Giuseppe Pileio

List of Publications by Year
in descending order

70	2,303	201674	223800
papers	citations	27 h-index	46 g-index

70	70	70	1163
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Storage of nuclear magnetization as long-lived singlet order in low magnetic field. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17135-17139.	7.1	159
2	The Long-Lived Nuclear Singlet State of ¹⁵N-Nitrous Oxide in Solution. Journal of the American Chemical Society, 2008, 130, 12582-12583.	13.7	124
3	A Nuclear Singlet Lifetime of More than One Hour in Roomâ€Temperature Solution. Angewandte Chemie - International Edition, 2015, 54, 3740-3743.	13.8	116
4	Theory of long-lived nuclear spin states in solution nuclear magnetic resonance. II. Singlet spin locking. Journal of Chemical Physics, 2009, 130, 214501.	3.0	97
5	Relaxation theory of nuclear singlet states in two spin-1/2 systems. Progress in Nuclear Magnetic Resonance Spectroscopy, 2010, 56, 217-231.	7.5	95
6	Direct Enhancement of Nuclear Singlet Order by Dynamic Nuclear Polarization. Journal of the American Chemical Society, 2012, 134, 7668-7671.	13.7	94
7	Recycling and Imaging of Nuclear Singlet Hyperpolarization. Journal of the American Chemical Society, 2013, 135, 5084-5088.	13.7	94
8	Long-Lived Nuclear Spin States in Methyl Groups and Quantum-Rotor-Induced Polarization. Journal of the American Chemical Society, 2013, 135, 18746-18749.	13.7	93
9	Long-lived nuclear spin states in the solution NMR of four-spin systems. Journal of Magnetic Resonance, 2006, 182, 353-357.	2.1	72
10	Long-Lived Nuclear Singlet Order in Near-Equivalent ¹³C Spin Pairs. Journal of the American Chemical Society, 2012, 134, 17494-17497.	13.7	61
11	J-Stabilization of singlet states in the solution NMR of multiple-spin systems. Journal of Magnetic Resonance, 2007, 187, 141-145.	2.1	60
12	Hyperpolarized singlet lifetimes of pyruvate in human blood and in the mouse. NMR in Biomedicine, 2013, 26, 1696-1704.	2.8	54
13	Extremely Low-Frequency Spectroscopy in Low-Field Nuclear Magnetic Resonance. Physical Review Letters, 2009, 103, 083002.	7.8	53
14	Real-space imaging of macroscopic diffusion and slow flow by singlet tagging MRI. Journal of Magnetic Resonance, 2015, 252, 130-134.	2.1	53
15	Theory of long-lived nuclear spin states in methyl groups and quantum-rotor induced polarisation. Journal of Chemical Physics, 2015, 142, 044506.	3.0	51
16	Long-lived nuclear spin states far from magnetic equivalence. Physical Chemistry Chemical Physics, 2015, 17, 5913-5922.	2.8	50
17	Singlet order conversion and parahydrogen-induced hyperpolarization of 13C nuclei in near-equivalent spin systems. Journal of Magnetic Resonance, 2017, 274, 163-172.	2.1	45
18	Singlet NMR methodology in two-spin-1/2 systems. Progress in Nuclear Magnetic Resonance Spectroscopy, 2017, 98-99, 1-19.	7.5	45

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19	Residual Dipolar Couplings by Off-Magic-Angle Spinning in Solid-State Nuclear Magnetic Resonance Spectroscopy. Journal of the American Chemical Society, 2007, 129, 10972-10973.	13.7	41
20	The conformational distribution in diphenylmethane determined by nuclear magnetic resonance spectroscopy of a sample dissolved in a nematic liquid crystalline solvent. Journal of Chemical Physics, 2003, 118, 6417-6426.	3.0	40
21	Hyperpolarized singlet NMR on a small animal imaging system. Magnetic Resonance in Medicine, 2012, 68, 1262-1265.	3.0	37
22	Truncated dipolar recoupling in solid-state nuclear magnetic resonance. Chemical Physics Letters, 2006, 432, 572-578.	2.6	35
23	Measurements of the persistent singlet state of N₂O in blood and other solventsâ€"Potential as a magnetic tracer. Magnetic Resonance in Medicine, 2011, 66, 1177-1180.	3.0	34
24	Long-lived localization in magnetic resonance imaging. Journal of Magnetic Resonance, 2014, 246, 27-30.	2.1	34
25	Estimation of internuclear couplings in the solid-state NMR of multiple-spin systems. Selective spin echoes and off-magic-angle sample spinning. Chemical Physics Letters, 2008, 456, 116-121.	2.6	33
26	A comparison of protonâ€detected13C local field experiments with deuterium NMR at natural abundance for studying liquid crystals. Liquid Crystals, 2008, 35, 443-464.	2.2	33
27	The structure and conformation of a mesogenic compound between almost zero and almost complete orientational order. Liquid Crystals, 2007, 34, 1071-1093.	2.2	31
28	Analytical theory of Î³-encoded double-quantum recoupling sequences in solid-state nuclear magnetic resonance. Journal of Magnetic Resonance, 2007, 186, 65-74.	2.1	29
29	Substituent interference on supramolecular assembly in urea gelators: synthesis, structure prediction and NMR. Soft Matter, 2016, 12, 4034-4043.	2.7	29
30	Isotropic filtering using polyhedral phase cycles: Application to singlet state NMR. Journal of Magnetic Resonance, 2008, 191, 148-155.	2.1	27
31	The Structure and Conformations of 2-Thiophenecarboxaldehyde Obtained from Partially Averaged Dipolar Couplings. ChemPhysChem, 2005, 6, 1483-1491.	2.1	26
32	Singlet state relaxation via intermolecular dipolar coupling. Journal of Chemical Physics, 2011, 134, 214505.	3.0	26
33	A pulse sequence for singlet to heteronuclear magnetization transfer: S2hM. Journal of Magnetic Resonance, 2017, 277, 169-178.	2.1	26
34	Is styrene planar in liquid phases?. Journal of Chemical Physics, 2004, 120, 7075-7084.	3.0	23
35	Singlet-assisted diffusion-NMR (SAD-NMR): redefining the limits when measuring tortuosity in porous media. Physical Chemistry Chemical Physics, 2018, 20, 13705-13713.	2.8	23
36	Synthesis of an Isotopically Labeled Naphthalene Derivative That Supports a Long-Lived Nuclear Singlet State. Organic Letters, 2015, 17, 2150-2153.	4.6	21

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37	A Nuclear Singlet Lifetime of More than One Hour in Roomâ€Temperature Solution. Angewandte Chemie, 2015, 127, 3811-3814.	2.0	20
38	Accessing the long-time limit in diffusion NMR: The case of singlet assisted diffusive diffraction q -space. Journal of Magnetic Resonance, 2017, 285, 1-7.	2.1	20
39	The Structure of Acrolein in a Liquid Crystal Phase. Chemistry - A European Journal, 2005, 11, 3599-3608.	3.3	19
40	Conformational Analysis of 2,2â€˜-Bithiophene:Â A1H Liquid Crystal NMR Study Using the13C Satellite Spectra. Journal of Physical Chemistry A, 2005, 109, 9953-9963.	2.5	19
41	Lineshape-based polarimetry of dynamically-polarized <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si26.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>15</mml:mn></mml:mrow></mml:msup><mml:msub><mml:mrow><mml:mtext>N</mml:mtext></mml:mrow> in solid-state mixtures. Journal of Magnetic Resonance, 2013, 234, 90-94.	2.1	19
42	Grid-free powder averages: On the applications of the Fokkerâ€“Planck equation to solid state NMR. Journal of Magnetic Resonance, 2013, 235, 121-129.	2.1	19
43	Enhancement of quantum rotor NMR signals by frequency-selective pulses. Journal of Magnetic Resonance, 2015, 250, 25-28.	2.1	18
44	Correlative Visualization of Root Mucilage Degradation Using X-ray CT and MRI. Frontiers in Environmental Science, 2018, 6, .	3.3	17
45	Intrinsic Information Content of NMR Dipolar Couplings: A Conformational Investigation of 1,3-Butadiene in a Nematic Phase. ChemPhysChem, 2006, 7, 1930-1943.	2.1	16
46	Orientational Sampling Schemes Based on Four Dimensional Polytopes. Symmetry, 2010, 2, 1423-1449.	2.2	16
47	Singlet state relaxation via scalar coupling of the second kind. Journal of Chemical Physics, 2011, 135, 174502.	3.0	16
48	Nuclear singlet relaxation by scalar relaxation of the second kind in the slow-fluctuation regime. Journal of Chemical Physics, 2019, 150, 064315.	3.0	16
49	Excitation of singletâ€“triplet coherences in pairs of nearly-equivalent spins. Physical Chemistry Chemical Physics, 2019, 21, 6087-6100.	2.8	15
50	Organophosphorus chemical warfare agent simulant DMMP promotes structural reinforcement of urea-based chiral supramolecular gels. RSC Advances, 2015, 5, 12287-12292.	3.6	14
51	NMR Spectroscopy Investigation of the Cooperative Nature of the Internal Rotational Motions in Acetophenone. ChemPhysChem, 2005, 6, 2086-2098.	2.1	13
52	The conformation and orientational order of a 1,2-disubstituted ethane nematogenic molecule (I22) in liquid crystalline and isotropic phases studied by NMR spectroscopy. Physical Chemistry Chemical Physics, 2010, 12, 2895.	2.8	12
53	Anisotropic nuclear spin interactions in H ₂ O@C ₆₀ determined by solid-state NMR. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120102.	3.4	12
54	An investigation of the structure and bond rotational potential of some fluorinated ethanes by NMR spectroscopy of solutions in nematic liquid crystalline solvents. Journal of Magnetic Resonance, 2006, 180, 245-255.	2.1	11

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55	Subâ€minute kinetics of human red cell fumarase: ¹H spinâ€echo NMR spectroscopy and ¹³C rapidâ€dissolution dynamic nuclear polarization. NMR in Biomedicine, 2018, 31, e3870.	2.8	8
56	CalculatedVersusâ€œExperimentalâ€•Force Fields: The Influence in the Structure Determination of Benzene by NMR Spectroscopy in Liquid Crystal Solvents. Molecular Crystals and Liquid Crystals, 2007, 465, 289-299.	0.9	7
57	Sensitivity enhancement and low-field spin relaxation in singlet NMR. Physical Chemistry Chemical Physics, 2012, 14, 16032.	2.8	7
58	A temperature-controlled sample shuttle for field-cycling NMR. Journal of Magnetic Resonance, 2020, 317, 106778.	2.1	7
59	Synthesis of carbon-13 labeled oxalates exhibiting extended nuclear singlet state lifetimes. Journal of Labelled Compounds and Radiopharmaceuticals, 2017, 60, 135-139.	1.0	5
60	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. Soil Biology and Biochemistry, 2021, 162, 108404.	8.8	5
61	Obtaining the structure and bond rotational potential of a substituted ethane by NMR spectroscopy of solutions in nematic liquid-crystalline solvents. Journal of Chemical Physics, 2005, 123, 194907.	3.0	2
62	Nuclear Spin Relaxation of Longitudinal and Singlet Order in Liquid-CO2 Solutions. Frontiers in Chemistry, 2021, 9, 668044.	3.6	2
63	Chapter 16. Q-space Singlet NMR. New Developments in NMR, 2020, , 302-319.	0.1	2
64	Correction: Substituent interference on supramolecular assembly in urea gelators: synthesis, structure prediction and NMR. Soft Matter, 2016, 12, 5489-5489.	2.7	1
65	Single-scan measurements of nuclear spin singlet order decay rates. Physical Chemistry Chemical Physics, 2021, 23, 9851-9859.	2.8	1
66	Do the molecules which form discotic liquid crystals have discâ€like structures? The conformation of a simple model compound, 1,2â€dihydroxydiacetylbenzene, determined from the NMR spectra of samples dissolved in liquid crystalline solvents. Liquid Crystals, 2008, 35, 205-211.	2.2	0
67	Nuclear Singlet Spin States. , 2017, , 456-462.		0
68	Chapter 7. Manipulating Spin Order by J-synchronised Echo Schemes. New Developments in NMR, 2020, , 136-150.	0.1	0
69	Chapter 15. Singlet-assisted Diffusion NMR. New Developments in NMR, 2020, , 280-301.	0.1	0
70	Chapter 3. Relaxation Theory of Long-lived Spin Order. New Developments in NMR, 2020, , 64-91.	0.1	0