Paul Tordo

List of Publications by Citations

53 papers	3,558 citations	31 h-index	54 g-index
54 ext. papers	3,824 ext. citations	7.4 avg, IF	4.58 L-index

#	Paper	IF	Citations
53	5-(Diethoxyphosphoryl)-5-methyl-1-pyrroline N-oxide: a new efficient phosphorylated nitrone for the in vitro and in vivo spin trapping of oxygen-centered radicals. *Journal of Medicinal Chemistry*, **1995**, 38, 258-65	8.3	427
52	Highly efficient, water-soluble polarizing agents for dynamic nuclear polarization at high frequency. *Angewandte Chemie - International Edition*, **2013**, 52, 10858-61	16.4	328
51	Large molecular weight nitroxide biradicals providing efficient dynamic nuclear polarization at temperatures up to 200 K. *Journal of the American Chemical Society*, **2013**, 135, 12790-7	16.4	284
50	Dynamic nuclear polarization with a rigid biradical. *Angewandte Chemie - International Edition*, **2009**, 48, 4996-5000	16.4	230
49	A slowly relaxing rigid biradical for efficient dynamic nuclear polarization surface-enhanced NMR spectroscopy: expeditious characterization of functional group manipulation in hybrid materials. *Journal of the American Chemical Society*, **2012**, 134, 2284-91	16.4	169
48	Dynamic nuclear polarization enhanced solid-state NMR spectroscopy of functionalized metal-organic frameworks. *Angewandte Chemie - International Edition*, **2012**, 51, 123-7	16.4	145
47	2-ethoxycarbonyl-2-methyl-3,4-dihydro-2H-pyrrole-1-oxide: evaluation of the spin trapping properties. *Free Radical Biology and Medicine*, **2000**, 28, 403-8	7.8	132
46	Non-aqueous solvents for DNP surface enhanced NMR spectroscopy. *Chemical Communications*, **2012**, 48, 654-6	5.8	129
45	Rational design of dinitroxide biradicals for efficient cross-effect dynamic nuclear polarization. *Chemical Science*, **2016**, 7, 550-558	9.4	117
44	5-Diethoxyphosphoryl-5-methyl-1-pyrroline N-oxide (DEPMPO): a new phosphorylated nitrone for the efficient In Vitro and In Vivo spin trapping of oxygen-centred radicals. *Journal of the Chemical Society Chemical Communications*, **1994**, 1793		86
43	Amplifying dynamic nuclear polarization of frozen solutions by incorporating dielectric particles. *Journal of the American Chemical Society*, **2014**, 136, 15711-8	16.4	85
42	NMR-based structural biology enhanced by dynamic nuclear polarization at high magnetic field. *Journal of Biomolecular NMR*, **2014**, 60, 157-68	3	82
41	Solid-state NMR spectroscopy of oriented membrane polypeptides at 100 K with signal enhancement by dynamic nuclear polarization. *Journal of the American Chemical Society*, **2010**, 132, 5940-1	16.4	72
40	Solid-State Dynamic Nuclear Polarization at 9.4 and 18.8 T from 100 K to Room Temperature. *Journal of the American Chemical Society*, **2015**, 137, 14558-61	16.4	70
39	Rigid orthogonal bis-TEMPO biradicals with improved solubility for dynamic nuclear polarization. *Journal of Organic Chemistry*, **2012**, 77, 1789-97	4.2	66
38	Highly Efficient, Water-Soluble Polarizing Agents for Dynamic Nuclear Polarization at High Frequency. *Angewandte Chemie*, **2013**, 125, 11058-11061	3.6	63
37	Design and use of phosphorus nitroxides and alkoxyamines in controlled/living free radical polymerizations. *Macromolecular Symposia*, **2002**, 182, 225-247	0.8	61

36	Visualizing Specific Cross-Protomer Interactions in the Homo-Oligomeric Membrane Protein Proteorhodopsin by Dynamic-Nuclear-Polarization-Enhanced Solid-State NMR. *Journal of the American Chemical Society*, **2015**, 137, 9032-43	16.4	60
35	Biomolecular DNP-Supported NMR Spectroscopy using Site-Directed Spin Labeling. *Chemistry - A European Journal*, **2015**, 21, 12971-7	4.8	59
34	Decay of the hydroperoxyl spin adduct of 5-diethoxyphosphoryl-5-methyl-1-pyrroline N-oxide: an EPR kinetic study. *Journal of the Chemical Society Perkin Transactions II*, **1995**, 295-298		58
33	Tailoring of Polarizing Agents in the bTurea Series for Cross-Effect Dynamic Nuclear Polarization in Aqueous Media. *Chemistry - A European Journal*, **2016**, 22, 5598-606	4.8	58
32	Properties of dinitroxides for use in dynamic nuclear polarization (DNP). *Physical Chemistry Chemical Physics*, **2010**, 12, 5841-5	3.6	55
31	Dynamic Nuclear Polarization with a Rigid Biradical. *Angewandte Chemie*, **2009**, 121, 5096-5100	3.6	46
30	Mito-DEPMPO synthesized from a novel NH2-reactive DEPMPO spin trap: a new and improved trap for the detection of superoxide. *Chemical Communications*, **2007**, 1083-5	5.8	45
29	Synthesis of a New Spin Trap: 2-(Diethoxyphosphoryl)-2-phenyl-3,4-dihydro-2H-pyrrole 1-Oxide. *Journal of Organic Chemistry*, **1999**, 64, 1471-1477	4.2	41
28	Optimizing Sample Preparation Methods for Dynamic Nuclear Polarization Solid-state NMR of Synthetic Polymers. *Macromolecules*, **2014**, 47, 3909-3916	5.5	38
27	Dynamic Nuclear Polarization Enhanced Solid-State NMR Spectroscopy of Functionalized Metal□Organic Frameworks. *Angewandte Chemie*, **2012**, 124, 127-131	3.6	37
26	Dynamic Nuclear Polarization Efficiency Increased by Very Fast Magic Angle Spinning. *Journal of the American Chemical Society*, **2017**, 139, 10609-10612	16.4	37
25	Improving the trapping of superoxide radical with a beta-cyclodextrin-5-diethoxyphosphoryl-5-methyl-1-pyrroline-N-oxide (DEPMPO) conjugate. *Chemistry - A European Journal*, **2009**, 15, 11114-8	4.8	35
24	Host-guest complexes as water-soluble high-performance DNP polarizing agents. *Journal of the American Chemical Society*, **2013**, 135, 19275-81	16.4	34
23	Dinitroxides for Solid State Dynamic Nuclear Polarization. *Applied Magnetic Resonance*, **2012**, 43, 251-261	0.8	34
22	Membrane topologies of the PGLa antimicrobial peptide and a transmembrane anchor sequence by Dynamic Nuclear Polarization/solid-state NMR spectroscopy. *Scientific Reports*, **2016**, 6, 20895	4.9	31
21	EPR Characterization of a Rigid Bis-TEMPO Bis-Ketal for Dynamic Nuclear Polarization. *Applied Magnetic Resonance*, **2010**, 37, 505-514	0.8	29
20	Dendritic polarizing agents for DNP SENS. *Chemical Science*, **2017**, 8, 416-422	9.4	27
19	Spin exchange monitoring of the strong positive homotropic allosteric binding of a tetraradical by a synthetic receptor in water. *Journal of the American Chemical Society*, **2014**, 136, 17570-7	16.4	25

18	Synthesis and spin-trapping behavior of 5-ChEPMPO, a cholesteryl ester analogue of the spin trap DEPMPO. *Journal of Organic Chemistry*, **2005**, 70, 10426-33	4.2	25
17	Synthesis and structure of 5,5-diethoxycarbonyl-1-pyrroline N-oxide (DECPO). Application to superoxide radical trapping. *Tetrahedron Letters*, **2004**, 45, 149-152	2	24
16	Dynamic Nuclear Polarization/Solid-State NMR Spectroscopy of Membrane Polypeptides: Free-Radical Optimization for Matrix-Free Lipid Bilayer Samples. *ChemPhysChem*, **2017**, 18, 2103-2113	3.2	22
15	Hydrophobic radicals embedded in neutral surfactants for dynamic nuclear polarization of aqueous environments at 9.4 Tesla. *Chemical Communications*, **2014**, 50, 10198-201	5.8	22
14	The ABC exporter MsbA probed by solid state NMR: challenges and opportunities. *Biological Chemistry*, **2015**, 396, 1135-49	4.5	21
13	Solid-State NMR/Dynamic Nuclear Polarization of Polypeptides in Planar Supported Lipid Bilayers. *Journal of Physical Chemistry B*, **2015**, 119, 14574-83	3.4	20
12	Frozen Acrylamide Gels as Dynamic Nuclear Polarization Matrices. *Angewandte Chemie - International Edition*, **2017**, 56, 8726-8730	16.4	18
11	Structure and spectromagnetic properties of the superoxide radical adduct of DMPO in water: elucidation by theoretical investigations. *Journal of Physical Chemistry B*, **2010**, 114, 11793-803	3.4	17
10	Design of new derivatives of nitrone DEPMPO functionalized at C-4 for further specific applications in superoxide radical detection. *Journal of Organic Chemistry*, **2007**, 72, 7886-92	4.2	17
9	Up to 100% Improvement in Dynamic Nuclear Polarization Solid-State NMR Sensitivity Enhancement of Polymers by Removing Oxygen. *Macromolecular Rapid Communications*, **2015**, 36, 1416-21	4.8	16
8	Synthesis of the cis diastereoisomer of 5-diethoxyphosphoryl-5-methyl-3-phenyl-1-pyrroline N-oxide (DEPMPPOc) and ESR study of its superoxide spin adduct. *Tetrahedron Letters*, **2004**, 45, 6385-6389	2	16
7	Triangular Regulation of Cucurbit[8]uril 1:1 Complexes. *Journal of the American Chemical Society*, **2019**, 141, 5897-5907	16.4	16
6	Synthesis and spin-trapping properties of a trifluoromethyl analogue of DMPO: 5-methyl-5-trifluoromethyl-1-pyrroline N-oxide (5-TFDMPO). *Chemistry - A European Journal*, **2014**, 20, 4064-71	4.8	11
5	EPR Studies of the Binding Properties, Guest Dynamics, and Inner-Space Dimensions of a Water-Soluble Resorcinarene Capsule. *Chemistry - A European Journal*, **2015**, 21, 16404-10	4.8	11
4	Dynamic Nuclear Polarization / solid-state NMR of membranes. Thermal effects and sample geometry. *Solid State Nuclear Magnetic Resonance*, **2019**, 100, 70-76	3.1	6
3	Rücktitelbild: Highly Efficient, Water-Soluble Polarizing Agents for Dynamic Nuclear Polarization at High Frequency (Angew. Chem. 41/2013). *Angewandte Chemie*, **2013**, 125, 11112-11112	3.6	1
2	Frozen Acrylamide Gels as Dynamic Nuclear Polarization Matrices. *Angewandte Chemie*, **2017**, 129, 8852-8856	3.6	0
1	Alkylperoxyl spin adducts of pyrroline-N-oxide spin traps: Experimental and theoretical CASSCF study of the unimolecular decomposition in organic solvent, potential applications in water. *Journal of Physical Organic Chemistry*, **2017**, 30, e3677	2.1	