Anton N Savitsky

List of Publications by Year
in descending order

92	2,872	147801 31	197818 49
papers	citations	h-index	g-index

97	97	97	2606
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detection of the Water-Binding Sites of the Oxygen-Evolving Complex of Photosystem II Using W-Band ¹⁷O Electronâ€“Electron Double Resonance-Detected NMR Spectroscopy. Journal of the American Chemical Society, 2012, 134, 16619-16634.	13.7	248
2	High-field EPR studies of the structure and conformational changes of site-directed spin labeled bacteriorhodopsin. Biochimica Et Biophysica Acta - Bioenergetics, 2000, 1457, 253-262.	1.0	144
3	Molecular orbital study of polarity and hydrogen bonding effects on thegand hyperfine tensors of site directed NO spin labelled bacteriorhodopsin. Molecular Physics, 2002, 100, 3711-3721.	1.7	108
4	High-field EPR spectroscopy applied to biological systems: characterization of molecular switches for electron and ion transfer. Physical Chemistry Chemical Physics, 2005, 7, 19-42.	2.8	102
5	In Situ EPR Study of the Redox Properties of CuOâ€“CeO₂ Catalysts for Preferential CO Oxidation (PROX). ACS Catalysis, 2016, 6, 3520-3530.	11.2	97
6	Adsorption and activation of molecular oxygen over atomic copper(I/II) site on ceria. Nature Communications, 2020, 11, 4008.	12.8	95
7	Orientation-Resolving Pulsed Electron Dipolar High-Field EPR Spectroscopy on Disordered Solids:Â I. Structure of Spin-Correlated Radical Pairs in Bacterial Photosynthetic Reaction Centers. Journal of Physical Chemistry B, 2007, 111, 6245-6262.	2.6	90
8	RIDME Spectroscopy with Gd(III) Centers. Journal of Physical Chemistry Letters, 2014, 5, 3970-3975.	4.6	76
9	Atomic-Scale Explanation of O₂ Activation at the Auâ€“TiO₂ Interface. Journal of the American Chemical Society, 2018, 140, 18082-18092.	13.7	69
10	Combining high-field EPR with site-directed spin labeling reveals unique information on proteins in action. Magnetic Resonance in Chemistry, 2005, 43, S4-S19.	1.9	62
11	Transition Ion Strikes Back: Large Magnetic Susceptibility Anisotropy in Cobalt(II) Clathrochelates. Journal of Physical Chemistry Letters, 2014, 5, 3799-3803.	4.6	62
12	Integrated and Portable Magnetometer Based on Nitrogenâ€Vacancy Ensembles in Diamond. Advanced Quantum Technologies, 2021, 4, 2000111.	3.9	60
13	W-band ELDOR-detected NMR (EDNMR) spectroscopy as a versatile technique for the characterisation of transition metalâ€“ligand interactions. Molecular Physics, 2013, 111, 2788-2808.	1.7	59
14	Heterogeneity in the Nitroxide Micro-Environment: Polarity and Proticity Effects in Spin-Labeled Proteins Studied by Multi-Frequency EPR. Applied Magnetic Resonance, 2010, 37, 391-403.	1.2	53
15	High-field EPR, ENDOR and ELDOR on bacterial photosynthetic reaction centers. Applied Magnetic Resonance, 2007, 31, 59-98.	1.2	48
16	Structural and dynamical characteristics of trehalose and sucrose matrices at different hydration levels as probed by FTIR and high-field EPR. Physical Chemistry Chemical Physics, 2014, 16, 9831-9848.	2.8	47
17	Protein Immobilization Capabilities of Sucrose and Trehalose Glasses: The Effect of Protein/Sugar Concentration Unraveled by High-Field EPR. Journal of Physical Chemistry Letters, 2016, 7, 4871-4877.	4.6	46
18	High-field ELDOR-detected NMR study of a nitroxide radical in disordered solids: Towards characterization of heterogeneity of microenvironments in spin-labeled systems. Journal of Magnetic Resonance, 2014, 242, 203-213.	2.1	45

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19	Electron transfer pathways in a light, oxygen, voltage (LOV) protein devoid of the photoactive cysteine. Scientific Reports, 2017, 7, 13346.	3.3	45
20	High-Field EPR and ESEEM Investigation of the Nitrogen Quadrupole Interaction of Nitroxide Spin Labels in Disordered Solids: Toward Differentiation between Polarity and Proticity Matrix Effects on Protein Function. Journal of Physical Chemistry B, 2008, 112, 9079-9090.	2.6	44
21	High-field EPR. Photosynthesis Research, 2009, 102, 311-333.	2.9	44
22	Incorporation of a high potential quinone reveals that electron transfer in Photosystem I becomes highly asymmetric at low temperature. Photochemical and Photobiological Sciences, 2012, 11, 946-956.	2.9	40
23	EPR characterization of Mn(<scp>ii</scp>) complexes for distance determination with pulsed dipolar spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 25120-25135.	2.8	40
24	High-field EPR-detected shifts of magnetic tensor components of spin label side chains reveal protein conformational changes: The proton entrance channel of bacteriorhodopsin. Applied Magnetic Resonance, 2001, 21, 441-452.	1.2	37
25	Addition of Benzoyl Radicals to Butyl Acrylate:â€‰ Absolute Rate Constants by Time-Resolved EPR. Macromolecules, 2005, 38, 7714-7720.	4.8	36
26	Computing distance distributions from dipolar evolution data with overtones: RIDME spectroscopy with Gd(<scp>iii</scp>)-based spin labels. Physical Chemistry Chemical Physics, 2017, 19, 17856-17876.	2.8	36
27	High-Field Dipolar Electron Paramagnetic Resonance (EPR) Spectroscopy of Nitroxide Biradicals for Determining Three-Dimensional Structures of Biomacromolecules in Disordered Solids. Journal of Physical Chemistry B, 2011, 115, 11950-11963.	2.6	35
28	ELDOR-detected NMR: A general and robust method for electron-nuclear hyperfine spectroscopy?. Journal of Magnetic Resonance, 2017, 280, 63-78.	2.1	35
29	Bacterial Photosynthetic Reaction Centers in Trehalose Glasses: Coupling between Protein Conformational Dynamics and Electron-Transfer Kinetics as Studied by Laser-Flash and High-Field EPR Spectroscopies. Journal of Physical Chemistry B, 2010, 114, 12729-12743.	2.6	33
30	Intermolecular background decay in RIDME experiments. Physical Chemistry Chemical Physics, 2019, 21, 8228-8245.	2.8	33
31	Trehalose matrix effects on charge-recombination kinetics in Photosystem I of oxygenic photosynthesis at different dehydration levels. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 1440-1454.	1.0	31
32	Investigations on the role of hemoglobin in sulfide metabolism by intact human red blood cells. Biochemical Pharmacology, 2018, 149, 163-173.	4.4	31
33	Spontaneous Refolding of the Pore-Forming Colicin A Toxin upon Membrane Association As Studied by X-Band and W-Band High-Field Electron Paramagnetic Resonance Spectroscopyâ€. Journal of Physical Chemistry B, 2004, 108, 9541-9548.	2.6	30
34	Alteration of the Axial Met Ligand to Electron Acceptor A0 in Photosystem I: Effect on the Generation of P 700 Â·+ A 1 Â·â^' Radical Pairs as Studied by W-band Transient EPR. Applied Magnetic Resonance, 2010, 37, 85-102.	1.2	30
35	Submicrosecond field-jump device for pulsed high-field ELDOR. Applied Magnetic Resonance, 2002, 22, 369-386.	1.2	29
36	Electron Spin Polarization after Photolysis of AIBN in Solution:Â Initial Spatial Radical Separation. Journal of Physical Chemistry A, 2000, 104, 9091-9100.	2.5	28

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37	The Temperature Dependence of Nitroxide Spinâ€“Label Interaction Parameters: a High-Field EPR Study of Intramolecular Motional Contributions. Applied Magnetic Resonance, 2010, 37, 415-434.	1.2	27
38	Orientation Resolving Dipolar High-Field EPR Spectroscopy on Disordered Solids: II. Structure of Spin-Correlated Radical Pairs in Photosystem I. Journal of Physical Chemistry B, 2013, 117, 11184-11199.	2.6	27
39	Characterization of Oxygen Bridged Manganese Model Complexes Using Multifrequency ¹⁷O-Hyperfine EPR Spectroscopies and Density Functional Theory. Journal of Physical Chemistry B, 2015, 119, 13904-13921.	2.6	27
40	Light and Temperature Control of the Spin State of Bis(p-methoxyphenyl)carbene: A Magnetically Bistable Carbene. Journal of the American Chemical Society, 2016, 138, 1622-1629.	13.7	26
41	Multifrequency EPR study of the mobility of nitroxides in solid-state calixarene nanocapsules. Physical Chemistry Chemical Physics, 2009, 11, 6700.	2.8	23
42	Electronâ^'Nuclear and Electronâ^'Electron Double Resonance Spectroscopies Show that the Primary Quinone Acceptor Q_A in Reaction Centers from Photosynthetic Bacteria Rhodobacter sphaeroides Remains in the Same Orientation Upon Light-Induced Reduction. Journal of Physical Chemistry B, 2010, 114, 16894-16901.	2.6	23
43	High-field EPR on membrane proteins â€“ Crossing the gap to NMR. Progress in Nuclear Magnetic Resonance Spectroscopy, 2013, 75, 1-49.	7.5	22
44	Quantitative time-resolved EPR CIDEP study of the photodecomposition oftrans-azocumene in solution. Applied Magnetic Resonance, 1997, 12, 449-464.	1.2	21
45	Biomolecular EPR Meets NMR at High Magnetic Fields. Magnetochemistry, 2018, 4, 50.	2.4	21
46	Hydrogen bonding of nitroxide spin labels in membrane proteins. Physical Chemistry Chemical Physics, 2014, 16, 15910-15916.	2.8	20
47	MÃ¶biusâ€“HÃ¼ckel topology switching in an expanded porphyrin cation radical as studied by EPR and ENDOR spectroscopy. Physical Chemistry Chemical Physics, 2015, 17, 6644-6652.	2.8	20
48	Synthesis and characterization of an Fe(<scp>i</scp>) cage complex with high stability towards strong H-acids. Chemical Communications, 2018, 54, 3436-3439.	4.1	20
49	Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy. Helvetica Chimica Acta, 2006, 89, 2544-2589.	1.6	19
50	W-band EPR studies of high-spin nitrenes with large spin-orbit contribution to zero-field splitting. Journal of Chemical Physics, 2015, 143, 084313.	3.0	19
51	Dynamics in the Mn2+Binding Site in Single Crystals of Concanavalin A Revealed by High-Field EPR Spectroscopyâ€. Biochemistry, 2003, 42, 7863-7870.	2.5	18
52	Cryo-EM photosystem I structure reveals adaptation mechanisms to extreme high light in Chlorella ohadii. Nature Plants, 2021, 7, 1314-1322.	9.3	18
53	Multifrequency Time-Resolved Electron Paramagnetic Resonance Investigations after Photolysis of Phosphine Oxide Photoinitiators. Dependence of Triplet Mechanism Chemically Induced Dynamic Electron Polarization on Microwave Frequency. Journal of Physical Chemistry A, 2005, 109, 2254-2263.	2.5	17
54	Changes in the Microenvironment of Nitroxide Radicals around the Glass Transition Temperature. Journal of Physical Chemistry B, 2015, 119, 13797-13806.	2.6	17

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55	W-band time-resolved electron paramagnetic resonance spectroscopy on transient organic radicals in solution. Chemical Physics Letters, 2001, 340, 458-466.	2.6	16
56	Pulse Double-Resonance EPR Techniques for the Study of Metallobiomolecules. Methods in Enzymology, 2015, 563, 211-249.	1.0	16
57	Local water sensing: water exchange in bacterial photosynthetic reaction centers embedded in a trehalose glass studied using multiresonance EPR. Physical Chemistry Chemical Physics, 2017, 19, 28388-28400.	2.8	16
58	Reversed triplet mechanism CIDEP in triplet azoalkanes. Chemical Physics Letters, 2000, 319, 403-410.	2.6	15
59	Photo-Induced Electron Spin Polarization in Chemical and Biological Reactions: Probing Structure and Dynamics of Transient Intermediates by Multifrequency EPR Spectroscopy. Applied Magnetic Resonance, 2011, 41, 113-143.	1.2	15
60	Photoredoxâ€Switchable Resorcin[4]arene Cavitands: Radical Control of Molecular Gripping Machinery via Hydrogen Bonding. Chemistry - A European Journal, 2018, 24, 1431-1440.	3.3	15
61	Soft Dynamic Confinement of Membrane Proteins by Dehydrated Trehalose Matrices: High-Field EPR and Fast-Laser Studies. Applied Magnetic Resonance, 2020, 51, 773-850.	1.2	15
62	Electron spin polarization in an excited triplet-radical pair system: Generation and decay of the state. Applied Magnetic Resonance, 2006, 30, 619-636.	1.2	14
63	B-Branch Electron Transfer in the Photosynthetic Reaction Center of a Rhodobacter sphaeroides Quadruple Mutant. Q- and W-Band Electron Paramagnetic Resonance Studies of Triplet and Radical-Pair Cofactor States. Journal of Physical Chemistry B, 2010, 114, 14364-14372.	2.6	14
64	Nitroxide Spin Labelsâ€”Magnetic Parameters and Hydrogen-Bond Formation: A High-Field EPR and EDNMR Study. Applied Magnetic Resonance, 2019, 50, 1-16.	1.2	14
65	Characterization of a Triplet Vinylidene. Journal of the American Chemical Society, 2021, 143, 21410-21415.	13.7	13
66	Intramolecular Electron and Energy Transfer in an Axial ZnPâ^'Pyridylfullerene Complex As Studied by X- and W-Band Time-Resolved EPR Spectroscopy. Journal of Physical Chemistry A, 2005, 109, 8451-8458.	2.5	12
67	Paramagnetic Molecular Grippers: The Elements of Six-State Redox Switches. Journal of Physical Chemistry Letters, 2016, 7, 2470-2477.	4.6	12
68	MÃ¶biusâ€“HÃ¼ckel Topology Switching in Expanded Porphyrins: EPR, ENDOR, and DFT Studies of Doublet and Triplet Open-Shell Systems. Applied Magnetic Resonance, 2016, 47, 757-780.	1.2	12
69	Thermally Activated Delayed Fluorescence in a Y₃N@C₈₀ Endohedral Fullerene: Timeâ€Resolved Luminescence and EPR Studies. Angewandte Chemie - International Edition, 2018, 57, 277-281.	13.8	12
70	Triplet and reversed triplet mechanism CIDEP studied by quenching experiments. Applied Magnetic Resonance, 1997, 13, 285-295.	1.2	10
71	EPR, NMR, and Thermodynamic Evidences for Forced Nuclear Spinâ€“Electron Spin Interactions in the Case of 1-Phenyl-2-Methylpropyl-1,1-Dimethyl-2-Nitroxide (TIPNO) Attached to Permethylated Î²-Cyclodextrin. Applied Magnetic Resonance, 2009, 36, 181-194.	1.2	9
72	Effect of Dehydrated Trehalose Matrix on the Kinetics of Forward Electron Transfer Reactions in Photosystem I. Zeitschrift Fur Physikalische Chemie, 2017, 231, 325-345.	2.8	9

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73	The Magic of Disaccharide Glass Matrices for Protein Function as Decoded by High-Field EPR and FTIR Spectroscopy. Applied Magnetic Resonance, 2015, 46, 435-464.	1.2	8
74	Reactions of Cyclopentadienylidenes with CF₃I: Electron Bond Donation versus Halogen Bond Donation of the Iodine Atom. Journal of Organic Chemistry, 2018, 83, 7586-7592.	3.2	8
75	Improving B1 field homogeneity in dielectric tube resonators for EPR spectroscopy via controlled shaping of the dielectric insert. Journal of Magnetic Resonance, 2020, 311, 106685.	2.1	8
76	Primary Processes in Photosynthesis: What do we learn from High-Field EPR Spectroscopy?. Biological Magnetic Resonance, 2004, , 45-93.	0.4	8
77	Multifrequency Multiresonance EPR Investigation of Halogen-bonded Complexes Involving Neutral Nitroxide Radicals. Zeitschrift Fur Physikalische Chemie, 2017, 231, 867-886.	2.8	7
78	Dinitreno pentaradicals: organic sextet molecules. Journal of Physical Organic Chemistry, 2017, 30, e3621.	1.9	7
79	Metallofullerene photoswitches driven by photoinduced fullerene-to-metal electron transfer. Chemical Science, 2021, 12, 7818-7838.	7.4	7
80	Initial Radical Separation after Photolysis of 2,2â€²-Azobis(isobutyronitrile) (AIBN) in Solution: Modeling the Primary Cage Effect for Polar Radicals. Helvetica Chimica Acta, 2006, 89, 2533-2543.	1.6	5
81	Photosynthetic electron transport in the cyanobacteriumSynechocystis sp. PCC 6803: High-Field W-band and X-band EPR study of electron flow through photosystem I. Applied Magnetic Resonance, 2007, 31, 221-236.	1.2	5
82	An improved coupling design for high-frequency TE011 electron paramagnetic resonance cavities. Review of Scientific Instruments, 2013, 84, 014704.	1.3	5
83	Steric Heavy Atom Effect on Magnetic Anisotropy of Triplet Tribromophenyl Nitrenes. Journal of Physical Chemistry A, 2018, 122, 8931-8937.	2.5	5
84	Sequential Hydrogen Tunneling in o â€Tolylmethylene. Chemistry - A European Journal, 2021, , .	3.3	5
85	High-Field EPR Spectroscopy on Transfer Proteins in Biological Action. Acta Physica Polonica A, 2005, 108, 215-234.	0.5	4
86	Hydrogen-Bonded Complexes of Neutral Nitroxide Radicals with 2-Propanol Studied by Multifrequency EPR/ENDOR. Applied Magnetic Resonance, 0, , 1.	1.2	4
87	Preparation of cysteine-34â€“nitroxide spin labeled human Î±1-microglobulin. Protein Expression and Purification, 2013, 88, 33-40.	1.3	2
88	Thermally Activated Delayed Fluorescence in a Y₃N@C₈₀ Endohedral Fullerene: Timeâ€Resolved Luminescence and EPR Studies. Angewandte Chemie, 2018, 130, 283-287.	2.0	2
89	Dielectric Coupler for General Purpose Q-Band EPR Cavity. Applied Magnetic Resonance, 0, , 1.	1.2	1
90	Jim Hyde and the ENDOR Connection: A Personal Account. Applied Magnetic Resonance, 2017, 48, 1149-1183.	1.2	0

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91	Characterization of Homodimeric Type I Reaction Center Cores from Heliobacterium modesticaldum by High-Field Electron Paramagnetic Resonance Spectroscopy. , 2008, , 69-72.		0
92	Special Issue of Applied Magnetic Resonance Celebrating the 85th Birthdays of Klaus MÃ¶bius and Kev M. Salikhov. Applied Magnetic Resonance, 2022, 53, 457.	1.2	0