

# Yusuke Nishiyama

## List of Publications by Year in descending order

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85  
papers

2,774  
citations

186265

28  
h-index

197818

49  
g-index

89  
all docs

89  
docs citations

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times ranked

2975  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Separating an overlapped <sup>1</sup> H peak and identifying its <sup>1</sup> H- <sup>1</sup> H correlations with the use of single-channel <sup>1</sup> H solid-state NMR at fast MAS. Solid State Nuclear Magnetic Resonance, 2022, 117, 101774. | 2.3  | 2         |
| 2  | Detection of remote proton- <sup>14</sup> N correlations by <sup>1</sup> H-detected <sup>14</sup> N overtone solid-state NMR at fast MAS. Physical Chemistry Chemical Physics, 2022, 24, 10717-10726.  | 2.8  | 13        |
| 3  | Practical guides for <sup>1</sup> H detected solid-state NMR under fast MAS for small molecules. Journal of Magnetic Resonance Open, 2022, 10-11, 100062.  | 1.1  | 1         |
| 4  | Network Size Control in Coordination Polymer Glasses and Its Impact on Viscosity and H <sup>+</sup> Conductivity. Chemistry of Materials, 2022, 34, 5832-5841.   | 6.7  | 14        |
| 5  | β-Cyclodextrin Encapsulation of Bicyclo[1.1.1]pentane Derivatives: A Storable Feedstock for Preparation of [1.1.1]Propellane. Angewandte Chemie, 2021, 133, 2610-2614.   | 2.0  | 1         |
| 6  | β-Cyclodextrin Encapsulation of Bicyclo[1.1.1]pentane Derivatives: A Storable Feedstock for Preparation of [1.1.1]Propellane. Angewandte Chemie - International Edition, 2021, 60, 2578-2582.  | 13.8 | 8         |
| 7  | A non-planar 2D covalent organic framework derived from a Z-shaped building unit. Chemical Communications, 2021, 57, 9236-9239.  | 4.1  | 4         |
| 8  | Host-Guest Assembly of H-Bonding Networks in Covalent Organic Frameworks for Ultrafast and Anhydrous Proton Transfer. ACS Applied Materials & Interfaces, 2021, 13, 37172-37178.   | 8.0  | 19        |
| 9  | Structure Solution of Nano-Crystalline Small Molecules Using MicroED and Solid-State NMR Dipolar-Based Experiments. Molecules, 2021, 26, 4652.   | 3.8  | 8         |
| 10 | Determination of the chemical shift tensor anisotropy and asymmetry of strongly dipolar coupled protons under fast MAS. Solid State Nuclear Magnetic Resonance, 2021, 114, 101743.   | 2.3  | 11        |
| 11 | Efficient symmetry-based <sup>13</sup> C-encoded DQ recoupling sequences for suppression of T <sub>1</sub> -noise in solid-state NMR spectroscopy at fast MAS. Solid State Nuclear Magnetic Resonance, 2021, 114, 101734.                          | 2.3  | 20        |
| 12 | One-Pot, Room-Temperature Conversion of CO <sub>2</sub> into Porous Metal-Organic Frameworks. Journal of the American Chemical Society, 2021, 143, 16750-16757.  | 13.7 | 14        |
| 13 | Titelbild: β-Cyclodextrin Encapsulation of Bicyclo[1.1.1]pentane Derivatives: A Storable Feedstock for Preparation of [1.1.1]Propellane (Angew. Chem. 5/2021). Angewandte Chemie, 2021, 133, 2197-2197.  | 2.0  | 0         |
| 14 | Selective Synthesis of a Salt and a Cocrystal of the Ethionamide-Salicylic Acid System. Crystal Growth and Design, 2020, 20, 906-915.  | 3.0  | 49        |
| 15 | Ligand-Functionalization-Controlled Activity of Metal-Organic Framework-Encapsulated Pt Nanocatalyst toward Activation of Water. Nano Letters, 2020, 20, 426-432.  | 9.1  | 30        |
| 16 | <sup>1</sup> H-Noise Suppression by <sup>13</sup> C-Free Recoupling Sequences in Solid-State NMR for Structural Characterization of Fully Protonated Molecules at Fast MAS. Journal of Physical Chemistry C, 2020, 124, 26332-26343.               | 3.1  | 16        |
| 17 | Perfluoroalkyl-Functionalized Covalent Organic Frameworks with Superhydrophobicity for Anhydrous Proton Conduction. Journal of the American Chemical Society, 2020, 142, 14357-14364.  | 13.7 | 167       |
| 18 | Accuracy of <sup>1</sup> H- <sup>1</sup> H distances measured using frequency selective recoupling and fast magic-angle spinning. Journal of Chemical Physics, 2020, 153, 084202.  | 3.0  | 19        |

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|----|--|------|-----------|
| 19 | Dynamic Transformation between Covalent Organic Frameworks and Discrete Organic Cages. <i>Journal of the American Chemical Society</i> , 2020, 142, 21279-21284.   | 13.7 | 54        |
| 20 | High-resolution proton-detected MAS experiments on self-assembled diphenylalanine nanotubes enabled by fast MAS and high magnetic field. <i>Journal of Magnetic Resonance</i> , 2020, 313, 106717.                           | 2.1  | 11        |
| 21 | Can proton-proton recoupling in fully protonated solids provide quantitative, selective and efficient polarization transfer?. <i>Journal of Magnetic Resonance</i> , 2020, 317, 106777.                                      | 2.1  | 22        |
| 22 | Coordination polymer glass from a protic ionic liquid: proton conductivity and mechanical properties as an electrolyte. <i>Chemical Science</i> , 2020, 11, 5175-5181.   | 7.4  | 47        |
| 23 | Understanding hydrogen-bonding structures of molecular crystals via electron and NMR nanocrystallography. <i>Nature Communications</i> , 2019, 10, 3537.   | 12.8 | 48        |
| 24 | Glass-phase coordination polymer displaying proton conductivity and guest-accessible porosity. <i>Chemical Communications</i> , 2019, 55, 8528-8531.   | 4.1  | 24        |
| 25 | Synthesis of porous coordination polymers using carbon dioxide as a direct source. <i>Chemical Communications</i> , 2019, 55, 9283-9286.   | 4.1  | 5         |
| 26 | Exploiting heterogeneous time scale of dynamics to enhance 2D HETCOR solid-state NMR sensitivity. <i>Journal of Magnetic Resonance</i> , 2019, 309, 106615.  | 2.1  | 15        |
| 27 | Determination of the <sup>15</sup> N chemical shift anisotropy in natural abundance samples by proton-detected 3D solid-state NMR under ultrafast MAS of 70 kHz. <i>Magnetic Resonance in Chemistry</i> , 2019, 57, 294-303. | 1.9  | 10        |
| 28 | Using Dynamic Bonds to Enhance the Mechanical Performance: From Microscopic Molecular Interactions to Macroscopic Properties. <i>Macromolecules</i> , 2019, 52, 5014-5025.   | 4.8  | 64        |
| 29 | Resolution enhancement and proton proximity probed by 3D TQ/DQ/SQ proton NMR spectroscopy under ultrafast magic-angle-spinning beyond 70 kHz. <i>Journal of Magnetic Resonance</i> , 2019, 304, 78-86.                       | 2.1  | 16        |
| 30 | Borohydride-containing coordination polymers: synthesis, air stability and dehydrogenation. <i>Chemical Science</i> , 2019, 10, 6193-6198.   | 7.4  | 4         |
| 31 | Synthesis and Structural Characterization of a Pure ZnAl <sub>4</sub> (OH) <sub>12</sub> (SO <sub>4</sub> ) <sub>2</sub> ·2.6H <sub>2</sub> O Layered Double Hydroxide. <i>Inorganic Chemistry</i> , 2019, 58, 6114-6122.    | 4.0  | 15        |
| 32 | Crystal melting and glass formation in copper thiocyanate based coordination polymers. <i>Chemical Communications</i> , 2019, 55, 5455-5458.   | 4.1  | 57        |
| 33 | Tuning the Intercage Distance in Charge-Regulated Blackberry-Type Assemblies through Host-Guest Chemistry. <i>Chemistry - A European Journal</i> , 2019, 25, 5803-5808.  | 3.3  | 11        |
| 34 | Accumulation of Glassy Poly(ethylene oxide) Anchored in a Covalent Organic Framework as a Solid-State Li <sup>+</sup> Electrolyte. <i>Journal of the American Chemical Society</i> , 2019, 141, 1227-1234.                   | 13.7 | 232       |
| 35 | Detection of side-chain proton resonances of fully protonated biosolids in nano-litre volumes by magic angle spinning solid-state NMR. <i>Journal of Biomolecular NMR</i> , 2018, 70, 177-185.                               | 2.8  | 11        |
| 36 | Intermolecular Arrangement of Fullerene Acceptors Proximal to Semiconducting Polymers in Mixed Bulk Heterojunctions. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7034-7039.                                 | 13.8 | 11        |

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|----|--|------|-----------|
| 37 | Construction of a Hierarchical Architecture of Covalent Organic Frameworks via a Postsynthetic Approach. <i>Journal of the American Chemical Society</i> , 2018, 140, 2602-2609.   | 13.7 | 117       |
| 38 | Forcing the $\alpha$ -lactam protons to work. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 25829-25840.  | 2.8  | 4         |
| 39 | A one-dimensional solid-state NMR approach for $^{14}\text{N}/^{14}\text{N}$ overtone correlation through $^1\text{H}/^1\text{H}$ mixing under fast MAS. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 25849-25853.                                   | 2.8  | 8         |
| 40 | Quantitative $^1\text{H}$ - $^1\text{H}$ Distances in Protonated Solids by Frequency-Selective Recoupling at Fast Magic Angle Spinning NMR. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5948-5954.   | 4.6  | 39        |
| 41 | HR- $^{13}\text{C}$ MAS NMR-Based Metabolomics: Localized Metabolic Profiling of a Garlic Clove with $^{13}\text{C}$ Tissues. <i>Analytical Chemistry</i> , 2018, 90, 13736-13743.   | 6.5  | 14        |
| 42 | The distribution of reactive $\text{Ni}^{2+}$ in 2D $\text{Mg}_2\text{Ni}_x\text{Al-LDH}$ nanohybrid materials determined by solid state $^{27}\text{Al}$ MAS NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 25335-25342.            | 2.8  | 11        |
| 43 | Maximizing the sensitivity in $^{13}\text{C}$ cross-polarization magic-angle-spinning solid-state NMR measurements with flip-back pulses. <i>Journal of Magnetic Resonance</i> , 2018, 294, 122-127.   | 2.1  | 6         |
| 44 | 3D $^{14}\text{N}/^1\text{H}$ Double Quantum/ $^1\text{H}$ Single Quantum Correlation Solid-State NMR for Probing the Parallel and Anti-Parallel $\beta$ -Sheet Arrangement of Oligo-Peptides at Natural Abundance. <i>ChemPhysChem</i> , 2018, 19, 1841-1845. | 2.1  | 13        |
| 45 | $^{14}\text{N}$ overtone nuclear magnetic resonance of rotating solids. <i>Journal of Chemical Physics</i> , 2018, 149, 064201.  | 3.0  | 12        |
| 46 | Satellite and central transitions selective $^1\text{H}/^{27}\text{Al}$ D-HMQC experiments at very fast MAS for quadrupolar couplings determination. <i>Solid State Nuclear Magnetic Resonance</i> , 2017, 84, 83-88.  | 2.3  | 12        |
| 47 | Solid-state NMR meets electron diffraction: determination of crystalline polymorphs of small organic microcrystalline samples. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2017, 73, 219-228.  | 0.5  | 7         |
| 48 | Resolution enhancement in proton double quantum magic-angle spinning spectra by constant-time acquisition. <i>Solid State Nuclear Magnetic Resonance</i> , 2017, 87, 104-110.  | 2.3  | 10        |
| 49 | Exploring the salt-cocystal continuum with solid-state NMR using natural-abundance samples: implications for crystal engineering. <i>IUCr</i> , 2017, 4, 466-475.  | 2.2  | 60        |
| 50 | 3D Double-Quantum/Double-Quantum Exchange Spectroscopy of Protons under 100 kHz Magic Angle Spinning. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5944-5952.   | 2.6  | 16        |
| 51 | Chemical Reactions and Their Kinetics of <i>atactic</i> -Polyacrylonitrile As Revealed by Solid-State $^{13}\text{C}$ NMR. <i>Macromolecules</i> , 2017, 50, 244-253.  | 4.8  | 39        |
| 52 | Engineering Codrug Solid Forms: Mechanochemical Synthesis of an Indomethacin-Caffeine System. <i>Crystal Growth and Design</i> , 2017, 17, 5744-5752.  | 3.0  | 46        |
| 53 | Electrostatic Constraints Assessed by $^1\text{H}$ MAS NMR Illuminate Differences in Crystalline Polymorphs. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 4253-4257.  | 4.6  | 15        |
| 54 | Hierarchical Self-Organization of AB <sub>n</sub> Dendron-like Molecules into a Supramolecular Lattice Sequence. <i>ACS Central Science</i> , 2017, 3, 860-867.  | 11.3 | 69        |

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|----|--|------|-----------|
| 55 | Role of Anomalous Water Constraints in the Efficacy of Pharmaceuticals Probed by $^1\text{H}$ Solid-State NMR. <i>ChemistrySelect</i> , 2017, 2, 6797-6800.  | 1.5  | 12        |
| 56 | Revealing the Local Proton Network through Three-Dimensional $^{13}\text{C}/^1\text{H}$ Double-Quantum/ $^1\text{H}$ Single-Quantum and $^1\text{H}$ Double-Quantum/ $^{13}\text{C}/^1\text{H}$ Single-Quantum Correlation Fast Magic-Angle Spinning Solid-State NMR Spectroscopy at Natural Abundance. <i>Journal of Physical Chemistry B</i> , 2017, 121, 8123-8131. | 2.6  | 6         |
| 57 | Capillary-Inserted Rotor Design for HR- $\mu\text{MAS}$ NMR-Based Metabolomics on Mass-Limited Neurospheres. <i>Molecules</i> , 2017, 22, 1289.  | 3.8  | 4         |
| 58 | Fast magic-angle sample spinning solid-state NMR at 60-100 kHz for natural abundance samples. <i>Solid State Nuclear Magnetic Resonance</i> , 2016, 78, 24-36.   | 2.3  | 122       |
| 59 | Understanding the Origins of Nucleophilic Hydride Reactivity of a Sodium Hydride-Iodide Composite. <i>Chemistry - A European Journal</i> , 2016, 22, 7108-7114.  | 3.3  | 44        |
| 60 | Sensitivity enhanced $^{14}\text{N}/^{14}\text{N}$ correlations to probe inter-beta-sheet interactions using fast magic angle spinning solid-state NMR in biological solids. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 22583-22589.   | 2.8  | 16        |
| 61 | Fast Magic-Angle Spinning Three-Dimensional NMR Experiment for Simultaneously Probing $^1\text{H}$ and $^{15}\text{N}$ Proximities in Solids. <i>Analytical Chemistry</i> , 2016, 88, 11412-11419.   | 6.5  | 38        |
| 62 | Ultrafast Magic-Angle Spinning: Benefits for the Acquisition of Ultrawide-Line NMR Spectra of Heavy Spin-Nuclei. <i>ChemPhysChem</i> , 2016, 17, 812-816.  | 2.1  | 24        |
| 63 | Encapsulating Mobile Proton Carriers into Structural Defects in Coordination Polymer Crystals: High Anhydrous Proton Conduction and Fuel Cell Application. <i>Journal of the American Chemical Society</i> , 2016, 138, 8505-8511.   | 13.7 | 146       |
| 64 | Two-dimensional proton-detected $^{35}\text{Cl}/^1\text{H}$ correlation solid-state NMR experiment under fast magic angle sample spinning: application to pharmaceutical compounds. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 6209-6216.  | 2.8  | 46        |
| 65 | Accurate NMR determination of $^1\text{H}$ or $^{15}\text{N}$ distances for unlabeled molecules. <i>Solid State Nuclear Magnetic Resonance</i> , 2016, 73, 15-21.  | 2.3  | 27        |
| 66 | Proton-detected 3D $^1\text{H}/^{13}\text{C}/^1\text{H}$ correlation experiment for structural analysis in rigid solids under ultrafast-MAS above 60 kHz. <i>Journal of Chemical Physics</i> , 2015, 143, 164201.  | 3.0  | 16        |
| 67 | High-resolution NMR-based metabolic detection of microgram biopsies using a 1 mm HR- $\mu\text{MAS}$ probe. <i>Analyst</i> , 2015, 140, 8097-8100.   | 3.5  | 17        |
| 68 | Evolution of CPMAS under fast magic-angle-spinning at 100 kHz and beyond. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 72, 9-16.  | 2.3  | 35        |
| 69 | Determination of NH proton chemical shift anisotropy with $^{14}\text{N}$ - $^1\text{H}$ heteronuclear decoupling using ultrafast magic angle spinning solid-state NMR. <i>Journal of Magnetic Resonance</i> , 2015, 261, 133-140.   | 2.1  | 25        |
| 70 | Intermolecular Packing in <i>B. mori</i> Silk Fibroin: Multinuclear NMR Study of the Model Peptide (Ala-Gly) <sub>15</sub> Defines a Heterogeneous Antiparallel Antipolar Mode of Assembly in the Silk II Form. <i>Macromolecules</i> , 2015, 48, 28-36.   | 4.8  | 43        |
| 71 | 1020 MHz single-channel proton fast magic angle spinning solid-state NMR spectroscopy. <i>Journal of Magnetic Resonance</i> , 2015, 261, 1-5.  | 2.1  | 38        |
| 72 | Determination of relative orientation between $^1\text{H}$ CSA tensors from a 3D solid-state NMR experiment mediated through $^1\text{H}/^1\text{H}$ RFDR mixing under ultrafast MAS. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 70, 15-20.   | 2.3  | 20        |

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| 73 | Nano-Mole Scale Side-Chain Signal Assignment by $^1\text{H}$ -Detected Protein Solid-State NMR by Ultra-Fast Magic-Angle Spinning and Stereo-Array Isotope Labeling. <i>PLoS ONE</i> , 2015, 10, e0122714.   | 2.5  | 16        |
| 74 | Difference in the structures of alanine tripeptide and tetrapeptides with antiparallel $\beta$ -sheet assessed by X-ray diffraction, solid-state NMR and chemical shift calculations by GIPAW. <i>Biopolymers</i> , 2014, 101, 13-20.                                    | 2.4  | 24        |
| 75 | Rapid measurement of multidimensional $^1\text{H}$ solid-state NMR spectra at ultra-fast MAS frequencies. <i>Journal of Magnetic Resonance</i> , 2014, 239, 75-80.   | 2.1  | 57        |
| 76 | Insights into the functional group transformation of a chinese brown coal during slow pyrolysis by combining various experiments. <i>Fuel</i> , 2014, 118, 257-264.  | 6.4  | 163       |
| 77 | Sensitivity and Resolution Enhanced Solid-State NMR for Paramagnetic Systems and Biomolecules under Very Fast Magic Angle Spinning. <i>Accounts of Chemical Research</i> , 2013, 46, 2127-2135.  | 15.6 | 83        |
| 78 | Analysis of water in Loy Yang brown coal using solid-state $^1\text{H}$ NMR. <i>Journal of Industrial and Engineering Chemistry</i> , 2013, 19, 1673-1679.   | 5.8  | 21        |
| 79 | Determination of Accurate $^1\text{H}$ Positions of (Ala-Gly) $_n$ as a Sequential Peptide Model of Bombyx mori Silk Fibroin before Spinning (Silk I). <i>Macromolecules</i> , 2013, 46, 8046-8050.  | 4.8  | 31        |
| 80 | Iodine Transfer Terpolymerization of Vinylidene Fluoride, $\beta$ -Trifluoromethacrylic Acid and Hexafluoropropylene for Exceptional Thermally Stable Fluoropolymers/Silica Nanocomposites. <i>Macromolecules</i> , 2011, 44, 1114-1124.                                 | 4.8  | 56        |
| 81 | Preparation of Novel Fluoroalkyl End-Capped Trimethoxyvinylsilane Oligomeric Nanoparticle-Encapsulated Binaphthol: Encapsulated Binaphthol Remaining Thermally Stable Even at 800 $^\circ\text{C}$ . <i>Bulletin of the Chemical Society of Japan</i> , 2010, 83, 75-81. | 3.2  | 16        |
| 82 | Fluoroalkyl end-capped oligomers possessing nonflammable and flammable characteristics in silica gel matrices after calcination at 800 $^\circ\text{C}$ under atmospheric conditions. <i>Polymer Journal</i> , 2010, 42, 167-171.  | 2.7  | 24        |
| 83 | Fluoroalkyl end-capped oligomer possessing a nonflammable characteristic in silica gel matrices even at 800 $^\circ\text{C}$ under atmospheric conditions. <i>Journal of Applied Polymer Science</i> , 2009, 112, 3482-3487.   | 2.6  | 19        |
| 84 | Characterization of local structures in amorphous and crystalline tris(8-hydroxyquinoline) aluminum(III) ( $\text{Alq}_3$ ) by solid-state $^{27}\text{Al}$ MQMAS NMR spectroscopy. <i>Chemical Physics Letters</i> , 2009, 471, 80-84.                                  | 2.6  | 17        |
| 85 | 2D NMR Observation of Strain-Induced $\beta$ -Form in Poly[(R)-3-hydroxybutyrate]. <i>Macromolecules</i> , 2006, 39, 4086-4092.  | 4.8  | 17        |