Antal Rockenbauer

List of Publications by Year
in descending order

54	1,556	361413	302126
papers	citations	20 h-index	39 g-index

55	55	55	1797
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Automatic computer simulations of ESR spectra. Applied Magnetic Resonance, 1996, 10, 29-43.	1.2	346
2	Comprehensive Synthesis of Monohydroxyâ€“Cucurbit[n]urils (n = 5, 6, 7, 8): High Purity and High Conversions. Journal of the American Chemical Society, 2015, 137, 10238-10245.	13.7	95
3	Nuclear and Electronic Relaxation of Eu2+(aq):Â An Extremely Labile Aqua Ion1. Journal of the American Chemical Society, 1999, 121, 10403-10409.	13.7	79
4	Tailoring of Polarizing Agents in the bTurea Series for Crossâ€Effect Dynamic Nuclear Polarization in Aqueous Media. Chemistry - A European Journal, 2016, 22, 5598-5606.	3.3	69
5	A Two-Dimensional (Magnetic Field and Concentration) Electron Paramagnetic Resonance Method for Analysis of Multispecies Complex Equilibrium Systems. Information Content of EPR Spectra. Journal of the American Chemical Society, 2001, 123, 7646-7654.	13.7	64
6	Properties of dinitroxides for use in dynamic nuclear polarization (DNP). Physical Chemistry Chemical Physics, 2010, 12, 5841.	2.8	62
7	Biological activity and coordination modes of copper(ii) complexes of Schiff base-derived coumarin ligands. Dalton Transactions, 2010, 39, 10854.	3.3	59
8	Synthesis of ¹⁴N- and ¹⁵N-labeled Trityl-nitroxide Biradicals with Strong Spinâ^'Spin Interaction and Improved Sensitivity to Redox Status and Oxygen. Journal of Organic Chemistry, 2010, 75, 7796-7802.	3.2	58
9	Trityl-nitroxide biradicals as unique molecular probes for the simultaneous measurement of redox status and oxygenation. Chemical Communications, 2010, 46, 628-630.	4.1	58
10	Structural Factors Controlling the Spinâ€“Spin Exchange Coupling: EPR Spectroscopic Studies of Highly Asymmetric Tritylâ€“Nitroxide Biradicals. Journal of the American Chemical Society, 2013, 135, 2350-2356.	13.7	46
11	Great Structural Variety of Complexes in Copper(II)â^'Oligoglycine Systems:Â Microspeciation and Coordination Modes as Studied by the Two-Dimensional Simulation of Electron Paramagnetic Resonance Spectra. Journal of the American Chemical Society, 2003, 125, 5227-5235.	13.7	44
12	An electron spin resonance study of coordination modes in the copper(II)â€“histamine and copper(II)â€“l-histidine systems in fluid aqueous solution. Polyhedron, 2000, 19, 1123-1131.	2.2	43
13	Synthesis of Trityl Radical-Conjugated Disulfide Biradicals for Measurement of Thiol Concentration. Journal of Organic Chemistry, 2011, 76, 3853-3860.	3.2	38
14	Biocompatibility and antibacterial activity of nitrogen-doped titanium dioxide nanoparticles for use in dental resin formulations. International Journal of Nanomedicine, 2016, Volume 11, 6459-6470.	6.7	35
15	Diastereoisomers of <scp>l</scp>-proline-linked trityl-nitroxide biradicals: synthesis and effect of chiral configurations on exchange interactions. Chemical Science, 2018, 9, 4381-4391.	7.4	33
16	Lipophilic Î²-Cyclodextrin Cyclicâ^'Nitrone Conjugate: Synthesis and Spin Trapping Studies. Journal of Organic Chemistry, 2009, 74, 5369-5380.	3.2	32
17	Postmodification via Thiol-Click Chemistry Yields Hydrophilic Trityl-Nitroxide Biradicals for Biomolecular High-Field Dynamic Nuclear Polarization. Journal of Physical Chemistry B, 2020, 124, 9047-9060.	2.6	30
18	ESR STUDY OF COPPER(II) COMPLEXES OF Î±-AMINO ACIDS. COORDINATION MODES AND METAL-LIGAND BONDS IN FROZEN AQUEOUS SOLUTIONS. Journal of Coordination Chemistry, 1988, 17, 69-83.	2.2	26

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19	Triangular Regulation of Cucurbit[8]uril 1:1 Complexes. Journal of the American Chemical Society, 2019, 141, 5897-5907.	13.7	23
20	Spin Trapping and Cytoprotective Properties of Fluorinated Amphiphilic Carrier Conjugates of Cyclic versus Linear Nitrones. Chemical Research in Toxicology, 2009, 22, 1570-1581.	3.3	22
21	ESR study of the copper(II)-glycylglycine equilibrium system in fluid aqueous solution. Computer analysis of overlapping multispecies spectra. Magnetic Resonance in Chemistry, 1999, 37, 484-492.	1.9	20
22	Reversal of <scp>SIN</scp>â€1â€induced e<scp>NOS</scp> dysfunction by the spin trap, <scp>DMPO</scp>, in bovine aortic endothelial cells via e<scp>NOS</scp> phosphorylation. British Journal of Pharmacology, 2014, 171, 2321-2334.	5.4	18
23	Discriminative Detection of Biothiols by Electron Paramagnetic Resonance Spectroscopy using a Methanethiosulfonate Trityl Probe. Angewandte Chemie - International Edition, 2020, 59, 928-934.	13.8	18
24	Equilibria of 3-Pyridylmethanol with Copper(II). A Comparative Electron Spin Resonance Study by the Decomposition of Spectra in Liquid and Frozen Solutions. Journal of Physical Chemistry A, 2008, 112, 10280-10286.	2.5	17
25	ESR DETERMINATION OF THE STABILITY CONSTANTS OF COBALOXIME(II)â€"PYRIDINE MIXED COMPLEXES IN METHANOL. Journal of Coordination Chemistry, 1972, 2, 53-56.	2.2	16
26	Embedding cyclic nitrone in mesoporous silica particles for EPR spin trapping of superoxide and other radicals. Analyst, The, 2019, 144, 4194-4203.	3.5	16
27	Highly Efficient Tritylâ€Nitroxide Biradicals for Biomolecular Highâ€Field Dynamic Nuclear Polarization. Chemistry - A European Journal, 2021, 27, 12758-12762.	3.3	16
28	Coordination Modes between Copper(II) and N-Acetylneuraminic (Sialic) Acid from a 2D-Simulation Analysis of EPR Spectra. Implications for Copper Mediation of Sialoglycoconjugate Chemistry Relevant to Human Biology. Inorganic Chemistry, 2005, 44, 2531-2543.	4.0	15
29	Thiol-Dependent Reduction of the Triester and Triamide Derivatives of Finland Trityl Radical Triggers O₂-Dependent Superoxide Production. Chemical Research in Toxicology, 2017, 30, 1664-1672.	3.3	14
30	Microspeciation in the Copper(II)â^'l-Histidylglycine System. An ESR Study by the Two-Dimensional Computer Simulation Method. Inorganic Chemistry, 2002, 41, 3483-3490.	4.0	13
31	Diversification of EPR signatures in site directed spin labeling using a Î²-phosphorylated nitroxide. Physical Chemistry Chemical Physics, 2014, 16, 4202.	2.8	13
32	EPR Studies of the Binding Properties, Guest Dynamics, and Innerâ€Space Dimensions of a Waterâ€Soluble Resorcinarene Capsule. Chemistry - A European Journal, 2015, 21, 16404-16410.	3.3	13
33	On the vasoprotective mechanisms underlying novel Î²-phosphorylated nitrones: Focus on free radical characterization, scavenging and NO-donation in a biological model of oxidative stress. European Journal of Medicinal Chemistry, 2016, 119, 197-217.	5.5	13
34	Copper(II) complexes of some N-substituted bis(aminomethyl)phosphinate ligands. An integrated EPR study of microspeciation and coordination modes by the two-dimensional simulation method. Journal of Inorganic Biochemistry, 2004, 98, 1655-1666.	3.5	11
35	Synthesis and Characterization of the Perthiatriarylmethyl Radical and Its Dendritic Derivatives with High Sensitivity and Selectivity to Superoxide Radical. Chemistry - A European Journal, 2018, 24, 6958-6967.	3.3	11
36	The reaction of 2-(tetrazol-5-yl)alkyl ketones and of 2-(tetrazol-5-yl)alkanoic acid derivatives with lead tetraacetate. A novel method of preparation of alk-2-ynyl ketones and alk-2-ynoic acid derivativesâ€Šâ€. Journal of the Chemical Society, Perkin Transactions 1, 2001, , 1131-1139.	1.3	10

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37	Thermodynamic Analysis of the Chemical Exchange of Î²â^'Phosphorylated Cyclic Nitroxides by Using Two-dimensional (Temperature versus Magnetic Field) Simulation of ESR Spectra:Â The Impact of Labile Solventâ^'Solute Interactions on Molecular Dynamics. Journal of Physical Chemistry A, 2006, 110, 9542-9548.	2.5	8
38	Supramolecular hostâ€"guest interaction of trityl-nitroxide biradicals with cyclodextrins: modulation of spinâ€"spin interaction and redox sensitivity. Organic and Biomolecular Chemistry, 2016, 14, 1694-1701.	2.8	8
39	Discriminative Detection of Biothiols by Electron Paramagnetic Resonance Spectroscopy using a Methanethiosulfonate Trityl Probe. Angewandte Chemie, 2020, 132, 938-944.	2.0	6
40	EPR STUDY OF THE SYSTEM [DIAQUOCOBALOXIME + AMINE] AS A CATALYST FOR THE HYDROGENATION OF NITROBENZENE. Journal of Coordination Chemistry, 1982, 11, 205-212.	2.2	5
41	Electron spin resonance detection of Jahnâ€"Teller effect induced phase transition with thermal hysteresis in the copper(II) doped zinc(II)â€bisâ€histidine systems: Free and hindered rotation of histidine molecules in solid lattice. Journal of Chemical Physics, 1987, 86, 976-979.	3.0	5
42	New Aminoâ€Acidâ€Based Î²â€Phosphorylated Nitroxides for Probing Acidic pH in Biological Systems by EPR Spectroscopy. ChemBioChem, 2017, 18, 300-315.	2.6	5
43	Membrane-specific spin trap, 5-dodecylcarbamoyl-5-N-dodecylacetamide-1-pyroline-N-oxide (diC₁₂PO): theoretical, bioorthogonal fluorescence imaging and EPR studies. Organic and Biomolecular Chemistry, 2019, 17, 7694-7705.	2.8	5
44	Synthesis and Redox Properties of Water-Soluble Asymmetric Trityl Radicals. Journal of Organic Chemistry, 2021, 86, 8351-8364.	3.2	5
45	Probing the dynamic properties of two sites simultaneously in a proteinâ€"protein interaction process: a SDSL-EPR study. Physical Chemistry Chemical Physics, 2019, 21, 22584-22588.	2.8	4
46	Hostâ€"guest interaction of nitroxide radicals with water-soluble pillar[6]arenes. Organic and Biomolecular Chemistry, 2020, 18, 2321-2325.	2.8	4
47	Molecular recognition. IIâ€"Discrimination of specific and non-specific intermolecular interactions by means of magnetic resonance spectroscopy. Magnetic Resonance in Chemistry, 1998, 36, 205-210.	1.9	2
48	Molecular Recognition Analyzed by Observing Intramolecular Interconversion with EPR Spectroscopy. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1998, 53, 1511-1519.	0.7	1
49	Synthesis and Characterization of the Perthiatriarylmethyl Radical and Its Dendritic Derivatives with High Sensitivity and Selectivity to Superoxide Radical. Chemistry - A European Journal, 2018, 24, 6865-6865.	3.3	1
50	ESR study of the copper(II)â€"glycylglycine equilibrium system in fluid aqueous solution. Computer analysis of overlapping multispecies spectra. Magnetic Resonance in Chemistry, 1999, 37, 484-492.	1.9	1
51	Frontispiece: EPR Studies of the Binding Properties, Guest Dynamics, and Innerâ€Space Dimensions of a Waterâ€Soluble Resorcinarene Capsule. Chemistry - A European Journal, 2015, 21, .	3.3	0
52	A screw model for quantum electrodynamics: from gravitation to quanta. Indian Journal of Physics, 2015, 89, 389-396.	1.8	0
53	Exploring the boundaries of direct detection and characterization of labile isomers â€" a case study of copper(ii)â€"dipeptide systems. Dalton Transactions, 2017, 46, 8157-8166.	3.3	0
54	In situ simultaneous electrochemical ESR study of radicals generated from 2,2-dinitroethene-1,1-diamine (FOX-7). Intramolecular chemical exchange resulting in an alternation line-width effect. Journal of Magnetic Resonance, 2021, 323, 106895.	2.1	0