Thomas Nauser

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Detection of gamma photons using solution-grown single crystals of hybrid lead halide perovskites. Nature Photonics, 2016, 10, 585-589.	31.4	437
2	Catalysis of Electron Transfer by Selenocysteineâ€. Biochemistry, 2006, 45, 6038-6043.	2.5	95
3	Thiyl Radicals Abstract Hydrogen Atoms from theÎ±Câ^'H Bonds in Model Peptides:Â Absolute Rate Constants and Effect of Amino Acid Structure. Journal of the American Chemical Society, 2003, 125, 2042-2043.	13.7	91
4	Thiyl Radical Reaction with Amino Acid Side Chains:Â Rate Constants for Hydrogen Transfer and Relevance for Posttranslational Protein Modification. Chemical Research in Toxicology, 2004, 17, 1323-1328.	3.3	78
5	The kinetics of oxidation of GSH by protein radicals. Biochemical Journal, 2005, 392, 693-701.	3.7	72
6	Reversible Intramolecular Hydrogen Transfer between Cysteine Thiyl Radicals and Glycine and Alanine in Model Peptides: Absolute Rate Constants Derived from Pulse Radiolysis and Laser Flash Photolysis. Journal of Physical Chemistry B, 2008, 112, 15034-15044.	2.6	69
7	Why do proteins use selenocysteine instead of cysteine?. Amino Acids, 2012, 42, 39-44.	2.7	57
8	Reversible Hydrogen Transfer Reactions in Thiyl Radicals From Cysteine and Related Molecules: Absolute Kinetics and Equilibrium Constants Determined by Pulse Radiolysis. Journal of Physical Chemistry B, 2012, 116, 5329-5341.	2.6	47
9	Perspectiveâ€"Prospects for Durable Hydrocarbon-Based Fuel Cell Membranes. Journal of the Electrochemical Society, 2018, 165, F3100-F3103.	2.9	47
10	Protein thiyl radical reactions and product formation: a kinetic simulation. Free Radical Biology and Medicine, 2015, 80, 158-163.	2.9	40
11	Hydrogen Exchange Equilibria in Glutathione Radicals: Rate Constants. Chemical Research in Toxicology, 2010, 23, 1596-1600.	3.3	39
12	Why Selenocysteine Replaces Cysteine in Thioredoxin Reductase: A Radical Hypothesis. Biochemistry, 2014, 53, 5017-5022.	2.5	33
13	Rapid reaction of superoxide with insulin-tyrosyl radicals to generate a hydroperoxide with subsequent glutathione addition. Free Radical Biology and Medicine, 2014, 70, 86-95.	2.9	27
14	Thiyl Radical Reaction with Thymine:Â Absolute Rate Constant for Hydrogen Abstraction and Comparison to Benzylic Câ^'H Bonds. Chemical Research in Toxicology, 2003, 16, 1056-1061.	3.3	22
15	Calmodulin methionine residues are targets for one-electron oxidation by hydroxyl radicals: formation of Sâˆ´N three-electron bonded radical complexes. Chemical Communications, 2005, , 587-589.	4.1	22
16	An Experimental Radical Electrophilicity Index. ChemPhysChem, 2017, 18, 2973-2976.	2.1	22
17	Electrode Potentials of <scp>l</scp>-Tryptophan, <scp>l</scp>-Tyrosine, 3-Nitro-<scp>l</scp>-tyrosine, 2,3-Difluoro-<scp>l</scp>-tyrosine, and 2,3,5-Trifluoro-<scp>l</scp>-tyrosine. Biochemistry, 2016, 55, 2849-2856.	2.5	21
18	Hydrogen Exchange Equilibria in Thiols. Chemical Research in Toxicology, 2012, 25, 1862-1867.	3.3	18

#	Article	IF	Citations
19	Fast Antioxidant Reaction of Polyphenols and Their Metabolites. Antioxidants, 2021, 10, 1297.	5.1	18
20	Synthesis, Characterization, and Reactivity of a Hypervalentâ€Iodineâ€Based Nitrooxylating Reagent. Angewandte Chemie - International Edition, 2020, 59, 17162-17168.	13.8	17
21	Repair of Protein Radicals by Antioxidants. Israel Journal of Chemistry, 2014, 54, 254-264.	2.3	14
22	Carbon-centered radicals add reversibly to histidine â€“ implications. Chemical Communications, 2014, 50, 14349-14351.	4.1	13
23	Fast reaction of carbon free radicals with flavonoids and other aromatic compounds. Archives of Biochemistry and Biophysics, 2019, 674, 108107.	3.0	13
24	Reaction rates of glutathione and ascorbate with alkyl radicals are too slow for protection against protein peroxidation inÂvivo. Archives of Biochemistry and Biophysics, 2017, 633, 118-123.	3.0	12
25	UV Photolysis of 3-Nitrotyrosine Generates Highly Oxidizing Species:Â A Potential Source of Photooxidative Stress. Chemical Research in Toxicology, 2004, 17, 1227-1235.	3.3	11
26	Physiological Concentrations of Ascorbate Cannot Prevent the Potentially Damaging Reactions of Protein Radicals in Humans. Chemical Research in Toxicology, 2017, 30, 1702-1710.	3.3	11
27	Attack of hydroxyl radicals to Î±-methyl-styrene sulfonate polymers and cerium-mediated repair <i>via</i> radical cations. Physical Chemistry Chemical Physics, 2020, 22, 4516-4525.	2.8	10
28	Thinking Outside the Cage: A New Hypothesis That Accounts for Variable Yields of Radicals from the Reaction of CO₂ with ONOO^{â€“}. Chemical Research in Toxicology, 2020, 33, 1516-1527.	3.3	10
29	Intramolecular 1,2â€•and 1,3â€Hydrogen Transfer Reactions of Thiyl Radicals. Israel Journal of Chemistry, 2014, 54, 265-271.	2.3	9
30	Possible Repair Mechanism for Hydrocarbon-Based Ionomers Following Damage by Radical Attack. Journal of the Electrochemical Society, 2021, 168, 054514.	2.9	9
31	Unexpected Disparity in Photoinduced Reactions of C₆₀ and C₇₀ in Water with the Generation of O₂^{â€¢â€“} or ¹O₂. Jacs Au, 2021, 1, 1601-1611.	7.9	9
32	Rate of single electron reduction of Togniâ€™s reagent. Journal of Fluorine Chemistry, 2017, 203, 218-222.	1.7	8
33	Antioxidants and radical damage in a hydrophilic environment: chemical reactions and concepts. Essays in Biochemistry, 2020, 64, 67-74.	4.7	8
34	Initiation and Prevention of Biological Damage by Radiation-Generated Protein Radicals. International Journal of Molecular Sciences, 2022, 23, 396.	4.1	7
35	Shielding effects in spacious macromolecules: a case study with dendronized polymers. Photochemical and Photobiological Sciences, 2016, 15, 964-968.	2.9	6
36	Antioxidant Strategies for Hydrocarbon-Based Membranes. ECS Transactions, 2018, 86, 369-379.	0.5	6

#	Article	IF	Citations
37	Impact of substitution on reactions and stability of one-electron oxidised phenyl sulfonates in aqueous solution. Physical Chemistry Chemical Physics, 2022, 24, 895-901.	2.8	6
38	Primary photochemistry of peroxynitrite in aqueous solution. Chemical Physics Letters, 2015, 641, 187-192.	2.6	5
39	Addition of carbon-centered radicals to aromatic antioxidants: mechanistic aspects. Physical Chemistry Chemical Physics, 2020, 22, 24572-24582.	2.8	5
40	Synthese, Charakterisierung und ReaktivitÃt eines Nitrooxylierungsreagenzes basierend auf einer hypervalenten Iodverbindung. Angewandte Chemie, 2020, 132, 17312-17319.	2.0	5
41	Thermochemical unification of molecular descriptors to predict radical hydrogen abstraction with low computational cost. Physical Chemistry Chemical Physics, 2020, 22, 23215-23225.	2.8	4
42	Moderation of Oxidative Damage on Aromatic Hydrocarbon-Based Polymers. Journal of the Electrochemical Society, 2022, 169, 054529.	2.9	3
43	Profiling the oxidative activation of DMSO-F₆ by pulse radiolysis and translational potential for radical Câ€“H trifluoromethylation. Organic and Biomolecular Chemistry, 2019, 17, 9734-9742.	2.8	2