Marina Bennati

List of Publications by Year
in descending order

		186265	197818
68	2,649	28	49
papers	citations	h-index	g-index

71	71	71	1779
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dynamic nuclear polarization at high magnetic fields in liquids. Progress in Nuclear Magnetic Resonance Spectroscopy, 2012, 64, 4-28.	7.5	162
2	High-field pulsed electron-electron double resonance spectroscopy to determine the orientation of the tyrosyl radicals in ribonucleotide reductase. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13386-13390.	7.1	147
3	Benchmark Test and Guidelines for DEER/PELDOR Experiments on Nitroxide-Labeled Biomolecules. Journal of the American Chemical Society, 2021, 143, 17875-17890.	13.7	124
4	Ribonucleotide Reductases: Structure, Chemistry, and Metabolism Suggest New Therapeutic Targets. Annual Review of Biochemistry, 2020, 89, 45-75.	11.1	120
5	Field Dependent Dynamic Nuclear Polarization with Radicals in Aqueous Solution. Journal of the American Chemical Society, 2008, 130, 3254-3255.	13.7	117
6	Pulsed Electron-Nuclear Double Resonance (ENDOR) at 140 GHz. Journal of Magnetic Resonance, 1999, 138, 232-243.	2.1	102
7	EPR Distance Measurements Support a Model for Long-Range Radical Initiation inE. coliRibonucleotide Reductase. Journal of the American Chemical Society, 2005, 127, 15014-15015.	13.7	102
8	Probing Secondary Structures of Spinâ€Labeled RNA by Pulsed EPR Spectroscopy. Angewandte Chemie - International Edition, 2010, 49, 6443-6447.	13.8	88
9	New developments in high field electron paramagnetic resonance with applications in structural biology. Reports on Progress in Physics, 2005, 68, 411-448.	20.1	87
10	Water 1H relaxation dispersion analysis on a nitroxide radical provides information on the maximal signal enhancement in Overhauser dynamic nuclear polarization experiments. Physical Chemistry Chemical Physics, 2010, 12, 5902.	2.8	78
11	One-thousand-fold enhancement of high field liquid nuclear magnetic resonance signals at room temperature. Nature Chemistry, 2017, 9, 676-680.	13.6	77
12	PELDOR Spectroscopy with DOPA-Î²2 and NH₂Y-Î±2s:â€‰ Distance Measurements between Residues Involved in the Radical Propagation Pathway of E. coli Ribonucleotide Reductase. Journal of the American Chemical Society, 2007, 129, 15748-15749.	13.7	68
13	Hydrogen Bond Network between Amino Acid Radical Intermediates on the Proton-Coupled Electron Transfer Pathway of E. coli Î±2 Ribonucleotide Reductase. Journal of the American Chemical Society, 2015, 137, 289-298.	13.7	65
14	Pulsed 180-GHz EPR/ENDOR/PELDOR spectroscopy. Magnetic Resonance in Chemistry, 2005, 43, S248-S255.	1.9	64
15	High-Field Electron Paramagnetic Resonance and Density Functional Theory Study of Stable Organic Radicals in Lignin: Influence of the Extraction Process, Botanical Origin, and Protonation Reactions on the Radical g Tensor. Journal of Physical Chemistry A, 2015, 119, 6475-6482.	2.5	62
16	Pulsed ELDOR Spectroscopy Measures the Distance between the Two Tyrosyl Radicals in the R2 Subunit of theE. coliRibonucleotide Reductase. Journal of the American Chemical Society, 2003, 125, 14988-14989.	13.7	60
17	Pulsed EPR on the photoexcited triplet state of C60 fullerene. Chemical Physics Letters, 1992, 200, 440-444.	2.6	55
18	High-Frequency (140-GHz) Time Domain EPR and ENDOR Spectroscopy:Â The Tyrosyl Radicalâ^'Diiron Cofactor in Ribonucleotide Reductase from Yeast. Journal of the American Chemical Society, 2001, 123, 3569-3576.	13.7	53

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19	Saturation factor of nitroxide radicals in liquid DNP by pulsed ELDOR experiments. Physical Chemistry Chemical Physics, 2011, 13, 3630.	2.8	51
20	ENDOR Spectroscopy and DFT Calculations: Evidence for the Hydrogen-Bond Network Within Î±2 in the PCET of E. coli Ribonucleotide Reductase. Journal of the American Chemical Society, 2012, 134, 17661-17670.	13.7	50
21	Structure of the Nitrogen-Centered Radical Formed during Inactivation ofE. coliRibonucleotide Reductase by 2â€˜-Azido-2â€˜-deoxyuridine-5â€˜-diphosphate:Â Trapping of the 3â€˜-Ketonucleotide. Journal of the American Chemical Society, 2005, 127, 7729-7738.	13.7	49
22	High-resolution measurement of long-range distances in RNA: pulse EPR spectroscopy with TEMPO-labeled nucleotides. Chemical Science, 2016, 7, 3172-3180.	7.4	49
23	Solid effect in the electron spin dressed state: A new approach for dynamic nuclear polarization. Journal of Chemical Physics, 2000, 113, 6795-6802.	3.0	38
24	Radical transfer in E. coli ribonucleotide reductase: a NH₂Y₇₃₁/R₄₁₁A-Î± mutant unmasks a new conformation of the pathway residue 731. Chemical Science, 2016, 7, 2170-2178.	7.4	38
25	Construction of a Liquid-State NMR DNP Shuttle Spectrometer: First Experimental Results and Evaluation of Optimal Performance Characteristics. Applied Magnetic Resonance, 2008, 34, 301.	1.2	36
26	Pulsed-EPR on the photoexcited triplet state of C60 in fluid solution: electron transfer from end-capped quaterthiophene and C60-radical anion formation. Chemical Physics, 1994, 185, 221-227.	1.9	32
27	Measurement of Angstrom to Nanometer Molecular Distances with ¹⁹F Nuclear Spins by EPR/ENDOR Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 373-379.	13.8	32
28	Dynamic Nuclear Polarization of ¹³C Nuclei in the Liquid State over a 10â€...Tesla Field Range. Angewandte Chemie - International Edition, 2019, 58, 1402-1406.	13.8	30
29	Studies of Dynamic Nuclear Polarization with Nitroxides in Aqueous Solution. Applied Magnetic Resonance, 2008, 34, 393.	1.2	28
30	Photo-induced radical polarization and liquid-state dynamic nuclear polarization using fullerene nitroxide derivatives. Physical Chemistry Chemical Physics, 2017, 19, 31823-31829.	2.8	27
31	Spectroscopic Evidence for a H Bond Network at Y₃₅₆ Located at the Subunit Interface of Active E. coli Ribonucleotide Reductase. Biochemistry, 2017, 56, 3647-3656.	2.5	27
32	A high saturation factor in Overhauser DNP with nitroxide derivatives: the role of ¹⁴N nuclear spin relaxation. Physical Chemistry Chemical Physics, 2015, 17, 11144-11149.	2.8	26
33	Mechanoradicals in tensed tendon collagen as a source of oxidative stress. Nature Communications, 2020, 11, 2315.	12.8	26
34	Structural Examination of the Transient 3-Aminotyrosyl Radical on the PCET Pathway of E. coli Ribonucleotide Reductase by Multifrequency EPR Spectroscopy. Journal of the American Chemical Society, 2009, 131, 15729-15738.	13.7	25
35	Overhauser DNP with¹⁵N labelled FrÃ©my's salt at 0.35 Tesla. Physical Chemistry Chemical Physics, 2012, 14, 502-510.	2.8	25
36	Nitroxide Derivatives for Dynamic Nuclear Polarization in Liquids: The Role of Rotational Diffusion. Journal of Physical Chemistry Letters, 2020, 11, 1629-1635.	4.6	25

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37	High-Frequency 94 GHz ENDOR Characterization of the Metal Binding Site in Wild-Type RasÂ·GDP and Its Oncogenic Mutant G12V in Frozen Solutionâ€. Biochemistry, 2006, 45, 42-50.	2.5	24
38	A Rapid Freezeâ€Quench Setup for Multiâ€Frequency EPR Spectroscopy of Enzymatic Reactions. ChemPhysChem, 2013, 14, 4094-4101.	2.1	22
39	Comparison of Overhauser DNP at 0.34 and 3.4ÂT with FrÃ©myâ€™s Salt. Applied Magnetic Resonance, 2012, 43, 129-138.	1.2	21
40	1H high field electron-nuclear double resonance spectroscopy at 263â€¯GHz/9.4â€¯T. Journal of Magnetic Resonance, 2019, 303, 17-27.	2.1	19
41	Longâ€Range Distances in Amyloid Fibrils of Î±â€Synuclein from PELDOR Spectroscopy. Angewandte Chemie - International Edition, 2013, 52, 10290-10294.	13.8	18
42	Detection of Water Molecules on the Radical Transfer Pathway of Ribonucleotide Reductase by ¹⁷O Electronâ€“Nuclear Double Resonance Spectroscopy. Journal of the American Chemical Society, 2021, 143, 7237-7241.	13.7	18
43	Multifrequency Electron Paramagnetic Resonance Characterization of PpoA, a CYP450 Fusion Protein that Catalyzes Fatty Acid Dioxygenation. Journal of the American Chemical Society, 2011, 133, 9052-9062.	13.7	17
44	High DNP efficiency of TEMPONE radicals in liquid toluene at low concentrations. Physical Chemistry Chemical Physics, 2014, 16, 8795-8800.	2.8	17
45	Effects in 94ÂGHz Orientation-Selected PELDOR on a Rigid Pair of Radicals with Non-Collinear Axes. Applied Magnetic Resonance, 2010, 37, 539-548.	1.2	15
46	Understanding Overhauser Dynamic Nuclear Polarisation through NMR relaxometry. Molecular Physics, 2019, 117, 888-897.	1.7	15
47	Evaluation of a Shuttle DNP Spectrometer by Calculating the Coupling and Global Enhancement Factors of l-Tryptophan. Applied Magnetic Resonance, 2012, 43, 207-221.	1.2	14
48	High-frequency 263ÂGHz PELDOR. Applied Magnetic Resonance, 2014, 45, 969-979.	1.2	14
49	Resolution of chemical shift anisotropy in 19F ENDOR spectroscopy at 263ÂGHz/9.4ÂT. Journal of Magnetic Resonance, 2021, 333, 107091.	2.1	14
50	Properties of Site-Specifically Incorporated 3-Aminotyrosine in Proteins To Study Redox-Active Tyrosines: Escherichia coli Ribonucleotide Reductase as a Paradigm. Biochemistry, 2018, 57, 3402-3415.	2.5	12
51	Spin density localization and accessibility of organic radicals affect liquid-state DNP efficiency. Physical Chemistry Chemical Physics, 2021, 23, 4480-4485.	2.8	12
52	¹⁹F Electron-Nuclear Double Resonance Reveals Interaction between Redox-Active Tyrosines across the Î±/Î² Interface of E. coli Ribonucleotide Reductase. Journal of the American Chemical Society, 2022, 144, 11270-11282.	13.7	12
53	Cross-polarisation edited ENDOR. Molecular Physics, 2013, 111, 2809-2823.	1.7	11
54	Pulse EPR Measurements of Intramolecular Distances in a TOPP-Labeled Transmembrane Peptide in Lipids. Biophysical Journal, 2016, 111, 2345-2348.	0.5	10

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55	Dynamic nuclear polarization in liquids. Electron Paramagnetic Resonance, 0, , 155-182.	0.2	10
56	A structural model of PpoA derived from SAXS-analysisâ€"Implications for substrate conversion. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2013, 1831, 1449-1457.	2.4	9
57	Kinetics of Bisâ€Allylic Hydroperoxide Synthesis in the Ironâ€Containing Lipoxygenase 2 from Cyanothece and the Effects of Manganese Substitution. Lipids, 2016, 51, 335-347.	1.7	9
58	Statistical analysis of ENDOR spectra. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	8
59	Advanced electron paramagnetic resonance on the catalytic ironâ€"sulfur cluster bound to the CCG domain of heterodisulfide reductase and succinate: quinone reductase. Journal of Biological Inorganic Chemistry, 2013, 18, 905-915.	2.6	7
60	Crossâ€Polarization Electronâ€Nuclear Double Resonance Spectroscopy. ChemPhysChem, 2015, 16, 3769-3773.	2.1	7
61	Longâ€Range Distances in Amyloid Fibrils of Î±â€Synuclein from PELDOR Spectroscopy. Angewandte Chemie, 2013, 125, 10480-10484.	2.0	6
62	Enhanced sensitivity of electron-nuclear double resonance (ENDOR) by cross polarisation and relaxation. Physical Chemistry Chemical Physics, 2014, 16, 7681.	2.8	6
63	Studies of transmembrane peptides by pulse dipolar spectroscopy with semi-rigid TOPP spin labels. European Biophysics Journal, 2021, 50, 143-157.	2.2	6
64	Dynamic Nuclear Polarization of ¹³C Nuclei in the Liquid State over a 10â€...Tesla Field Range. Angewandte Chemie, 2019, 131, 1416-1420.	2.0	3
65	Distribution of H$$^upbeta$$ Hyperfine Couplings in a Tyrosyl Radical Revealed by 263ÂGHz ENDOR Spectroscopy. Applied Magnetic Resonance, 2022, 53, 1015-1030.	1.2	3
66	Measurement of Angstrom to Nanometer Molecular Distances with 19 F Nuclear Spins by EPR/ENDOR Spectroscopy. Angewandte Chemie, 2020, 132, 381-387.	2.0	1
67	Cross-polarisation ENDOR for spin-1 deuterium nuclei. Molecular Physics, 2020, 118, e1763490.	1.7	1
68	Antiferromagnetic resonance in Rb[sub 1]C[sub 60]. , 1998, , .		0