Rimma Samoilova

List of Publications by Year
in descending order

60	1,460	257450 24	361022 35
papers	citations	h-index	g-index

63	63	63	1177
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	ENDOR/HYSCORE Studies of the Common Intermediate Trapped during Nitrogenase Reduction of N₂H₂, CH₃N₂H, and N₂H₄Support an Alternating Reaction Pathway for N₂Reduction. Journal of the American Chemical Society, 2011, 133, 11655-11664.	13.7	83
2	Reaction of Superoxide Radical with Quinone Molecules. Journal of Physical Chemistry A, 2011, 115, 11589-11593.	2.5	78
3	A rapid and robust method for selective isotope labeling of proteins. Methods, 2011, 55, 370-378.	3.8	55
4	Exploration of Ligands to the Qi Site Semiquinone in the bc 1 Complex Using High-resolution EPR. Journal of Biological Chemistry, 2003, 278, 39747-39754.	3.4	52
5	The Interaction of the Rieske Iron-Sulfur Protein with Occupants of the Qo-site of the bc 1 Complex, Probed by Electron Spin Echo Envelope Modulation. Journal of Biological Chemistry, 2002, 277, 4605-4608.	3.4	51
6	PELDOR study of conformations of double-spin-labeled single- and double-stranded DNA with non-nucleotide inserts. Physical Chemistry Chemical Physics, 2009, 11, 6826.	2.8	46
7	AEROSOL FORMATION UNDER HETEROGENEOUS/HOMOGENEOUS THERMAL DECOMPOSITION OF SILANE: EXPERIMENT AND NUMERICAL MODELING. Journal of Aerosol Science, 2000, 31, 879-906.	3.8	43
8	The quinone-binding sites of the cytochrome bo3 ubiquinol oxidase from Escherichia coli. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1924-1932.	1.0	41
9	Hydrogen Bonds Involved in Binding the Qi-site Semiquinone in the bc1 Complex, Identified through Deuterium Exchange Using Pulsed EPR. Journal of Biological Chemistry, 2004, 279, 15814-15823.	3.4	40
10	Two-Dimensional ESEEM Study of VO2+ Complexes with Imidazole and Histidine: Histidine Is a Polydentante Ligand. Journal of the American Chemical Society, 1995, 117, 10579-10580.	13.7	39
11	Characterization of the Exchangeable Protons in the Immediate Vicinity of the Semiquinone Radical at the QH Site of the Cytochrome bo3 from Escherichia coli. Journal of Biological Chemistry, 2006, 281, 16879-16887.	3.4	39
12	ESEEM Measurements of Local Water Concentration in D2O-Containing Spin-Labeled Systems. Applied Magnetic Resonance, 2008, 35, 73-94.	1.2	35
13	Hydrogen Bonding and Spin Density Distribution in the Q_BSemiquinone of Bacterial Reaction Centers and Comparison with the Q_ASite. Journal of the American Chemical Society, 2011, 133, 5525-5537.	13.7	35
14	Self-Aggregation of Spin-Labeled Alamethicin in ePC Vesicles Studied by Pulsed Electronâ^'Electron Double Resonance. Journal of the American Chemical Society, 2007, 129, 9260-9261.	13.7	33
15	Continuous-Wave and Pulsed EPR Characterization of the [2Feâ^'2S](Cys)₃(His)₁ Cluster in Rat MitoNEET. Journal of the American Chemical Society, 2009, 131, 13659-13667.	13.7	33
16	Hydrogen Bonds between Nitrogen Donors and the Semiquinone in the Qi-site of the bc1 Complex. Journal of Biological Chemistry, 2007, 282, 25831-25841.	3.4	31
17	Structure of Self-Aggregated Alamethicin in ePC Membranes Detected by Pulsed Electron-Electron Double Resonance and Electron Spin Echo Envelope Modulation Spectroscopies. Biophysical Journal, 2009, 96, 3197-3209.	0.5	31
18	Interactions of Intermediate Semiquinone with Surrounding Protein Residues at the Q_H Site of Wild-Type and D75H Mutant Cytochrome bo₃ from Escherichia coli. Biochemistry, 2012, 51, 3827-3838.	2.5	31

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19	PELDOR Conformational Analysis of bis-Labeled Alamethicin Aggregated in Phospholipid Vesicles. Journal of Physical Chemistry B, 2008, 112, 13469-13472.	2.6	30
20	Synthesis and X-ray Molecular Structure of the First Stable Organic Radical Lacking Resonance Stabilization. Journal of the American Chemical Society, 1999, 121, 8118-8119.	13.7	29
21	Characterization of Mutants That Change the Hydrogen Bonding of the Semiquinone Radical at the QH Site of the Cytochrome bo3 from Escherichia coli. Journal of Biological Chemistry, 2007, 282, 8777-8785.	3.4	29
22	Chemical composition and bond structure of aerosol particles of amorphous hydrogenated silicon forming from thermal decomposition of silane. Journal of Aerosol Science, 1997, 28, 1425-1441.	3.8	28
23	Identification of the Nitrogen Donor Hydrogen Bonded with the Semiquinone at the Q_H Site of the Cytochrome bo₃ from Escherichia coli. Journal of the American Chemical Society, 2008, 130, 15768-15769.	13.7	28
24	Identification of Hydrogen Bonds to the Rieske Cluster through the Weakly Coupled Nitrogens Detected by Electron Spin Echo Envelope Modulation Spectroscopy. Journal of Biological Chemistry, 2006, 281, 27416-27425.	3.4	27
25	Interactions of quinone with the ironâ€“sulfur protein of the bc1 complex: is the mechanism spring-loaded?. Biochimica Et Biophysica Acta - Bioenergetics, 2002, 1555, 48-53.	1.0	25
26	A comparative, two-dimensional 14N ESEEM characterization of reduced [2Feâ€“2S] clusters in hyperthermophilic archaeal high- and low-potential Rieske-type proteins. Journal of Biological Inorganic Chemistry, 2004, 9, 753-767.	2.6	25
27	Characterization of the Semiquinone Radical Stabilized by the Cytochrome aa3-600 Menaquinol Oxidase of Bacillus subtilis. Journal of Biological Chemistry, 2010, 285, 18241-18251.	3.4	24
28	Orientation-Selected15N-HYSCORE Detection of Weakly Coupled Nitrogens around the Archaeal Rieske [2Feâ˜2S] Center. Journal of the American Chemical Society, 2004, 126, 13902-13903.	13.7	23
29	Supramolecular Structure of Self-Assembling Alamethicin Analog Studied by ESR and PELDOR. Chemistry and Biodiversity, 2007, 4, 1275-1298.	2.1	22
30	ENDOR and EPR studies of highly isotopically 13C-enriched ubiquinone radicals. Part 2. Journal of the Chemical Society Perkin Transactions II, 1995, , 2063.	0.9	21
31	Pulsed EPR Study of Orthophosphoric and Boric Acid Modified Î³-Alumina. The Journal of Physical Chemistry, 1996, 100, 17621-17629.	2.9	21
32	ENDOR and EPR studies of highly isotopically 13C-enriched ubiquinone radicals. Journal of the Chemical Society Perkin Transactions II, 1994, , 609.	0.9	20
33	Spatial distribution of spin-labeled trichogin GA IV in the gram-positive bacterial cell membrane determined from PELDOR data. Applied Magnetic Resonance, 2002, 23, 81-95.	1.2	20
34	Exploring by Pulsed EPR the Electronic Structure of Ubisemiquinone Bound at the QH Site of Cytochrome bo3 from Escherichia coli with in Vivo 13C-Labeled Methyl and Methoxy Substituents. Journal of Biological Chemistry, 2011, 286, 10105-10114.	3.4	20
35	Peptides on the Surface: Spin-Label EPR and PELDOR Study of Adsorption of the Antimicrobial Peptides Trichogin GA IV and Ampullosporin A on the Silica Nanoparticles. Applied Magnetic Resonance, 2016, 47, 309-320.	1.2	20
36	Proton Environment of Reduced Rieske Ironâ˜Sulfur Cluster Probed by Two-Dimensional ESEEM Spectroscopy. Journal of Physical Chemistry A, 2009, 113, 653-667.	2.5	19

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37	Hydrogen Bonds between Nitrogen Donors and the Semiquinone in the Q_B Site of Bacterial Reaction Centers. Journal of the American Chemical Society, 2010, 132, 11671-11677.	13.7	17
38	The reduced [2Fe-2S] clusters in adrenodoxin and Arthrospira platensis ferredoxin share spin density with protein nitrogens, probed using 2D ESEEM. Physical Chemistry Chemical Physics, 2009, 11, 6807.	2.8	16
39	Hydrogen Bonding between the Q_B Site Ubisemiquinone and Ser-L223 in the Bacterial Reaction Center: A Combined Spectroscopic and Computational Perspective. Biochemistry, 2012, 51, 9086-9093.	2.5	16
40	Analysis of hydrogen and paramagnetic defects in aï£¿Si: H aerosol particles. Resulting from thermal decomposition of silane. Physica Status Solidi (B): Basic Research, 1996, 193, 25-38.	1.5	15
41	Observation of two paramagnetic species in electron transfer reactions within cesium modified X and Y zeolites. Chemical Physics Letters, 2000, 316, 404-410.	2.6	15
42	Membrane-peptide interaction studied by PELDOR and CW ESR: Peptide conformations and cholesterol effect on the spatial peptide distribution in the membrane. Applied Magnetic Resonance, 2005, 29, 703-716.	1.2	14
43	15N HYSCORE Characterization of the Fully Deprotonated, Reduced Form of the Archaeal Rieske [2Feâ^'2S] Center. Journal of the American Chemical Society, 2006, 128, 2170-2171.	13.7	14
44	The Semiquinone at the Q_i Site of the bc₁ Complex Explored Using HYSCORE Spectroscopy and Specific Isotopic Labeling of Ubiquinone in Rhodobacter sphaeroides via ¹³C Methionine and Construction of a Methionine Auxotroph. Biochemistry, 2014, 53, 6022-6031.	2.5	14
45	Self-Aggregation and Orientation of the Ion Channel-Forming Zervamicin IIA in the Membranes of ePC Vesicles Studied by cw EPR and ESEEM Spectroscopy. Applied Magnetic Resonance, 2010, 38, 75-84.	1.2	13
46	Electron spin echo of hydrogen atoms and hydroxyl radicals adsorbed in A-type zeolites. The Journal of Physical Chemistry, 1979, 83, 2515-2519.	2.9	11
47	Peptides on the Surface. PELDOR Data for Spin-Labeled Alamethicin F50/5 Analogues on Organic Sorbent. Journal of Physical Chemistry B, 2014, 118, 7085-7090.	2.6	11
48	Investigation of the Reorientational Dynamics of Nitroxides Adsorbed on Surfaces Using Echo-Induced EPR Lineshapes. Journal of Magnetic Resonance Series A, 1993, 105, 204-208.	1.6	10
49	Plasticity in the High Affinity Menaquinone Binding Site of the Cytochrome aa₃-600 Menaquinol Oxidase from Bacillus subtilis. Biochemistry, 2015, 54, 5030-5044.	2.5	9
50	Electron spin echo of CH2OH radicals adsorbed in A-type zeolites. Chemical Physics Letters, 1977, 52, 520-525.	2.6	8
51	ESR, ENDOR and ESEEM studies of Lewis acid site interactions with tetrachloro-1,2-benzoquinone in aluminosilicate catalysts. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1993, 72, 29-35.	4.7	8
52	ENDOR and ESEEM studies of ion radicals of artificial dimethoxy- or halogen-1,4-benzoquinones with an alkyl side chain of differing length. Journal of the Chemical Society Perkin Transactions II, 1992, , 1519.	0.9	7
53	Aggregation of spin-labeled alamethicin in low-polarity solutions as studied by PELDOR spectroscopy. Doklady Physical Chemistry, 2006, 406, 21-25.	0.9	7
54	The structure of radical tracks in methanol irradiated by tritium Î²-particles. Radiation Physics and Chemistry (1977), 1980, 15, 553-559.	0.3	6

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55	E.s.r. and ENDOR spectra of paramagnetic complexes of quinones with Lewis acid centers in thermally activated Y-type zeolites. Zeolites, 1991, 11, 282-286.	0.5	6
56	EPR-study of nitrogen implanted silicon nitride. Solid State Communications, 2001, 118, 129-134.	1.9	6
57	Twoâ€dimensional pulsed electron spin resonance characterization of ¹⁵Nâ€labeled archaeal Rieskeâ€type ferredoxin. FEBS Letters, 2009, 583, 3467-3472.	2.8	5
58	Dose dependence of the yields of trapped electrons in irradiated alkaline glasses. Radiation Physics and Chemistry (1977), 1977, 10, 171-175.	0.3	2
59	Hyperfine Interaction Tensors of 13C Nuclei for Ring Carbons of Ubisemiquinone-10 Hydrogen Bonded in Alcohol Solvents. Applied Magnetic Resonance, 2014, 45, 941-953.	1.2	2
60	Hydrogen bonding and spin density distribution in the QB semiquinone of bacterial reaction centers and comparison with the QA site. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, S30.	1.0	0