

# Giuseppe Pileio

## List of Publications by Year in descending order

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70  
papers

2,303  
citations

201674

27  
h-index

223800

46  
g-index

70  
all docs

70  
docs citations

70  
times ranked

1163  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Single-scan measurements of nuclear spin singlet order decay rates. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 9851-9859.   | 2.8 | 1         |
| 2  | Nuclear Spin Relaxation of Longitudinal and Singlet Order in Liquid-CO <sub>2</sub> Solutions. <i>Frontiers in Chemistry</i> , 2021, 9, 668044.   | 3.6 | 2         |
| 3  | Physical characterisation of chia mucilage polymeric gel and its implications on rhizosphere science - Integrating imaging, MRI, and modelling to gain insights into plant and microbial amended soils. <i>Soil Biology and Biochemistry</i> , 2021, 162, 108404. | 8.8 | 5         |
| 4  | A temperature-controlled sample shuttle for field-cycling NMR. <i>Journal of Magnetic Resonance</i> , 2020, 317, 106778.  | 2.1 | 7         |
| 5  | Chapter 16. Q-space Singlet NMR. <i>New Developments in NMR</i> , 2020, , 302-319.  | 0.1 | 2         |
| 6  | Chapter 7. Manipulating Spin Order by J-synchronised Echo Schemes. <i>New Developments in NMR</i> , 2020, , 136-150.  | 0.1 | 0         |
| 7  | Chapter 15. Singlet-assisted Diffusion NMR. <i>New Developments in NMR</i> , 2020, , 280-301.   | 0.1 | 0         |
| 8  | Chapter 3. Relaxation Theory of Long-lived Spin Order. <i>New Developments in NMR</i> , 2020, , 64-91.  | 0.1 | 0         |
| 9  | Excitation of singlet-triplet coherences in pairs of nearly-equivalent spins. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 6087-6100.   | 2.8 | 15        |
| 10 | Nuclear singlet relaxation by scalar relaxation of the second kind in the slow-fluctuation regime. <i>Journal of Chemical Physics</i> , 2019, 150, 064315.  | 3.0 | 16        |
| 11 | Singlet-assisted diffusion-NMR (SAD-NMR): redefining the limits when measuring tortuosity in porous media. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 13705-13713.  | 2.8 | 23        |
| 12 | Sub-minute kinetics of human red cell fumarase: <sup>1</sup> H spin-echo NMR spectroscopy and <sup>13</sup> C rapid-dissolution dynamic nuclear polarization. <i>NMR in Biomedicine</i> , 2018, 31, e3870.  | 2.8 | 8         |
| 13 | Correlative Visualization of Root Mucilage Degradation Using X-ray CT and MRI. <i>Frontiers in Environmental Science</i> , 2018, 6, .   | 3.3 | 17        |
| 14 | Synthesis of carbon-13 labeled oxalates exhibiting extended nuclear singlet state lifetimes. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2017, 60, 135-139.   | 1.0 | 5         |
| 15 | A pulse sequence for singlet to heteronuclear magnetization transfer: S2hM. <i>Journal of Magnetic Resonance</i> , 2017, 277, 169-178.  | 2.1 | 26        |
| 16 | Singlet order conversion and parahydrogen-induced hyperpolarization of <sup>13</sup> C nuclei in near-equivalent spin systems. <i>Journal of Magnetic Resonance</i> , 2017, 274, 163-172.   | 2.1 | 45        |
| 17 | Singlet NMR methodology in two-spin-1/2 systems. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2017, 98-99, 1-19.  | 7.5 | 45        |
| 18 | Accessing the long-time limit in diffusion NMR: The case of singlet assisted diffusive diffraction q-space. <i>Journal of Magnetic Resonance</i> , 2017, 285, 1-7.  | 2.1 | 20        |

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|----|--|------|-----------|
| 19 | Nuclear Singlet Spin States. , 2017, , 456-462.  |      | 0         |
| 20 | Correction: Substituent interference on supramolecular assembly in urea gelators: synthesis, structure prediction and NMR. <i>Soft Matter</i> , 2016, 12, 5489-5489.   | 2.7  | 1         |
| 21 | Substituent interference on supramolecular assembly in urea gelators: synthesis, structure prediction and NMR. <i>Soft Matter</i> , 2016, 12, 4034-4043.   | 2.7  | 29        |
| 22 | A Nuclear Singlet Lifetime of More than One Hour in Room-Temperature Solution. <i>Angewandte Chemie</i> , 2015, 127, 3811-3814.  | 2.0  | 20        |
| 23 | Real-space imaging of macroscopic diffusion and slow flow by singlet tagging MRI. <i>Journal of Magnetic Resonance</i> , 2015, 252, 130-134.   | 2.1  | 53        |
| 24 | Organophosphorus chemical warfare agent simulant DMMP promotes structural reinforcement of urea-based chiral supramolecular gels. <i>RSC Advances</i> , 2015, 5, 12287-12292.  | 3.6  | 14        |
| 25 | A Nuclear Singlet Lifetime of More than One Hour in Room-Temperature Solution. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3740-3743.   | 13.8 | 116       |
| 26 | Theory of long-lived nuclear spin states in methyl groups and quantum-rotor induced polarisation. <i>Journal of Chemical Physics</i> , 2015, 142, 044506.  | 3.0  | 51        |
| 27 | Long-lived nuclear spin states far from magnetic equivalence. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 5913-5922.  | 2.8  | 50        |
| 28 | Synthesis of an Isotopically Labeled Naphthalene Derivative That Supports a Long-Lived Nuclear Singlet State. <i>Organic Letters</i> , 2015, 17, 2150-2153.  | 4.6  | 21        |
| 29 | Enhancement of quantum rotor NMR signals by frequency-selective pulses. <i>Journal of Magnetic Resonance</i> , 2015, 250, 25-28.   | 2.1  | 18        |
| 30 | Long-lived localization in magnetic resonance imaging. <i>Journal of Magnetic Resonance</i> , 2014, 246, 27-30.  | 2.1  | 34        |
| 31 | Lineshape-based polarimetry of dynamically-polarized $^{15}\text{N}$ in solid-state mixtures. <i>Journal of Magnetic Resonance</i> , 2013, 224, 88-94.   | 2.1  | 19        |
| 32 | Long-Lived Nuclear Spin States in Methyl Groups and Quantum-Rotor-Induced Polarization. <i>Journal of the American Chemical Society</i> , 2013, 135, 18746-18749.  | 13.7 | 93        |
| 33 | Grid-free powder averages: On the applications of the Fokker-Planck equation to solid state NMR. <i>Journal of Magnetic Resonance</i> , 2013, 235, 121-129.  | 2.1  | 19        |
| 34 | Recycling and Imaging of Nuclear Singlet Hyperpolarization. <i>Journal of the American Chemical Society</i> , 2013, 135, 5084-5088.  | 13.7 | 94        |
| 35 | Hyperpolarized singlet lifetimes of pyruvate in human blood and in the mouse. <i>NMR in Biomedicine</i> , 2013, 26, 1696-1704.   | 2.8  | 54        |
| 36 | Anisotropic nuclear spin interactions in $^2\text{H}$ $\text{O}@\text{C}$ $^{60}$ determined by solid-state NMR. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2013, 371, 20120102. | 3.4  | 12        |

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|----|---|------|-----------|
| 37 | Sensitivity enhancement and low-field spin relaxation in singlet NMR. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16032.   | 2.8  | 7         |
| 38 | Long-Lived Nuclear Singlet Order in Near-Equivalent <sup>13</sup> C Spin Pairs. <i>Journal of the American Chemical Society</i> , 2012, 134, 17494-17497.   | 13.7 | 61        |
| 39 | Direct Enhancement of Nuclear Singlet Order by Dynamic Nuclear Polarization. <i>Journal of the American Chemical Society</i> , 2012, 134, 7668-7671.  | 13.7 | 94        |
| 40 | Hyperpolarized singlet NMR on a small animal imaging system. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1262-1265.   | 3.0  | 37        |
| 41 | Singlet state relaxation via scalar coupling of the second kind. <i>Journal of Chemical Physics</i> , 2011, 135, 174502.  | 3.0  | 16        |
| 42 | Singlet state relaxation via intermolecular dipolar coupling. <i>Journal of Chemical Physics</i> , 2011, 134, 214505.   | 3.0  | 26        |
| 43 | Measurements of the persistent singlet state of N <sub>2</sub> O in blood and other solvents—Potential as a magnetic tracer. <i>Magnetic Resonance in Medicine</i> , 2011, 66, 1177-1180.   | 3.0  | 34        |
| 44 | Relaxation theory of nuclear singlet states in two spin-1/2 systems. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2010, 56, 217-231.  | 7.5  | 95        |
| 45 | Storage of nuclear magnetization as long-lived singlet order in low magnetic field. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 17135-17139.  | 7.1  | 159       |
| 46 | Orientational Sampling Schemes Based on Four Dimensional Polytopes. <i>Symmetry</i> , 2010, 2, 1423-1449.   | 2.2  | 16        |
| 47 | The conformation and orientational order of a 1,2-disubstituted ethane nematogenic molecule (I22) in liquid crystalline and isotropic phases studied by NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 2895.  | 2.8  | 12        |
| 48 | Theory of long-lived nuclear spin states in solution nuclear magnetic resonance. II. Singlet spin locking. <i>Journal of Chemical Physics</i> , 2009, 130, 214501.  | 3.0  | 97        |
| 49 | Extremely Low-Frequency Spectroscopy in Low-Field Nuclear Magnetic Resonance. <i>Physical Review Letters</i> , 2009, 103, 083002.   | 7.8  | 53        |
| 50 | Isotropic filtering using polyhedral phase cycles: Application to singlet state NMR. <i>Journal of Magnetic Resonance</i> , 2008, 191, 148-155.   | 2.1  | 27        |
| 51 | Estimation of internuclear couplings in the solid-state NMR of multiple-spin systems. Selective spin echoes and off-magic-angle sample spinning. <i>Chemical Physics Letters</i> , 2008, 456, 116-121.  | 2.6  | 33        |
| 52 | A comparison of proton-detected <sup>13</sup> C local field experiments with deuterium NMR at natural abundance for studying liquid crystals. <i>Liquid Crystals</i> , 2008, 35, 443-464.   | 2.2  | 33        |
| 53 | Do the molecules which form discotic liquid crystals have disc-like structures? The conformation of a simple model compound, 1,2-dihydroxydiacetylbenzene, determined from the NMR spectra of samples dissolved in liquid crystalline solvents. <i>Liquid Crystals</i> , 2008, 35, 205-211. | 2.2  | 0         |
| 54 | The Long-Lived Nuclear Singlet State of <sup>15</sup> N-Nitrous Oxide in Solution. <i>Journal of the American Chemical Society</i> , 2008, 130, 12582-12583.  | 13.7 | 124       |

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|----|--|------|-----------|
| 55 | The structure and conformation of a mesogenic compound between almost zero and almost complete orientational order. <i>Liquid Crystals</i> , 2007, 34, 1071-1093.  | 2.2  | 31        |
| 56 | Residual Dipolar Couplings by Off-Magic-Angle Spinning in Solid-State Nuclear Magnetic Resonance Spectroscopy. <i>Journal of the American Chemical Society</i> , 2007, 129, 10972-10973.   | 13.7 | 41        |
| 57 | Calculated Versus Experimental Force Fields: The Influence in the Structure Determination of Benzene by NMR Spectroscopy in Liquid Crystal Solvents. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 465, 289-299.           | 0.9  | 7         |
| 58 | J-Stabilization of singlet states in the solution NMR of multiple-spin systems. <i>Journal of Magnetic Resonance</i> , 2007, 187, 141-145.   | 2.1  | 60        |
| 59 | Analytical theory of $\hat{I}^3$ -encoded double-quantum recoupling sequences in solid-state nuclear magnetic resonance. <i>Journal of Magnetic Resonance</i> , 2007, 186, 65-74.  | 2.1  | 29        |
| 60 | Truncated dipolar recoupling in solid-state nuclear magnetic resonance. <i>Chemical Physics Letters</i> , 2006, 432, 572-578.  | 2.6  | 35        |
| 61 | An investigation of the structure and bond rotational potential of some fluorinated ethanes by NMR spectroscopy of solutions in nematic liquid crystalline solvents. <i>Journal of Magnetic Resonance</i> , 2006, 180, 245-255.    | 2.1  | 11        |
| 62 | Long-lived nuclear spin states in the solution NMR of four-spin systems. <i>Journal of Magnetic Resonance</i> , 2006, 182, 353-357.  | 2.1  | 72        |
| 63 | Intrinsic Information Content of NMR Dipolar Couplings: A Conformational Investigation of 1,3-Butadiene in a Nematic Phase. <i>ChemPhysChem</i> , 2006, 7, 1930-1943.  | 2.1  | 16        |
| 64 | NMR Spectroscopy Investigation of the Cooperative Nature of the Internal Rotational Motions in Acetophenone. <i>ChemPhysChem</i> , 2005, 6, 2086-2098.   | 2.1  | 13        |
| 65 | The Structure and Conformations of 2-Thiophenecarboxaldehyde Obtained from Partially Averaged Dipolar Couplings. <i>ChemPhysChem</i> , 2005, 6, 1483-1491.   | 2.1  | 26        |
| 66 | The Structure of Acrolein in a Liquid Crystal Phase. <i>Chemistry - A European Journal</i> , 2005, 11, 3599-3608.  | 3.3  | 19        |
| 67 | Conformational Analysis of 2,2'-Bithiophene: A $^1\text{H}$ Liquid Crystal NMR Study Using the $^{13}\text{C}$ Satellite Spectra. <i>Journal of Physical Chemistry A</i> , 2005, 109, 9953-9963.                                   | 2.5  | 19        |
| 68 | Obtaining the structure and bond rotational potential of a substituted ethane by NMR spectroscopy of solutions in nematic liquid-crystalline solvents. <i>Journal of Chemical Physics</i> , 2005, 123, 194907.                     | 3.0  | 2         |
| 69 | Is styrene planar in liquid phases?. <i>Journal of Chemical Physics</i> , 2004, 120, 7075-7084.  | 3.0  | 23        |
| 70 | The conformational distribution in diphenylmethane determined by nuclear magnetic resonance spectroscopy of a sample dissolved in a nematic liquid crystalline solvent. <i>Journal of Chemical Physics</i> , 2003, 118, 6417-6426. | 3.0  | 40        |