Tatyana I Smirnova

List of Publications by Year
in descending order

57	1,310	361413	345221
papers	citations	20 h-index	36 g-index

57	57	57	1893
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Surface-Mediated Production of Hydroxyl Radicals as a Mechanism of Iron Oxide Nanoparticle Biotoxicity. Journal of the American Chemical Society, 2011, 133, 35-41.	13.7	310
2	The Hydroxyl Radical is a Critical Intermediate in the Voltammetric Detection of Hydrogen Peroxide. Journal of the American Chemical Society, 2016, 138, 2516-2519.	13.7	77
3	Glycol Chitosan Engineered Autoregenerative Antioxidant Significantly Attenuates Pathological Damages in Models of Age-Related Macular Degeneration. ACS Nano, 2017, 11, 4669-4685.	14.6	61
4	Characterization of Dehaloperoxidase Compound ES and Its Reactivity with Trihalophenols. Biochemistry, 2009, 48, 995-1005.	2.5	58
5	Local Polarity and Hydrogen Bonding Inside the Sec14p Phospholipid-Binding Cavity: High-Field Multi-Frequency Electron Paramagnetic Resonance Studies. Biophysical Journal, 2007, 92, 3686-3695.	0.5	53
6	Spectroscopic and Mechanistic Investigations of Dehaloperoxidase B from Amphitrite ornata. Biochemistry, 2010, 49, 6600-6616.	2.5	49
7	Oligomeric Structure of Anabaena Sensory Rhodopsin in a Lipid Bilayer Environment by Combining Solid-State NMR and Long-range DEER Constraints. Journal of Molecular Biology, 2017, 429, 1903-1920.	4.2	47
8	W-Band (95 GHz) EPR Spectroscopy of Nitroxide Radicals with Complex Proton Hyperfine Structure: Fast Motion. The Journal of Physical Chemistry, 1995, 99, 9008-9016.	2.9	42
9	Spontaneous Switching among Conformational Ensembles in Intrinsically Disordered Proteins. Biomolecules, 2019, 9, 114.	4.0	41
10	Accuracy of Oxygen Measurements inT2 (Line Width) EPR Oximetry. Magnetic Resonance in Medicine, 1995, 33, 801-810.	3.0	38
11	Lipid Magnetic Resonance Imaging Contrast Agent Interactions:Â A Spin-Labeling and a Multifrequency EPR Study. Journal of the American Chemical Society, 1998, 120, 5060-5072.	13.7	38
12	Pyridine Inhibitor Binding to the 4Fe-4S ProteinA. aeolicusIspH (LytB): A HYSCORE Investigation. Journal of the American Chemical Society, 2011, 133, 6525-6528.	13.7	35
13	Copper-Organic/Octamolybdates: Structures, Bandgap Sizes, and Photocatalytic Activities. Inorganic Chemistry, 2014, 53, 3464-3470.	4.0	35
14	An ENDOR and HYSCORE Investigation of a Reaction Intermediate in IspG (GcpE) Catalysis. Journal of the American Chemical Society, 2011, 133, 8400-8403.	13.7	33
15	Geometry of Hydrogen Bonds Formed by Lipid Bilayer Nitroxide Probes:Â A High-Frequency Pulsed ENDOR/EPR Study. Journal of the American Chemical Society, 2007, 129, 3476-3477.	13.7	32
16	Substrate Binding Triggers a Switch in the Iron Coordination in Dehaloperoxidase from Amphitrite ornata:â€‰ HYSCORE Experiments. Journal of the American Chemical Society, 2008, 130, 2128-2129.	13.7	31
17	Resurrection of a functional phosphatidylinositol transfer protein from a pseudo-Sec14 scaffold by directed evolution. Molecular Biology of the Cell, 2011, 22, 892-905.	2.1	31
18	Elucidating the Reaction Pathway of Decarboxylation-Assisted Olefination Catalyzed by a Mononuclear Non-Heme Iron Enzyme. Journal of the American Chemical Society, 2018, 140, 15190-15193.	13.7	30

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19	Identification of free radicals in pyrolysis oil and their impact on bio-oil stability. RSC Advances, 2014, 4, 29840-29846.	3.6	26
20	Tyrosyl Radicals in Dehaloperoxidase. Journal of Biological Chemistry, 2013, 288, 33470-33482.	3.4	25
21	Oxidation of pyrrole by dehaloperoxidase-hemoglobin: chemoenzymatic synthesis of pyrrolin-2-ones. Catalysis Science and Technology, 2017, 7, 3104-3118.	4.1	20
22	The Chemistry of Phospholipid Binding by the Saccharomyces cerevisiae Phosphatidylinositol Transfer Protein Sec14p as Determined by EPR Spectroscopy. Journal of Biological Chemistry, 2006, 281, 34897-34908.	3.4	19
23	Isoprenoid Biosynthesis: Ferraoxetane or Allyl Anion Mechanism for IspH Catalysis?. Angewandte Chemie - International Edition, 2013, 52, 6522-6525.	13.8	17
24	Cryogen-free superconducting magnet system for multifrequency electron paramagnetic resonance up to 12.1T. Review of Scientific Instruments, 2006, 77, 035108.	1.3	16
25	The UDP-diacylglucosamine Pyrophosphohydrolase LpxH in Lipid A Biosynthesis Utilizes Mn2+ Cluster for Catalysis. Journal of Biological Chemistry, 2013, 288, 26987-27001.	3.4	16
26	Manganeseâ€“Vanadate Hybrids: Impact of Organic Ligands on Their Structures, Thermal Stabilities, Optical Properties, and Photocatalytic Activities. Inorganic Chemistry, 2015, 54, 7388-7401.	4.0	16
27	Characterization of magnetic and electronic properties of trimetallic nitride endohedral fullerenes by SQUID magnetometry and electron paramagnetic resonance. Chemical Physics Letters, 2008, 453, 233-237.	2.6	15
28	Peptideâ€“Membrane Interactions by Spin-Labeling EPR. Methods in Enzymology, 2015, 564, 219-258.	1.0	13
29	Single-Crystal Multifrequency EPR Evidence for a Quasi-Low-Dimensional Spin Exchange in 3-n-Butyl-2,4,6-Triphenylverdazyl. Journal of Physical Chemistry B, 1997, 101, 11249-11253.	2.6	10
30	Half-field EPR transitions in synthetic carbohydrate chars. Solid State Communications, 1994, 91, 319-323.	1.9	9
31	Integrative structural dynamics probing of the conformational heterogeneity in synaptosomal-associated protein 25. Cell Reports Physical Science, 2021, 2, 100616.	5.6	9
32	Dynamic Molecular Oxygen Accessibility to a Buried Mn2+Protein Site:Â A High-Field EPR Experiment. Journal of Physical Chemistry B, 2003, 107, 7212-7215.	2.6	8
33	Ferromagnetic coupling in d1â€“d3 linear oxido-bridged heterometallic complexes: ground-state models of metal-to-metal charge transfer excited states. Dalton Transactions, 2015, 44, 18937-18944.	3.3	8
34	Convolution-Based Algorithm: from Analysis of Rotational Dynamics to EPR Oximetry and Protein Distance Measurements. Biological Magnetic Resonance, 2004, , 277-348.	0.4	8
35	Dielectric and Electrostatic Properties of the Silica Nanoparticleâ€“Water Interface by EPR of pH-Sensitive Spin Probes. Journal of Physical Chemistry C, 2019, 123, 29972-29985.	3.1	7
36	Alternative Reactivity of Leucine 5-Hydroxylase Using an Olefin-Containing Substrate to Construct a Substituted Piperidine Ring. Biochemistry, 2020, 59, 1961-1965.	2.5	6

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37	High-Field ESR Spectroscopy in Membrane and Protein Biophysics. , 2007, , 165-251.		6
38	Isoprenoid Biosynthesis: Ferraoxetane or Allyl Anion Mechanism for IspH Catalysis?. Angewandte Chemie, 2013, 125, 6650-6653.	2.0	4
39	EPR Oximetry with Nitroxides: Effects of Molecular Structure, pH, and Electrolyte Concentration. Applied Magnetic Resonance, 0, , .	1.2	4
40	smFRET and DEER Distance Measurements as Applied to Disordered and Structured Proteins. Biophysical Journal, 2016, 110, 559a.	0.5	2
41	Silica-Supported Lipid Bilayers: Electrostatic Effects at Lipid Interfaces as Reported by Spin-Labeling EPR. Biophysical Journal, 2018, 114, 96a.	0.5	2
42	Spectroscopic Probes of the Reactive Intermediates of Dehaloperoxidase from Amphitrite ornata. Biophysical Journal, 2009, 96, 437a.	0.5	1
43	Heterogeneous Dielectric and Hydrogen Bonding Environment of Transmembrane Peptides. Biophysical Journal, 2010, 98, 87a.	0.5	1
44	Synthesis of New Mixed-Metal Ammonium Vanadates: Cation Order versus Disorder, and Optical and Photocatalytic Properties. Crystal Growth and Design, 2016, 16, 5762-5770.	3.0	1
45	Membrane insertion of peptides mimicking E2 domain of Sindbis virus is modulated by cholesterol. Biophysical Journal, 2009, 96, 389a-390a.	0.5	0
46	Substrate binding triggers a switch in the iron coordination in dehaloperoxidase from Amphitrite Ornate. Biophysical Journal, 2009, 96, 437a.	0.5	0
47	Role of Electrostatic and Hydrogen Bonding Environment in Sequestering Lipids from Membranes Into the Sec14 Protein Cavity. Biophysical Journal, 2011, 100, 552a-553a.	0.5	0
48	Probing Dielectric and Hydrogen Bonding Gradients in Biological Membranes. Biophysical Journal, 2012, 102, 414a.	0.5	0
49	Molecular pH Probes at a Protein-Lipid Interface: Assessment of Local Dielectric Environment for Transmembrane Peptide. Biophysical Journal, 2013, 104, 373a.	0.5	0
50	Profiling the Dielectric Constant at the Membrane-Peptide Interface using Ionizable EPR Probes. Biophysical Journal, 2014, 106, 508a.	0.5	0
51	Structure, Dynamics, and Electrostatic Effects on Membrane Binding of Nod Peptides. Biophysical Journal, 2014, 106, 295a.	0.5	0
52	Determining Oligomeric Order of a Membrane Protein by Double Electron-Electron Resonance Spectroscopy. Biophysical Journal, 2015, 108, 93a.	0.5	0
53	â€œSnorkelingâ€•of the Charged Sidechain of a Transmembrane Peptide as Directly Observed by Double Electron-Electron Resonance Experiment. Biophysical Journal, 2015, 108, 203a.	0.5	0
54	Effects of Silica Support on Dynamics of Transmembrane Peptides and Effective p K a of Ionisable Sidechains. Biophysical Journal, 2017, 112, 175a.	0.5	0

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55	Using Hyscore Spectroscopy of Nitroxides to Profile Water Content of Lipid Bilayers with 2 Ã... Spatial Resolution. Biophysical Journal, 2018, 114, 16a.	0.5	0
56	Effect of Silica Support on Electrostatics of Lipid Interfaces in Nano-Bio Hybrid Systems. Biophysical Journal, 2019, 116, 81a.	0.5	0
57	EPR studies of bionanomaterials. Experimental Methods in the Physical Sciences, 2019, 50, 129-159.	0.1	0