

# Raiker Witter

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

1,610  
citations

331670

21  
h-index

289244

40  
g-index

48  
all docs

48  
docs citations

48  
times ranked

1805  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Disordered Lithium-Rich Oxyfluoride as a Stable Host for Enhanced $\text{Li}^{+}$ Intercalation Storage. <i>Advanced Energy Materials</i> , 2015, 5, 1401814.  | 19.5 | 162       |
| 2  | Nanostructured Fluorite-Type Fluorides As Electrolytes for Fluoride Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4943-4950.  | 3.1  | 145       |
| 3  | Solid Electrolytes for Fluoride Ion Batteries: Ionic Conductivity in Polycrystalline Tysonite-Type Fluorides. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2103-2110.  | 8.0  | 131       |
| 4  | $^1\text{H}$ line width dependence on MAS speed in solid state NMR – Comparison of experiment and simulation. <i>Journal of Magnetic Resonance</i> , 2018, 291, 32-39.   | 2.1  | 80        |
| 5  | Room-Temperature, Rechargeable Solid-State Fluoride-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2018, 1, 4766-4775.   | 5.1  | 80        |
| 6  | Measurements of chain length distributions in calcium phosphate glasses using 2D double quantum NMR. <i>Solid State Nuclear Magnetic Resonance</i> , 1998, 13, 189-200.  | 2.3  | 75        |
| 7  | $^{13}\text{C}$ Chemical Shift Constrained Crystal Structure Refinement of Cellulose I $\beta$ and Its Verification by NMR Anisotropy Experiments. <i>Macromolecules</i> , 2006, 39, 6125-6132.  | 4.8  | 74        |
| 8  | $\text{Li}^{+}$ intercalation in isostructural $\text{Li}_2\text{VO}_3$ and $\text{Li}_2\text{VO}_2\text{F}$ with $\text{O}^{2-}$ and mixed $\text{O}^{2-}/\text{F}^{-}$ anions. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 17288-17295.         | 2.8  | 67        |
| 9  | Solid state $^{19}\text{F}$ NMR parameters of fluorine-labeled amino acids. Part I: Aromatic substituents. <i>Journal of Magnetic Resonance</i> , 2008, 191, 7-15.   | 2.1  | 57        |
| 10 | Altered reaction pathways of eutectic $\text{LiBH}_4\text{-Mg}(\text{BH}_4)_2$ by nanoconfinement. <i>Journal of Materials Chemistry A</i> , 2013, 1, 3379.  | 10.3 | 52        |
| 11 | Solid-State $^{19}\text{F}$ NMR Spectroscopy Reveals That $\text{Trp}_{41}$ Participates in the Gating Mechanism of the M2 Proton Channel of Influenza A Virus. <i>Journal of the American Chemical Society</i> , 2008, 130, 918-924.                        | 13.7 | 47        |
| 12 | New 2D NMR experiments for determining the structure of phosphate glasses: a review. <i>Journal of Non-Crystalline Solids</i> , 2000, 263-264, 61-72.  | 3.1  | 42        |
| 13 | Crystal Structure Refinements of Cellulose Polymorphs using Solid State $^{13}\text{C}$ Chemical Shifts. <i>Cellulose</i> , 2003, 10, 189-199.   | 4.9  | 39        |
| 14 | Low-E probe for $^{19}\text{F}$ - $^1\text{H}$ NMR of dilute biological solids. <i>Journal of Magnetic Resonance</i> , 2007, 189, 182-189.   | 2.1  | 39        |
| 15 | Catalytic Influence of Various Cerium Precursors on the Hydrogen Sorption Properties of $\text{NaAlH}_4$ . <i>Advanced Energy Materials</i> , 2012, 2, 560-568.  | 19.5 | 38        |
| 16 | Introducing Interlayer Electrolytes: Toward Room-Temperature High-Potential Solid-State Rechargeable Fluoride Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 1553-1562.   | 5.1  | 38        |
| 17 | Synthesis of Fast Fluoride-Ion-Conductive Fluorite-Type $\text{Ba}_{1-x}\text{Sb}_x\text{F}_{2+x}$ (0.1 $\leq x \leq$ 0.4): A Potential Solid Electrolyte for Fluoride-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 17249-17256. | 8.0  | 37        |
| 18 | Calculation of fluorine chemical shift tensors for the interpretation of oriented $^{19}\text{F}$ -NMR spectra of gramicidin A in membranes. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 7048.  | 2.8  | 30        |

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|----|---|------|-----------|
| 19 | All-atom molecular dynamics simulations using orientational constraints from anisotropic NMR samples. <i>Journal of Biomolecular NMR</i> , 2007, 38, 23-39.   | 2.8  | 27        |
| 20 | Chemical shift driven geometry optimization. <i>Journal of Computational Chemistry</i> , 2002, 23, 298-305.   | 3.3  | 26        |
| 21 | Powder pattern recoupling at 10kHz spinning speed applied to cellulose. <i>Journal of Magnetic Resonance</i> , 2003, 161, 35-42.  | 2.1  | 23        |
| 22 | NMR Chemical Shift Powder Pattern Recoupling at High Spinning Speed and Theoretical Tensor Evaluation Applied to Silk Fibroin. <i>Journal of the American Chemical Society</i> , 2006, 128, 2236-2243.  | 13.7 | 22        |
| 23 | <sup>29</sup> Si NMR Shielding Tensors in Triphenylsilanes – <sup>29</sup> Si Solid State NMR Experiments and DFT-GLO Calculations. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2012, 638, 935-944.   | 1.2  | 22        |
| 24 | Testing Mg as an anode against BiF <sub>3</sub> and SnF <sub>2</sub> cathodes for room temperature rechargeable fluoride ion batteries. <i>Materials Letters</i> , 2019, 244, 159-162.  | 2.6  | 22        |
| 25 | Multilayered core-shell structure of polyol-stabilized calcium fluoride nanoparticles characterized by NMR. <i>Journal of Colloid and Interface Science</i> , 2013, 390, 250-257.   | 9.4  | 20        |
| 26 | Calculation of solid-state <sup>13</sup> C NMR spectra of cellulose I <sup>±</sup> , I <sup>±</sup> and II using a semi-empirical approach and molecular dynamics. <i>Macromolecular Chemistry and Physics</i> , 2000, 201, 1930-1939.  | 2.2  | 19        |
| 27 | Lithiation-driven structural transition of VO <sub>2</sub> F into disordered rock-salt Li <sub>x</sub> VO <sub>2</sub> F. <i>RSC Advances</i> , 2016, 6, 65112-65118.   | 3.6  | 19        |
| 28 | Beneficial effects of stoichiometry and nanostructure for a LiBH <sub>4</sub> -MgH <sub>2</sub> hydrogen storage system. <i>Journal of Materials Chemistry A</i> , 2014, 2, 66-72.  | 10.3 | 18        |
| 29 | Structure determination of a pseudotripeptide zinc complex with the COSY-NMR force field and DFT methods. <i>Journal of Biomolecular NMR</i> , 2002, 24, 277-289.   | 2.8  | 17        |
| 30 | 3D Structure Elucidation Using NMR Chemical Shifts. <i>Annual Reports on NMR Spectroscopy</i> , 2004, , 53-104.   | 1.5  | 17        |
| 31 | Crystal phase and surface defect driven synthesis of Pb <sub>1-x</sub> Sn <sub>x</sub> F <sub>2</sub> solid solution electrolyte for fluoride ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2019, 845, 154-159.  | 3.8  | 17        |
| 32 | Spectral assignments and anisotropy data of cellulose I <sup>±</sup> : <sup>13</sup> C-NMR chemical shift data of cellulose I <sup>±</sup> determined by INADEQUATE and RAI techniques applied to uniformly <sup>13</sup> C-labeled bacterial celluloses of different <i>Gluconacetobacter xylinus</i> strains. <i>Magnetic Resonance in Chemistry</i> , 2008, 46, 1030-1036. | 1.9  | 16        |
| 33 | Mechanochemical synthesis of solid-state electrolyte Sm <sub>1-x</sub> CaxF <sub>3-x</sub> for batteries and other electrochemical devices. <i>Materials Letters</i> , 2019, 244, 22-26.  | 2.6  | 13        |
| 34 | Surface defect-enhanced conductivity of calcium fluoride for electrochemical applications. <i>Material Design and Processing Communications</i> , 2019, 1, e44.   | 0.9  | 13        |
| 35 | Influence of Nanoconfinement on Reaction Pathways of Complex Metal Hydrides. <i>Energy Procedia</i> , 2012, 29, 731-737.  | 1.8  | 11        |
| 36 | Structure and electrochemical properties of Na <sub>2</sub> VO <sub>3</sub> P <sub>2</sub> O <sub>13</sub> (x = 0 and 1): a promising cathode material for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6947-6958.  | 10.3 | 9         |

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|----|---|-----|-----------|
| 37 | Medical Plants and Nutraceuticals for Amyloid- $\beta^2$ Fibrillation Inhibition. Journal of Alzheimer's Disease Reports, 2018, 2, 239-252.   | 2.2 | 9         |
| 38 | Molecular dynamics simulations on PGLa using NMR orientational constraints. Journal of Biomolecular NMR, 2015, 63, 265-274.   | 2.8 | 8         |
| 39 | Fast Atomic Charge Calculation for Implementation into a Polarizable Force Field and Application to an Ion Channel Protein. Journal of Chemistry, 2015, 2015, 1-14.                           | 1.9 | 6         |
| 40 | Complexation of metal ions by pseudotriptides with different functionalized N-alkyl residues. International Journal of Peptide Research and Therapeutics, 2000, 7, 133-141.                   | 0.1 | 5         |
| 41 | CaF 2 solid-state electrolytes prepared by vapor pressure exposure and solid synthesis for defect and ionic conductivity tuning. Material Design and Processing Communications, 2020, 2, e76. | 0.9 | 5         |
| 42 | Screening of Nutraceuticals and Plant Extracts for Inhibition of Amyloid- $\beta^2$ Fibrillation. Journal of Alzheimer's Disease, 2020, 73, 1003-1012.  | 2.6 | 5         |
| 43 | Investigation of backbone dynamics and local geometry of bio-molecules using calculated NMR chemical shifts and anisotropies. Journal of Biomolecular NMR, 2019, 73, 727-741.                 | 2.8 | 4         |
| 44 | Synthesis and characterization of Ca $(1\hat{a}^{\sim} <i>x</i> ) </sub> Sm <sub> <i>x</i> </sub> F <sub> (2+) Tj ETQq0 0 0 rgBT /Overlock Processing Communications, 2021, 3, e226.$         | 0.9 | 3         |
| 45 | Complexation of metal ions by pseudotriptides with different functionalized N-alkyl residues. International Journal of Peptide Research and Therapeutics, 2000, 7, 133-141.                   | 0.1 | 1         |
| 46 | 3D Structure Elucidation Using NMR Chemical Shifts. ChemInform, 2005, 36, no.   | 0.0 | 0         |
| 47 | Compoundâ€™s Pre-Screening of &lt;i>Withania somnifera</i>, &lt;i>Bacopa monnieri</i> and &lt;i>Centella asiatica</i> Extracts. Journal of Biosciences and Medicines, 2020, 08, 80-98.        | 0.2 | 0         |