydride Exchange: Assistance of Hydrogen Bonding for the Heterolytic Splitting of H <sub>2</sub> . Journal of the American Chemical Society, 2009, 131, 17552-17553.	6.6	94
9	<i>N</i> - <i>o</i> -Vanillylidene- <i>l</i> -histidine: Experimental Charge Density Analysis of a Double Zwitterionic Amino Acid Schiff-Base Compound. Crystal Growth and Design, 2010, 10, 1665-1676.	1.4	81
10	Homonuclear Zero-Quantum Recoupling in Fast Magic-Angle Spinning Nuclear Magnetic Resonance. Journal of Magnetic Resonance, 2002, 156, 79-96.	1.2	77
11	Superion Conductor Na <sub>11.1</sub> Sn <sub>2.1</sub> P <sub>0.9</sub> Se <sub>12</sub> : Lowering the Activation Barrier of Na <sup>+</sup> Conduction in Quaternary 1 <sup>-</sup> 5 <sup>-</sup> 6 Electrolytes. Chemistry of Materials, 2018, 30, 4134-4139.	3.2	73
12	Ba <sub>2</sub> AlSi <sub>5</sub> N <sub>9</sub> A New Host Lattice for Eu <sup>2+</sup> -Doped Luminescent Materials Comprising a Nitridoalumosilicate Framework with Corner- and Edge-Sharing Tetrahedra. Chemistry of Materials, 2009, 21, 1288-1295.	3.2	68
13	Pressure-Induced Crystallization and Characterization of the Tin Borate $\hat{I}^2$ -SnB <sub>4</sub> O <sub>7</sub> . Chemistry of Materials, 2007, 19, 254-262.	3.2	62
14	Structural investigation of aluminium doped ZnO nanoparticles by solid-state NMR spectroscopy. Physical Chemistry Chemical Physics, 2012, 14, 11610.	1.3	60
15	A Triazadiphosphole. Angewandte Chemie - International Edition, 2005, 44, 7790-7793.	7.2	57
16	Distance measurements in spin-1/2 systems by <sup>13</sup> C and <sup>31</sup> P solid-state NMR in dense dipolar networks. Journal of Magnetic Resonance, 2003, 165, 18-32.	1.2	54
17	Characterization of Noncrystalline Nanomaterials: NMR of Zinc Phosphate as a Case Study. Chemistry of Materials, 2008, 20, 5787-5795.	3.2	54
18	Calculation of NMR parameters in ionic solids by an improved self-consistent embedded cluster method. Physical Chemistry Chemical Physics, 2010, 12, 583-603.	1.3	52

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19	Diphosphines with Strongly Polarized Pâ”P Bonds: Hybrids between Covalent Molecules and Donorâ”Acceptor Adducts with Flexible Molecular Structures. <i>Journal of the American Chemical Society</i> , 2009, 131, 10763-10774.	6.6	49
20	Study on the Defect Structure of SnO <sub>2</sub> :F Nanoparticles by High-Resolution Solid-State NMR. <i>Chemistry of Materials</i> , 2011, 23, 1526-1538.	3.2	45
21	Direct Observation of the Exciton Self-Trapping Process in CsCu <sub>2</sub> I <sub>3</sub> Thin Films. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4286-4291.	2.1	45
22	Unprecedented Zeolite-Like Framework Topology Constructed from Cages with 3-Rings in a Barium Oxonitridophosphate. <i>Journal of the American Chemical Society</i> , 2011, 133, 12069-12078.	6.6	43
23	Thermally Highly Stable Amorphous Zinc Phosphate Intermediates during the Formation of Zinc Phosphate Hydrate. <i>Journal of the American Chemical Society</i> , 2015, 137, 2285-2294.	6.6	43
24	Catalytically Doped Semiconductors for Chemical Gas Sensing: Aerogel-Like Aluminum-Containing Zinc Oxide Materials Prepared in the Gas Phase. <i>Advanced Functional Materials</i> , 2016, 26, 3424-3437.	7.8	42
25	Occurrence of Difluorine F <sub>2</sub> in Natureâ”Inâ”Situ Proof and Quantification by NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 7847-7849.	7.2	39
26	HPâ”CsB <sub>5</sub> O <sub>8</sub> : Synthesis and Characterization of an Outstanding Borate Exhibiting the Simultaneous Linkage of All Structural Units of Borates. <i>Chemistry - A European Journal</i> , 2014, 20, 17059-17067.	1.7	36
27	The Structure of Poly(carbonsuboxide) on the Atomic Scale: A Solid-State NMR Study. <i>Chemistry - A European Journal</i> , 2005, 11, 4429-4440.	1.7	33
28	Metastable Se <sub>6</sub> as a ligand for Ag <sup>+</sup> : from isolated molecular to polymeric 1D and 2D structures. <i>Dalton Transactions</i> , 2011, 40, 5865.	1.6	30
29	Re-entrant phase transition of the crystalline ion conductor Ag <sub>7</sub> P <sub>3</sub> S <sub>11</sub> . <i>Solid State Sciences</i> , 2004, 6, 1077-1088.	1.5	29
30	Switchâ”On Fluorescence of a Peryleneâ”Dyeâ”Functionalized Metalâ”Organic Framework through Postsynthetic Modification. <i>Chemistry - A European Journal</i> , 2015, 21, 10714-10720.	1.7	29
31	Refinement of the crystal structure of Li <sub>4</sub> P <sub>2</sub> S <sub>6</sub> using NMR crystallography. <i>Dalton Transactions</i> , 2018, 47, 11691-11695.	1.6	26
32	Rare-Earth Tricyanomelaminates [NH <sub>4</sub> ]Ln[HC <sub>6</sub> N <sub>9</sub> ] <sub>2</sub> [H <sub>2</sub> O] <sub>7</sub> â”H <sub>2</sub> O (Ln=La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy): Structural Investigation, Solid-State NMR Spectroscopy, and Photoluminescence. <i>Chemistry - A European Journal</i> , 2007, 13, 3512-3524.	1.7	25
33	Synthesis, Structure, and Dynamics of Tris(Î-5-cyclopentadienyl)lanthanides and Bis(Î-5-cyclopentadienyl)[bis(trimethylsilyl)amido]cerium(III). <i>Organometallics</i> , 2006, 25, 3027-3033.	1.1	23
34	Effective dipolar couplings determined by dipolar dephasing of double-quantum coherences. <i>Journal of Magnetic Resonance</i> , 2006, 180, 186-196.	1.2	23
35	Synthesis, Crystal Structure, and Characterization (Vibrational and Solid-State <sup>31</sup> P MAS) Tj ETQq1 1 0.784314 rgBT /Over <i>Chemistry of Materials</i> , 2007, 19, 5067-5073.	3.2	22
36	A method for improved quantification of <sup>1</sup> H NMR signals under low-resolution conditions for solids. <i>Journal of Magnetic Resonance</i> , 2009, 201, 1-6.	1.2	22

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37	Metastable 11 K Superconductor Na <sub>1-x</sub> Fe <sub>2</sub> . Inorganic Chemistry, 2012, 51, 8161-8167.	1.9	22
38	Sr <sub>3</sub> P <sub>6</sub> O <sub>6</sub> N <sub>8</sub> a highly condensed layered phosphate. Dalton Transactions, 2009, , 4081.	1.6	21
39	Pulse-transient adapted C-symmetry pulse sequences. Solid State Nuclear Magnetic Resonance, 2012, 43-44, 42-50.	1.5	21
40	Homogeneity of doping with paramagnetic ions by NMR. Physical Chemistry Chemical Physics, 2016, 18, 9752-9757.	1.3	21
41	Blind spheres of paramagnetic dopants in solid state NMR. Physical Chemistry Chemical Physics, 2019, 21, 10185-10194.	1.3	21
42	Oxonium Ions Substituting Cesium Ions in the Structure of the New High-Pressure Borate HP <sub>1-x</sub> (H <sub>3</sub> O) <sub>x</sub> B <sub>3</sub> O <sub>5</sub> (x=0.5-0.7). Chemistry - A European Journal, 2014, 20, 4316-4323.	1.7	20
43	M <sub>4</sub> P <sub>6</sub> N <sub>12</sub> (M=Mg, Ca): New Imidonitridophosphates with an Unprecedented Layered Network Structure Type. Chemistry - A European Journal, 2015, 21, 5836-5842.	1.7	20
44	Linking <sup>31</sup> P Magnetic Shielding Tensors to Crystal Structures: Experimental and Theoretical Studies on Metal(II) Aminotris(methylenephosphonates). Inorganic Chemistry, 2012, 51, 11466-11477.	1.9	19
45	Cd <sub>2</sub> N <sub>4</sub> and MnP <sub>2</sub> N <sub>4</sub> Ternary Transition-Metal Nitridophosphates. European Journal of Inorganic Chemistry, 2016, 2016, 1497-1502.	1.0	19
46	Reduction of the temperature gradients in laser assisted high temperature MAS NMR. Solid State Nuclear Magnetic Resonance, 2018, 94, 26-30.	1.5	19
47	Cellulose Nanocrystal-Templated Tin Dioxide Thin Films for Gas Sensing. ACS Applied Materials & Interfaces, 2020, 12, 12639-12647.	4.0	19
48	Beiträge zur Kristallchemie und zum thermischen Verhalten von wasserfreien Phosphaten. XXXVI [1] Synthese, Kristallstruktur und spektroskopische Charakterisierung von Palladium(II)-diphosphat Pd <sub>2</sub> P <sub>2</sub> O <sub>7</sub> . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2005, 631, 2371-2376.	0.6	15
49	Trace Determination and Pressure Estimation of Fluorine F <sub>2</sub> Caused by Irradiation Damage in Minerals and Synthetic Fluorides. Chemistry - A European Journal, 2016, 22, 18388-18393.	1.7	14
50	A Test for the Number of Coupled Spins I=1/2 in Magic-Angle-Spinning Solids: Zero-Quantum Recoupling of Multiple-Quantum Coherences. ChemPhysChem, 2003, 4, 457-465.	1.0	12
51	No aromaticity of P <sub>6</sub> observed via solid state <sup>31</sup> P-NMR spectroscopy. Chemical Communications, 2006, , 218-219.	2.2	11
52	Beiträge zur Kristallchemie und zum thermischen Verhalten von wasserfreien Phosphaten. XXXXII Die ersten Iridiumphosphate. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 2922-2932.	0.6	11
53	Vacancy ordering and host-guest interactions in CdPS <sub>3</sub> intercalates: Results from multidimensional solid state NMR. Physical Chemistry Chemical Physics, 2003, 5, 1306.	1.3	10
54	Thermal Hardening and Defects in Anodic Aluminum Oxide Obtained in Oxalic Acid: Implications for the Template Synthesis of Low-Dimensional Nanostructures. ACS Applied Nano Materials, 2019, 2, 1986-1994.	2.4	10

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55	Enhanced triple-quantum excitation in <sup>13</sup> C magic-angle spinning NMR. Journal of Magnetic Resonance, 2003, 162, 443-453.	1.2	9
56	C-REDOR curves of extended spin systems. Solid State Nuclear Magnetic Resonance, 2013, 49-50, 12-22.	1.5	9
57	Electronic and Ionic Conductivity in Alkaline Earth Diazenides MAEN2 (MAE = Ca, Sr, Ba) and in Li2N2. Chemistry of Materials, 2013, 25, 4149-4155.	3.2	8
58	Nonequilibrium Catalyst Materials Stabilized by the Aerogel Effect: Solvent Free and Continuous Synthesis of Gamma-Alumina with Hierarchical Porosity. ACS Applied Materials & Interfaces, 2017, 9, 11599-11608.	4.0	8
59	Decomposition of P <sub>4</sub> O <sub>10</sub> in DMSO. Chemical Communications, 2018, 54, 7605-7608.	2.2	8
60	Stable magic angle spinning with Low-Cost 3D-Printed parts. Journal of Magnetic Resonance, 2021, 333, 107096.	1.2	8
61	Low temperature synthesis of ionic phosphates in dimethyl sulfoxide. Dalton Transactions, 2014, 43, 10033-10039.	1.6	7
62	Accurate determination of chemical shift tensor orientations of single-crystals by solid-state magic angle spinning NMR. Journal of Magnetic Resonance, 2017, 282, 89-103.	1.2	7
63	Doping homogeneity in co-doped materials investigated at different length scales. Physical Chemistry Chemical Physics, 2020, 22, 818-825.	1.3	7
64	A Guide to Brighter Phosphorsâ€Linking Luminescence Properties to Doping Homogeneity Probed by NMR. ChemPhysChem, 2019, 20, 3245-3250.	1.0	6
65	Understanding the Stability and Recrystallization Behavior of Amorphous Zinc Phosphate. Journal of Physical Chemistry C, 2021, 125, 2636-2647.	1.5	6
66	Defect-controlled halogenating properties of lanthanide-doped ceria nanozymes. Nanoscale, 2022, 14, 4740-4752.	2.8	6
67	Stepwise conversion of a single source precursor into crystalline AlN by transamination reaction. Journal of Solid State Chemistry, 2008, 181, 530-538.	1.4	5
68	Highâ€Pressure Synthesis and Structural Investigation of H <sub>3</sub> P <sub>8</sub> O <sub>8</sub> N <sub>9</sub> : A New Phosphorus(V) Oxonitride Imide with an Interrupted Framework Structure. Chemistry - A European Journal, 2012, 18, 4358-4366.	1.7	4
69	Sn6[P12N24] - A Sodalite-Type Nitridophosphate. European Journal of Inorganic Chemistry, 2015, 2015, 382-388.	1.0	4
70	Binary Lead Fluoride Pb <sub>3</sub> F <sub>8</sub> . Chemistry - A European Journal, 2019, 25, 15656-15661.	1.7	4
71	Solid-State Landscape of 4,4â€Azobis(3,5-dimethyl-1 <i>H</i> -pyrazole) with the Isolation of Conformer-Dependent Polymorphs. Crystal Growth and Design, 2020, 20, 2721-2733.	1.4	4
72	Spinâ€Polarized Structures and Solidâ€State NMR Spectroscopy of Paramagnetic Compounds. Angewandte Chemie - International Edition, 2009, 48, 3401-3403.	7.2	3

#	ARTICLE	IF	CITATIONS
73	Giant zirconium-bisphosphonate nano-ribbons and their liquid crystalline phase behaviour in water. Dalton Transactions, 2021, 50, 7314-7323.	1.6	3
74	Irreversible Phase Transition of Bistetramethylammonium Hydrogencyclotriphosphate. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 1609-1614.	0.6	2
75	Investigation of Bistetramethylammonium Hydrogencyclotriphosphateâ€™A Molecular Rotor?. Chemistry - A European Journal, 2018, 24, 8756-8759.	1.7	2
76	Synthesis and characterization of methylammonium phosphates as crystalline approximants for anhydrous, low melting phosphate glasses. RSC Advances, 2019, 9, 1822-1830.	1.7	1
77	Effect of Oxygen on the Ammonothermal Synthesis: Example of $\text{Na}_2[\text{Zn}(\text{NH}_2)_4] \cdot (\text{NH}_3)_x$ and $\text{Na}_2[\text{Zn}(\text{NH}_2)_4] \cdot (\text{H}_2\text{O})_x$ . European Journal of Inorganic Chemistry, 0, , .	1.0	0
78	Volume Increments for Crystalline Borates. European Journal of Inorganic Chemistry, 2022, 2022, .	1.0	0