

Klaus Schmidt-Rohr

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3922309/publications.pdf>

Version: 2024-02-01

140
papers

8,447
citations

46984

47
h-index

48277

88
g-index

141
all docs

141
docs citations

141
times ranked

10727
citing authors

#	ARTICLE	IF	CITATIONS
1	Parallel cylindrical water nanochannels in Nafion fuel-cell membranes. <i>Nature Materials</i> , 2008, 7, 75-83.	13.3	1,214
2	Characterization of biochar from fast pyrolysis and gasification systems. <i>Environmental Progress and Sustainable Energy</i> , 2009, 28, 386-396.	1.3	649
3	Structure of the amantadine binding site of influenza M2 proton channels in lipid bilayers. <i>Nature</i> , 2010, 463, 689-692.	13.7	590
4	Quantitative solid-state ¹³ C NMR with signal enhancement by multiple cross polarization. <i>Journal of Magnetic Resonance</i> , 2014, 239, 44-49.	1.2	253
5	Criteria to Select Biochars for Field Studies based on Biochar Chemical Properties. <i>Bioenergy Research</i> , 2011, 4, 312-323.	2.2	231
6	Poly(methylene) Crystallites in Humic Substances Detected by Nuclear Magnetic Resonance. <i>Environmental Science & Technology</i> , 2000, 34, 530-534.	4.6	185
7	Microstructure of poly(vinyl alcohol) hydrogels produced by freeze/thaw cycling. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1999, 37, 3438-3454.	2.4	180
8	Principles of centerband-only detection of exchange in solid-state nuclear magnetic resonance, and extension to four-time centerband-only detection of exchange. <i>Journal of Chemical Physics</i> , 2000, 112, 8988-9001.	1.2	159
9	Single-Site Heterogeneous Catalysts for Olefin Polymerization Enabled by Cation Exchange in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2016, 138, 10232-10237.	6.6	153
10	Nonaromatic Core-Shell Structure of Nanodiamond from Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2009, 131, 1426-1435.	6.6	147
11	Chemical and nanometer-scale structure of kerogen and its change during thermal maturation investigated by advanced solid-state ¹³ C NMR spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 2110-2127.	1.6	146
12	NMR Detection of pH-Dependent Histidine-Water Proton Exchange Reveals the Conduction Mechanism of a Transmembrane Proton Channel. <i>Journal of the American Chemical Society</i> , 2012, 134, 3703-3713.	6.6	143
13	Improved Catalytic Activity and Stability of a Palladium Pincer Complex by Incorporation into a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2016, 138, 1780-1783.	6.6	141
14	Influence of Molecular Structure and Adsorbent Properties on Sorption of Organic Compounds to a Temperature Series of Wood Chars. <i>Environmental Science & Technology</i> , 2014, 48, 4790-4798.	4.6	137
15	Influence of animal manure application on the chemical structures of soil organic matter as investigated by advanced solid-state NMR and FT-IR spectroscopy. <i>Geoderma</i> , 2008, 146, 353-362.	2.3	113
16	A Novel Tool for Probing Membrane Protein Structure: Solid-State NMR with Proton Spin Diffusion and X-Nucleus Detection. <i>Journal of the American Chemical Society</i> , 1998, 120, 5043-5051.	6.6	112
17	Advanced solid-state NMR spectroscopy of natural organic matter. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2017, 100, 17-51.	3.9	112
18	Loss of optical and molecular indicators of terrigenous dissolved organic matter during long-term photobleaching. <i>Aquatic Sciences</i> , 2014, 76, 353-373.	0.6	105

#	ARTICLE	IF	CITATIONS
19	Enzyme-Regulated Supramolecular Assemblies of Cholesterol Conjugates against Drug-Resistant Ovarian Cancer Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 10758-10761.	6.6	102
20	Polymer Infiltration into Metal-Organic Frameworks in Mixed-Matrix Membranes Detected in Situ by NMR. <i>Journal of the American Chemical Society</i> , 2019, 141, 7589-7595.	6.6	102
21	Late Stages of Phase Separation in a Binary Polymer Blend Studied by Rheology, Optical and Electron Microscopy, and Solid State NMR. <i>Macromolecules</i> , 1997, 30, 4470-4480.	2.2	99
22	Improved Hydrothermal Stability of Mesoporous Oxides for Reactions in the Aqueous Phase. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 13163-13167.	7.2	90
23	Characterization of a nitrogen-rich fulvic acid and its precursor algae from solid state NMR. <i>Organic Geochemistry</i> , 2007, 38, 1277-1292.	0.9	89
24	Carbon Overcoating of Supported Metal Catalysts for Improved Hydrothermal Stability. <i>ACS Catalysis</i> , 2015, 5, 4546-4555.	5.5	88
25	Carbon Nitride Nanowire Crystals Derived from Pyridine. <i>Journal of the American Chemical Society</i> , 2018, 140, 4969-4972.	6.6	81
26	Extent of Pyrolysis Impacts on Fast Pyrolysis Biochar Properties. <i>Journal of Environmental Quality</i> , 2012, 41, 1115-1122.	1.0	80
27	Photochemical flocculation of terrestrial dissolved organic matter and iron. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 121, 398-413.	1.6	71
28	Avoidance of Density Anomalies as a Structural Principle for Semicrystalline Polymers: The Importance of Chain Ends and Chain Tilt. <i>Macromolecules</i> , 2017, 50, 1521-1540.	2.2	71
29	Solid state NMR study of chemical structure and hydrothermal deactivation of moderate-temperature carbon materials with acidic SO ₃ H sites. <i>Carbon</i> , 2014, 74, 333-345.	5.4	67
30	pH-Dependent Conformation, Dynamics, and Aromatic Interaction of the Gating Tryptophan Residue of the Influenza M2 Proton Channel from Solid-State NMR. <i>Biophysical Journal</i> , 2013, 104, 1698-1708.	0.2	64
31	Engineering Catalyst Microenvironments for Metal-Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12718-12722.	7.2	64
32	Magic-Angle-Spinning NMR Techniques for Measuring Long-Range Distances in Biological Macromolecules. <i>Accounts of Chemical Research</i> , 2013, 46, 2154-2163.	7.6	63
33	Composite-pulse and partially dipolar dephased multiCP for improved quantitative solid-state ¹³ C NMR. <i>Journal of Magnetic Resonance</i> , 2017, 285, 68-78.	1.2	61
34	Molecular-scale heterogeneity of humic acid in particle-size fractions of two Iowa soils. <i>Geoderma</i> , 2007, 140, 17-29.	2.3	60
35	Advanced Solid-State NMR Characterization of Marine Dissolved Organic Matter Isolated Using the Coupled Reverse Osmosis/Electrodialysis Method. <i>Environmental Science & Technology</i> , 2012, 46, 5806-5814.	4.6	60
36	Why Combustions Are Always Exothermic, Yielding About 418 kJ per Mole of O ₂ . <i>Journal of Chemical Education</i> , 2015, 92, 2094-2099.	1.1	60

#	ARTICLE	IF	CITATIONS
37	Backbone Dynamics of the Nafion Ionomer Studied by ¹⁹ F- ¹³ C Solid-State NMR. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 2189-2203.	1.1	59
38	Determination of the Structure of a Novel Anion Exchange Fuel Cell Membrane by Solid-State Nuclear Magnetic Resonance Spectroscopy. <i>Macromolecules</i> , 2009, 42, 1659-1664.	2.2	59
39	The Chemical Structure of Carbon Nanothreads Analyzed by Advanced Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2018, 140, 7658-7666.	6.6	59
40	How Batteries Store and Release Energy: Explaining Basic Electrochemistry. <i>Journal of Chemical Education</i> , 2018, 95, 1801-1810.	1.1	59
41	Vinyl-Substituted Silphenylene Siloxane Copolymers: Novel High-Temperature Elastomers. <i>Macromolecules</i> , 1999, 32, 3426-3431.	2.2	56
42	Differences between Lignin in Unprocessed Wood, Milled Wood, Mutant Wood, and Extracted Lignin Detected by ¹³ C Solid-State NMR. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 9677-9686.	2.4	56
43	Relaxation-Induced Dipolar Exchange with Recoupling—An MAS NMR Method for Determining Heteronuclear Distances without Irradiating the Second Spin. <i>Journal of Magnetic Resonance</i> , 2000, 145, 161-172.	1.2	55
44	Compensation for pulse imperfections in rotational-echo double-resonance NMR by composite pulses and EXORCYCLE. <i>Journal of Magnetic Resonance</i> , 2004, 168, 358-365.	1.2	55
45	Simulation of small-angle scattering curves by numerical Fourier transformation. <i>Journal of Applied Crystallography</i> , 2007, 40, 16-25.	1.9	54
46	Oxygen Is the High-Energy Molecule Powering Complex Multicellular Life: Fundamental Corrections to Traditional Bioenergetics. <i>ACS Omega</i> , 2020, 5, 2221-2233.	1.6	53
47	Analysis of Phase Separation in High Performance PbTe/PbS Thermoelectric Materials. <i>Advanced Functional Materials</i> , 2013, 23, 747-757.	7.8	52
48	Quantitative ¹³ C NMR of whole and fractionated Iowa Mollisols for assessment of organic matter composition. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 584-598.	1.6	48
49	Solid-State ¹³ C NMR Characterization of Carbon-Modified TiO ₂ . <i>Chemistry of Materials</i> , 2009, 21, 1187-1197.	3.2	42
50	Spectrally edited 2D ¹³ C/ ¹³ C NMR spectra without diagonal ridge for characterizing ¹³ C-enriched low-temperature carbon materials. <i>Journal of Magnetic Resonance</i> , 2013, 234, 112-124.	1.2	40
51	Cellulase-Inspired Solid Acids for Cellulose Hydrolysis: Structural Explanations for High Catalytic Activity. <i>ACS Catalysis</i> , 2018, 8, 1464-1468.	5.5	40
52	Reaction engineering implications of cellulose crystallinity and water-promoted recrystallization. <i>Green Chemistry</i> , 2019, 21, 5541-5555.	4.6	40
53	Suitability of Different ¹³ C Solid-state NMR Techniques in the Characterization of Humic Acids. <i>International Journal of Environmental Analytical Chemistry</i> , 2002, 82, 183-196.	1.8	39
54	Structural characterization of gilsonite bitumen by advanced nuclear magnetic resonance spectroscopy and ultrahigh resolution mass spectrometry revealing pyrrolic and aromatic rings substituted with aliphatic chains. <i>Organic Geochemistry</i> , 2012, 44, 21-36.	0.9	37

#	ARTICLE	IF	CITATIONS
55	Relaxation-compensated difference spin diffusion NMR for detecting ^{13}C - ^{13}C long-range correlations in proteins and polysaccharides. <i>Journal of Biomolecular NMR</i> , 2015, 61, 97-107.	1.6	36
56	Identification and mobility of deuterated residues in peptides and proteins by ^2D solid-state NMR. <i>Chemical Physics Letters</i> , 1999, 300, 213-220.	1.2	35
57	A molecular fluorophore in citric acid/ethylenediamine carbon dots identified and quantified by multinuclear solid-state nuclear magnetic resonance. <i>Magnetic Resonance in Chemistry</i> , 2020, 58, 1130-1138.	1.1	34
58	Rotational Motions in Atactic Poly(acrylonitrile) Studied by One- and Two-Dimensional ^{15}N Solid-State NMR and Dielectric Measurements. <i>Macromolecules</i> , 2003, 36, 6100-6113.	2.2	33
59	Measurements of Carbon to Amide-Proton Distances by ^1H Dipolar Recoupling with ^{15}N NMR Detection. <i>Journal of the American Chemical Society</i> , 2003, 125, 5648-5649.	6.6	33
60	Deactivation of Supported Pt Catalysts during Alcohol Oxidation Elucidated by Spectroscopic and Kinetic Analyses. <i>ACS Catalysis</i> , 2017, 7, 6745-6756.	5.5	33
61	Evidence for major input of riverine organic matter into the ocean. <i>Organic Geochemistry</i> , 2018, 116, 62-76.	0.9	33
62	Abundant Nonprotonated Aromatic and Oxygen-Bonded Carbons Make Humic Substances Distinct from Biopolymers. <i>Environmental Science and Technology Letters</i> , 2018, 5, 476-480.	3.9	32
63	Conformation and Dynamics of Atactic Poly(acrylonitrile). 1. Trans/Gauche Ratio from Double-Quantum Solid-State ^{13}C NMR of the Methylene Groups. <i>Macromolecules</i> , 2000, 33, 5169-5180.	2.2	31
64	Conformation and Dynamics of Atactic Poly(acrylonitrile). 2. Torsion Angle Distributions in Meso Dyads from Two-Dimensional Solid-State Double-Quantum ^{13}C NMR. <i>Macromolecules</i> , 2001, 34, 7368-7381.	2.2	31
65	Hydrocarbons to carboxyl-rich alicyclic molecules: A continuum model to describe biodegradation of petroleum-derived dissolved organic matter in contaminated groundwater plumes. <i>Journal of Hazardous Materials</i> , 2021, 402, 123998.	6.5	31
66	Self-assembled calcium phosphate nanocomposites using block copolypeptide templates. <i>Soft Matter</i> , 2009, 5, 4311.	1.2	30
67	Novel insights from NMR spectroscopy into seasonal changes in the composition of dissolved organic matter exported to the Bering Sea by the Yukon River. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 181, 72-88.	1.6	30
68	Zirconium Metal-Organic Frameworks Assembled from Pd and Pt $\text{P}^{\text{N}}\text{N}^{\text{P}}$ Pincer Complexes: Synthesis, Postsynthetic Modification, and Lewis Acid Catalysis. <i>Inorganic Chemistry</i> , 2018, 57, 2663-2672.	1.9	29
69	Conformationally selective multidimensional chemical shift ranges in proteins from a PACSY database purged using intrinsic quality criteria. <i>Journal of Biomolecular NMR</i> , 2016, 64, 115-130.	1.6	28
70	Stability of Pd nanoparticles on carbon-coated supports under hydrothermal conditions. <i>Catalysis Science and Technology</i> , 2018, 8, 1151-1160.	2.1	28
71	Selective Observation and Quantification of Amorphous Trans Conformers in Doubly ^{13}C -Labeled Poly(ethylene terephthalate), PET, by Zero-Quantum Magic-Angle-Spinning Solid-State NMR. <i>Macromolecules</i> , 2002, 35, 7993-8004.	2.2	27
72	Fate of the Amino Acid in Glucose- $^{\sim}$ Glycine Melanoidins Investigated by Solid-State Nuclear Magnetic Resonance (NMR). <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 10701-10711.	2.4	27

#	ARTICLE	IF	CITATIONS
73	Solid State NMR spectroscopy in polymer science. <i>Advanced Materials</i> , 1990, 2, 72-81.	11.1	26
74	Waterâ€“polymer interfacial area in Nafion: Comparison with structural models. <i>Polymer</i> , 2011, 52, 1971-1974.	1.8	26
75	Quantifying Molecular Mixing and Heterogeneity in Pharmaceutical Dispersions at Sub-100 nm Resolution by Spin Diffusion NMR. <i>Molecular Pharmaceutics</i> , 2020, 17, 3567-3580.	2.3	26
76	Morphological Transformations in the Magnetite Biomineralizing Protein Mms6 in Iron Solutions: A Small-Angle X-ray Scattering Study. <i>Langmuir</i> , 2015, 31, 2818-2825.	1.6	25
77	Hyperâ€“Crosslinkers Lead to Temperatureâ€“and pHâ€“Responsive Polymeric Nanogels with Unusual Volume Change. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2623-2627.	7.2	24
78	Comparison of the Chemical Composition of Dissolved Organic Matter in Three Lakes in Minnesota. <i>Environmental Science & Technology</i> , 2018, 52, 1747-1755.	4.6	24
79	Constraining Carbon Nanothread Structures by Experimental and Calculated Nuclear Magnetic Resonance Spectra. <i>Nano Letters</i> , 2018, 18, 4934-4942.	4.5	24
80	Postsynthetic Metal Exchange in a Metalâ€“Organic Framework Assembled from Co(III) Diphosphine Pincer Complexes. <i>Inorganic Chemistry</i> , 2019, 58, 3227-3236.	1.9	23
81	Bioinspired synthesis of self-assembled calcium phosphate nanocomposites using block copolymer-peptide conjugates. <i>Journal of Materials Research</i> , 2008, 23, 3196-3212.	1.2	22
82	Sorption Selectivity in Natural Organic Matter Studied with Nitroxyl Paramagnetic Relaxation Probes. <i>Environmental Science & Technology</i> , 2012, 46, 12814-12822.	4.6	22
83	Similarities in chemical composition of soil organic matter across a millennia-old paddy soil chronosequence as revealed by advanced solid-state NMR spectroscopy. <i>Biology and Fertility of Soils</i> , 2014, 50, 571-581.	2.3	22
84	High-Sensitivity ^2H NMR in Solids by ^1H Detection. <i>Journal of the American Chemical Society</i> , 2001, 123, 7168-7169.	6.6	21
85	Sorption Selectivity in Natural Organic Matter Probed with Fully Deuterium-Exchanged and Carbonyl- ^{13}C -Labeled Benzophenone and ^1H - ^{13}C NMR Spectroscopy. <i>Environmental Science & Technology</i> , 2014, 48, 8645-8652.	4.6	21
86	Conformation and Dynamics of Atactic Poly(acrylonitrile). 3. Characterization of Local Structure by Two-Dimensional ^2H - ^{13}C Solid-State NMR. <i>Macromolecules</i> , 2001, 34, 7382-7391.	2.2	20
87	Improved hydrothermal stability of Pd nanoparticles on nitrogen-doped carbon supports. <i>Catalysis Science and Technology</i> , 2018, 8, 3548-3561.	2.1	20
88	Reduced Crystallinity and Mobility of Nylon-6 Confined near the Organicâ€“Inorganic Interface in a Phosphate Glass-Rich Nanocomposite Detected by ^1H - ^{13}C NMR. <i>Macromolecules</i> , 2011, 44, 8100-8105.	2.2	19
89	Aqueous Route Synthesis of Mesoporous ZrO_2 by Agarose Templatation. <i>Journal of the American Ceramic Society</i> , 2012, 95, 3455-3462.	1.9	19
90	Hydrothermal degradation of model sulfonic acid compounds: Probing the relative sulfurâ€“carbon bond strength in water. <i>Catalysis Communications</i> , 2014, 51, 33-36.	1.6	19

#	ARTICLE	IF	CITATIONS
91	Structural evidence for soil organic matter turnover following glucose addition and microbial controls over soil carbon change at different horizons of a Mollisol. <i>Soil Biology and Biochemistry</i> , 2018, 119, 63-73.	4.2	19
92	Structure of the Polymer Backbones in polyMOF Materials. <i>Journal of the American Chemical Society</i> , 2020, 142, 10863-10868.	6.6	19
93	Biosorption of nonylphenol by pure algae, field-collected planktons and their fractions. <i>Environmental Pollution</i> , 2015, 198, 61-69.	3.7	18
94	Polymer-Clay Nanocomposites from Directly Micellized Polymer/Toluene in Water and Their Characterization by WAXD and Solid-State NMR Spectroscopy. <i>Chemistry of Materials</i> , 2003, 15, 1938-1940.	3.2	17
95	Broadband ∞ -Speed-Magic-Angle Spinning NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2009, 131, 8390-8391.	6.6	17
96	Temperature and reaction atmosphere effects on the properties of corn stover biochar. <i>Environmental Progress and Sustainable Energy</i> , 2017, 36, 696-707.	1.3	17
97	Aromatic spectral editing techniques for magic-angle-spinning solid-state NMR spectroscopy of uniformly ^{13}C -labeled proteins. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 72, 118-126.	1.5	16
98	Investigation into the Effect of Heteroatom Content on Kerogen Structure Using Advanced ^{13}C Solid-State Nuclear Magnetic Resonance Spectroscopy. <i>Energy & Fuels</i> , 2019, 33, 645-653.	2.5	16
99	^{15}N and $^{13}\text{C}\{^{14}\text{N}\}$ NMR investigation of the major nitrogen-containing segment in an aquatic fulvic acid: Evidence for a hydantoin derivative. <i>Magnetic Resonance in Chemistry</i> , 2011, 49, 775-780.	1.1	15
100	Solid-state ^{13}C -NMR on oriented films of liquid-crystalline polymers. <i>Advanced Materials</i> , 1990, 2, 484-487.	11.1	14
101	Synthesis and Reactivity of Zr MOFs Assembled from $\text{P}^{\text{N}}\text{N}^{\text{N}}\text{P}$ -Ru Pincer Complexes. <i>Organometallics</i> , 2019, 38, 3419-3428.	1.1	14
102	Alterations in Molecular Composition of Humic Substances from Eucalypt Plantation Soils Assessed by ^{13}C -NMR Spectroscopy. <i>Soil Science Society of America Journal</i> , 2013, 77, 293-306.	1.2	13
103	Nanoscale Morphology of Polyanhydride Copolymers. <i>Macromolecules</i> , 2005, 38, 8468-8472.	2.2	12
104	A Major Step in Opening the Black Box of High-Molecular-Weight Dissolved Organic Nitrogen by Isotopic Labeling of <i>Synechococcus</i> and Multibond Two-Dimensional NMR. <i>Analytical Chemistry</i> , 2017, 89, 11990-11998.	3.2	12
105	Exploring water-soluble organic aerosols structures in urban atmosphere using advanced solid-state ^{13}C NMR spectroscopy. <i>Atmospheric Environment</i> , 2020, 230, 117503.	1.9	12
106	Direct quantification of the degree of polymerization of hydrolyzed cellulose by solid-state NMR spectroscopy. <i>Cellulose</i> , 2022, 29, 2131-2144.	2.4	12
107	Engineering Catalyst Microenvironments for Metal-Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. <i>Angewandte Chemie</i> , 2014, 126, 12932-12936.	1.6	11
108	Simple One-Step Synthesis of Aromatic-Rich Materials with High Concentrations of Hydrothermally Stable Catalytic Sites, Validated by NMR. <i>Chemistry of Materials</i> , 2014, 26, 5523-5532.	3.2	11

#	ARTICLE	IF	CITATIONS
109	Formation of Char-Like, Fused-Ring Aromatic Structures from a Nonpyrogenic Pathway during Decomposition of Wheat Straw. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 2607-2614.	2.4	11
110	Perfect and Defective ¹³ C-Furan-Derived Nanofibers from Modest-Pressure Synthesis Analyzed by ¹³ C NMR. <i>Journal of the American Chemical Society</i> , 2021, 143, 9529-9542.	6.6	11
111	Effects of post-pyrolysis air oxidation on the chemical composition of biomass chars investigated by solid-state nuclear magnetic resonance spectroscopy. <i>Carbon</i> , 2019, 153, 173-178.	5.4	10
112	Immobilized ¹³ C-labeled polyether chain ends confined to the crystallite surface detected by advanced NMR. <i>Science Advances</i> , 2020, 6, .	4.7	10
113	Analysis of coke formed during zeolite-catalyzed supercritical dodecane cracking: Effect of supercritical water. <i>Applied Catalysis A: General</i> , 2020, 590, 117330.	2.2	9
114	Asymmetric Co-unit Inclusion in Statistical Copolyesters. <i>Macromolecules</i> , 2021, 54, 835-845.	2.2	9
115	Silk-Like Protein with Persistent Radicals Identified in Oyster Adhesive by Solid-State NMR. <i>ACS Applied Bio Materials</i> , 2019, 2, 2840-2852.	2.3	8
116	Methionine bound to Pd/β-Al ₂ O ₃ catalysts studied by solid-state ¹³ C NMR. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 72, 64-72.	1.5	7
117	Rapid Depolymerization of Decrystallized Cellulose to Soluble Products via Ethanolysis under Mild Conditions. <i>ChemSusChem</i> , 2020, 13, 2634-2641.	3.6	7
118	Physicochemical Changes in Biomass Chars by Thermal Oxidation or Ambient Weathering and Their Impacts on Sorption of a Hydrophobic and a Cationic Compound. <i>Environmental Science & Technology</i> , 2021, 55, 13072-13081.	4.6	7
119	Parallel cylindrical water nanochannels in Nafion fuel-cell membranes. , 2010, , 238-246.		7
120	Alkyl and Other Major Structures in ¹³ C-Labeled Glucose-Glycine Melanoidins Identified by Solid-State Nuclear Magnetic Resonance. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 481-490.	2.4	6
121	Expansion Work without the External Pressure and Thermodynamics in Terms of Quasistatic Irreversible Processes. <i>Journal of Chemical Education</i> , 2014, 91, 402-409.	1.1	6
122	Quick, selective NMR spectra of C OH moieties in ¹³ C-enriched solids. <i>Journal of Magnetic Resonance</i> , 2019, 301, 80-84.	1.2	5
123	Structural composition of immobilized fertilizer N associated with decomposed wheat straw residues using advanced nuclear magnetic resonance spectroscopy combined with ¹³ C and ¹⁵ N labeling. <i>Geoderma</i> , 2021, 398, 115110.	2.3	5
124	Investigation of sorbate-induced plasticization of Pahokee peat by solid-state NMR spectroscopy. <i>Journal of Soils and Sediments</i> , 2016, 16, 1841-1848.	1.5	4
125	Protective Carbon Overlayers from 2,3-Naphthalenediol Pyrolysis on Mesoporous SiO ₂ and Al ₂ O ₃ Analyzed by Solid-State NMR. <i>Materials</i> , 2018, 11, 980.	1.3	4
126	Analysis of Two Definitions of the Mole That Are in Simultaneous Use, and Their Surprising Consequences. <i>Journal of Chemical Education</i> , 2020, 97, 597-602.	1.1	4

#	ARTICLE	IF	CITATIONS
127	A New Method for Solid Acid Catalyst Evaluation for Cellulose Hydrolysis. Sustainable Chemistry, 2021, 2, 645-669.	2.2	4
128	Mechanochemical Pretreatment for Waste-Free Conversion of Bamboo to Simple Sugars: Utilization of Available Resources for Developing Economies. Advanced Sustainable Systems, 0, , 2100286.	2.7	4
129	Sub-millisecond ¹²⁵ Te NMR spin-lattice relaxation times and large Knight shifts in complex tellurides: Validation of a quadratic relation across the spectrum. Solid State Nuclear Magnetic Resonance, 2016, 78, 40-44.	1.5	3
130	Hyper-Crosslinkers Lead to Temperature- and pH-Responsive Polymeric Nanogels with Unusual Volume Change. Angewandte Chemie, 2017, 129, 2667-2671.	1.6	3
131	Multinuclear solid-state NMR of complex nitrogen-rich polymeric microcapsules: Weight fractions, spectral editing, component mixing, and persistent radicals. Solid State Nuclear Magnetic Resonance, 2020, 106, 101650.	1.5	3
132	Microstructure of poly(vinyl alcohol) hydrogels produced by freeze/thaw cycling. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 3438-3454.	2.4	3
133	Multidimensional NMR Spectroscopy of Polymers. ACS Symposium Series, 1995, , 184-190.	0.5	2
134	O ₂ and Other High-Energy Molecules in Photosynthesis: Why Plants Need Two Photosystems. Life, 2021, 11, 1191.	1.1	2
135	Structural changes from vibration welding of maple and pine woods analyzed by solid-state NMR. Welding in the World, Le Soudage Dans Le Monde, 0, , 1.	1.3	2
136	Reply to "Comment on "Quantification of C and O Surface Carbons in Detonation Nanodiamond by NMR". Journal of Physical Chemistry C, 2015, 119, 21288-21291.	1.5	1
137	Templated and Bioinspired Aqueous Phase Synthesis and Characterization of Mesoporous Zirconia. Science of Advanced Materials, 2013, 5, 354-365.	0.1	1
138	Frontispiece: Engineering Catalyst Microenvironments for Metal-Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. Angewandte Chemie - International Edition, 2014, 53, .	7.2	0
139	Frontispiz: Engineering Catalyst Microenvironments for Metal-Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. Angewandte Chemie, 2014, 126, n/a-n/a.	1.6	0
140	Impact of plant litter on nonprotonated aromatics and aromaticity of organic matter in some Cerrado Ferralsols. Catena, 2022, 216, 106361.	2.2	0