Christian SchÃ¶neich

List of Publications by Year
in descending order

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230	11,750	22132	36008
papers	citations	59 h-index	97 g-index

236	236	236	8840
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Near UV and Visible Light Photo-Degradation Mechanisms in Citrate Buffer: One-Electron Reduction of Peptide and Protein Disulfides promotes Oxidation and Cis/Trans Isomerization of Unsaturated Fatty Acids of Polysorbate 80. Journal of Pharmaceutical Sciences, 2022, 111, 991-1003.	1.6	14
2	Oxidation and Deamidation of Monoclonal Antibody Products: Potential Impact on Stability, Biological Activity, and Efficacy. Journal of Pharmaceutical Sciences, 2022, 111, 903-918.	1.6	45
3	Thiyl radicals: Formation, properties, and detection. , 2022, , 115-132.		4
4	Intra-Micellar and Extra-Micellar Oxidation in Phosphate and Histidine Buffers Containing Polysorbate 80. Journal of Pharmaceutical Sciences, 2022, 111, 2435-2444.	1.6	2
5	Light-Induced Histidine Adducts to an IgG1 Molecule Via Oxidized Histidine Residue and the Potential Impact of Polysorbate-20 Concentration. Pharmaceutical Research, 2021, 38, 491-501.	1.7	9
6	Oxidative protein modifications of protein therapeutics: targeted proteomic analysis and consequences for stability, efficacy and immunogenicity. Free Radical Biology and Medicine, 2021, 165, 16.	1.3	0
7	Pharmaceutical Excipients Enhance Iron-Dependent Photo-Degradation in Pharmaceutical Buffers by near UV and Visible Light: Tyrosine Modification by Reactions of the Antioxidant Methionine in Citrate Buffer. Pharmaceutical Research, 2021, 38, 915-930.	1.7	7
8	Visible Light Degradation of a Monoclonal Antibody in a High-Concentration Formulation: Characterization of a Tryptophan-Derived Chromophoric Photo-product by Comparison to Photo-degradation of N-Acetyl-l-tryptophan Amide. Molecular Pharmaceutics, 2021, 18, 3223-3234.	2.3	1
9	Photo-induced fragmentation of tyrosine side chains in IgG4-Fc: Effect of protein sequence, conformation and glycan structure. Journal of Photochemistry and Photobiology, 2021, 7, 100049.	1.1	1
10	Analysis of N15-rat growth hormone after incubation with rat subcutaneous tissue and immune cells using ultra-pressure chromatography-mass spectrometry. Analytical Biochemistry, 2021, 634, 114425.	1.1	0
11	Proteolysis and Oxidation of Therapeutic Proteins After Intradermal or Subcutaneous Administration. Journal of Pharmaceutical Sciences, 2020, 109, 191-205.	1.6	24
12	Cis/Trans Isomerization of Unsaturated Fatty Acids in Polysorbate 80 During Light Exposure of a Monoclonal Antibodyâ€“Containing Formulation. Journal of Pharmaceutical Sciences, 2020, 109, 603-613.	1.6	12
13	Effects of Glycan Structure on the Stability and Receptor Binding of an IgG4-Fc. Journal of Pharmaceutical Sciences, 2020, 109, 677-689.	1.6	6
14	Comparison of Polysorbate 80 Hydrolysis and Oxidation on the Aggregation of a Monoclonal Antibody. Journal of Pharmaceutical Sciences, 2020, 109, 633-639.	1.6	60
15	Near UV and Visible Light Induce Iron-Dependent Photodegradation Reactions in Pharmaceutical Buffers: Mechanistic and Product Studies. Molecular Pharmaceutics, 2020, 17, 4163-4179.	2.3	16
16	Azocompounds as generators of defined radical species: Contributions and challenges for free radical research. Free Radical Biology and Medicine, 2020, 160, 78-91.	1.3	34
17	Probing Protein Conformation Destabilization in Sterile Liquid Formulations through the Formation of 3,4-Dihydroxyphenylalanine. Molecular Pharmaceutics, 2020, 17, 3783-3793.	2.3	2
18	Novel Formaldehyde-Induced Modifications of Lysine Residue Pairs in Peptides and Proteins: Identification and Relevance to Vaccine Development. Molecular Pharmaceutics, 2020, 17, 4375-4385.	2.3	10

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19	Water Distribution and Clustering on the Lyophilized IgG1 Surface: Insight from Molecular Dynamics Simulations. Molecular Pharmaceutics, 2020, 17, 900-908.	2.3	6
20	N-Terminal Decarboxylation as a Probe for Intramolecular Contact Formation in Î³-Glu-(Pro)_n-Met Peptides. Journal of Physical Chemistry B, 2020, 124, 8082-8098.	1.2	5
21	Photo-Degradation of Therapeutic Proteins: Mechanistic Aspects. Pharmaceutical Research, 2020, 37, 45.	1.7	33
22	Radical rearrangement and transfer reactions in proteins. Essays in Biochemistry, 2020, 64, 87-96.	2.1	4
23	Effect of Iron Oxide Nanoparticles on the Oxidation and Secondary Structure of Growth Hormone. Journal of Pharmaceutical Sciences, 2019, 108, 3372-3381.	1.6	6
24	Silicone Oil-Free Polymer Syringes for the Storage of Therapeutic Proteins. Journal of Pharmaceutical Sciences, 2019, 108, 1148-1160.	1.6	24
25	Xanthine oxidase-mediated oxidative stress promotes cancer cell-specific apoptosis. Free Radical Biology and Medicine, 2019, 139, 70-79.	1.3	42
26	Thiyl Radical Reactions in the Chemical Degradation of Pharmaceutical Proteins. Molecules, 2019, 24, 4357.	1.7	19
27	Glatiramer acetate persists at the injection site and draining lymph nodes via electrostatically-induced aggregation. Journal of Controlled Release, 2019, 293, 36-47.	4.8	25
28	Photoinduced Tyrosine Side Chain Fragmentation in IgG4-Fc: Mechanisms and Solvent Isotope Effects. Molecular Pharmaceutics, 2019, 16, 258-272.	2.3	15
29	Dual Effect of Histidine on Polysorbate 20 Stability: Mechanistic Studies. Pharmaceutical Research, 2018, 35, 33.	1.7	31
30	Understanding the Increased Aggregation Propensity of a Light-Exposed IgG1 Monoclonal Antibody Using Hydrogen Exchange Mass Spectrometry, Biophysical Characterization, and Structural Analysis. Journal of Pharmaceutical Sciences, 2018, 107, 1498-1511.	1.6	23
31	Novel chemical degradation pathways of proteins mediated by tryptophan oxidation: tryptophan side chain fragmentation. Journal of Pharmacy and Pharmacology, 2018, 70, 655-665.	1.2	17
32	Fragmentation of a Monoclonal Antibody by Peroxotungstate. Pharmaceutical Research, 2018, 35, 219.	1.7	7
33	Identification of D-Amino Acids in Light Exposed mAb Formulations. Pharmaceutical Research, 2018, 35, 238.	1.7	3
34	Investigation of Metal-Catalyzed Antibody Carbonylation With an Improved Protein Carbonylation Assay. Journal of Pharmaceutical Sciences, 2018, 107, 2570-2580.	1.6	5
35	Light-Induced Covalent Buffer Adducts to Histidine in a Model Protein. Pharmaceutical Research, 2018, 35, 67.	1.7	12
36	Postproduction Handling and Administration of Protein Pharmaceuticals and Potential Instability Issues. Journal of Pharmaceutical Sciences, 2018, 107, 2013-2019.	1.6	75

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37	New Insights into the Reaction Paths of 4-Carboxybenzophenone Triplet with Oligopeptides Containing N- and C-Terminal Methionine Residues. Journal of Physical Chemistry B, 2017, 121, 5247-5258.	1.2	12
38	Structure-Based Correlation of Light-Induced Histidine Reactivity in A Model Protein. Analytical Chemistry, 2017, 89, 7225-7231.	3.2	14
39	Photodegradation Pathways of Protein Disulfides: Human Growth Hormone. Pharmaceutical Research, 2017, 34, 2756-2778.	1.7	16
40	The Botanical Drug Substance Crofelemer as a Model System for Comparative Characterization of Complex Mixture Drugs. Journal of Pharmaceutical Sciences, 2017, 106, 3242-3256.	1.6	14
41	Comparative Characterization of Crofelemer Samples Using Data Mining and Machine Learning Approaches With Analytical Stability Data Sets. Journal of Pharmaceutical Sciences, 2017, 106, 3270-3279.	1.6	5
42	Profiling the Photochemical-Induced Degradation of Rat Growth Hormone with Extreme Ultra-pressure Chromatographyâ€“Mass Spectrometry Utilizing Meter-Long Microcapillary Columns Packed with Sub-2-Âµm Particles. Chromatographia, 2017, 80, 1299-1318.	0.7	5
43	Chemical Stability of the Botanical Drug Substance Crofelemer: A Model System for Comparative Characterization of Complex Mixture Drugs. Journal of Pharmaceutical Sciences, 2017, 106, 3257-3269.	1.6	6
44	An Efficient and Rapid Method to Monitor the Oxidative Degradation of Protein Pharmaceuticals: Probing Tyrosine Oxidation with Fluorogenic Derivatization. Pharmaceutical Research, 2017, 34, 1428-1443.	1.7	16
45	Photo-oxidation of IgG1 and Model Peptides: Detection and Analysis of Triply Oxidized His and Trp Side Chain Cleavage Products. Pharmaceutical Research, 2017, 34, 229-242.	1.7	29
46	Inhibition and conformational change of SERCA3b induced by Bcl-2. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 121-131.	1.1	6
47	Sulfur Radical-Induced Redox Modifications in Proteins: Analysis and Mechanistic Aspects. Antioxidants and Redox Signaling, 2017, 26, 388-405.	2.5	25
48	Degradation Mechanisms of Polysorbate 20 Differentiated by 18O-labeling and Mass Spectrometry. Pharmaceutical Research, 2017, 34, 84-100.	1.7	48
49	Neighboring Ï€-Amide Participation in Thioether Oxidation: Conformational Control. Organic Letters, 2016, 18, 3522-3525.	2.4	4
50	A Tribute to Ronald T. Borchardtâ€”Teacher, Mentor, Scientist, Colleague, Leader, Friend, and Family Man. Journal of Pharmaceutical Sciences, 2016, 105, 370-385.	1.6	4
51	Neighboring amide participation in the Fenton oxidation of a sulfide to sulfoxide, vinyl sulfide and ketone relevant to oxidation of methionine thioether side chains in peptides. Tetrahedron, 2016, 72, 7770-7789.	1.0	1
52	Formation of a Three-Electron Sulfurâ€“Sulfur Bond as a Probe for Interaction between Side Chains of Methionine Residues. Journal of Physical Chemistry B, 2016, 120, 9732-9744.	1.2	10
53	Comparative Evaluation of the Chemical Stability of 4 Well-Defined Immunoglobulin G1-Fc Glycoforms. Journal of Pharmaceutical Sciences, 2016, 105, 575-587.	1.6	20
54	Site-Specific Hydrolysis Reaction C-Terminal of Methionine in Met-His during Metal-Catalyzed Oxidation of IgG-1. Molecular Pharmaceutics, 2016, 13, 1317-1328.	2.3	7

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55	Thiyl radicals and induction of protein degradation. Free Radical Research, 2016, 50, 143-149.	1.5	58
56	Do Not Drop: Mechanical Shock in Vials Causes Cavitation, Protein Aggregation, and Particle Formation. Journal of Pharmaceutical Sciences, 2015, 104, 602-611.	1.6	86
57	Using Lysine-Reactive Fluorescent Dye for Surface Characterization of a mAb. Journal of Pharmaceutical Sciences, 2015, 104, 995-1004.	1.6	4
58	Low-Temperature NMR Characterization of Reaction of Sodium Pyruvate with Hydrogen Peroxide. Journal of Physical Chemistry A, 2015, 119, 966-977.	1.1	26
59	Chemical degradation of proteins in the solid state with a focus on photochemical reactions. Advanced Drug Delivery Reviews, 2015, 93, 2-13.	6.6	21
60	Photoinduced Aggregation of a Model Antibodyâ€“Drug Conjugate. Molecular Pharmaceutics, 2015, 12, 1784-1797.	2.3	25
61	Introduction: What we do and do not know regarding redox processes of thiols in signaling pathways. Free Radical Biology and Medicine, 2015, 80, 145-147.	1.3	20
62	Protein thiyl radical reactions and product formation: a kinetic simulation. Free Radical Biology and Medicine, 2015, 80, 158-163.	1.3	40
63	Sarcoendoplasmic Reticulum Ca²⁺ ATPase. A Critical Target in Chlorine Inhalationâ€“Induced Cardiotoxicity. American Journal of Respiratory Cell and Molecular Biology, 2015, 52, 492-502.	1.4	36
64	Oxidation of Proteins in the In Vivo Environment: What We Know; What We Need to Study and Potential Mitigation Strategies. AAPS Advances in the Pharmaceutical Sciences Series, 2015, , 137-151.	0.2	0
65	Intramolecular 1,2â€•and 1,3â€Hydrogen Transfer Reactions of Thiyl Radicals. Israel Journal of Chemistry, 2014, 54, 265-271.	1.0	9
66	Apoptosis in differentiating C2C12 muscle cells selectively targets Bcl-2-deficient myotubes. Apoptosis: an International Journal on Programmed Cell Death, 2014, 19, 42-57.	2.2	47
67	Oxidation of Therapeutic Proteins and Peptides: Structural and Biological Consequences. Pharmaceutical Research, 2014, 31, 541-553.	1.7	161
68	Sequence-Specific Formation of <scp>d</scp>-Amino Acids in a Monoclonal Antibody during Light Exposure. Molecular Pharmaceutics, 2014, 11, 4291-4297.	2.3	15
69	Characterization of Oxidative Carbonylation on Recombinant Monoclonal Antibodies. Analytical Chemistry, 2014, 86, 4799-4806.	3.2	26
70	Effect of Conformation on the Photodegradation of Trp- And Cystine-Containing Cyclic Peptides: Octreotide and Somatostatin. Molecular Pharmaceutics, 2014, 11, 3537-3546.	2.3	19
71	UV photodegradation of murine growth hormone: Chemical analysis and immunogenicity consequences. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 87, 395-402.	2.0	25
72	The Photolysis of Disulfide Bonds in IgG1 and IgG2 Leads to Selective Intramolecular Hydrogen Transfer Reactions of Cysteine Thiyl Radicals, Probed by Covalent H/D Exchange and RPLC-MS/MS analysis. Pharmaceutical Research, 2013, 30, 1291-1299.	1.7	22

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73	Fluorogenic Tagging Methodology Applied to Characterize Oxidized Tyrosine and Phenylalanine in an Immunoglobulin Monoclonal Antibody. Pharmaceutical Research, 2013, 30, 1311-1327.	1.7	8
74	Role of Surface Exposed Tryptophan as Substrate Generators for the Antibody Catalyzed Water Oxidation Pathway. Molecular Pharmaceutics, 2013, 10, 278-288.	2.3	50
75	Metal-Catalyzed Oxidation of Protein Methionine Residues in Human Parathyroid Hormone (1-34): Formation of Homocysteine and a Novel Methionine-Dependent Hydrolysis Reaction. Molecular Pharmaceutics, 2013, 10, 739-755.	2.3	26
76	Photodegradation of Human Growth Hormone: A Novel Backbone Cleavage between Glu-88 and Pro-89. Molecular Pharmaceutics, 2013, 10, 2693-2706.	2.3	6
77	Proteomic Approaches to Analyze Protein Tyrosine Nitration. Antioxidants and Redox Signaling, 2013, 19, 1247-1256.	2.5	23
78	Identification of Oxidation Sites and Covalent Cross-Links in Metal Catalyzed Oxidized Interferon Beta-1a: Potential Implications for Protein Aggregation and Immunogenicity. Molecular Pharmaceutics, 2013, 10, 2311-2322.	2.3	39
79	Light-Induced Conversion of Trp to Gly and Gly Hydroperoxide in IgG1. Molecular Pharmaceutics, 2013, 10, 1146-1150.	2.3	39
80	Heat-shock proteins attenuate SERCA inactivation by the anti-apoptotic protein Bcl-2: possible implications for the ER Ca2+-mediated apoptosis. Biochemical Journal, 2012, 444, 127-139.	1.7	28
81	Biotherapeutic Formulation Factors Affecting Metal Leachables from Stainless Steel Studied by Design of Experiments. AAPS PharmSciTech, 2012, 13, 284-294.	1.5	25
82	Fluorogenic tagging of protein 3-nitrotyrosine with 4-(aminomethyl)benzene sulfonate in tissues: A useful alternative to Immunohistochemistry for fluorescence microscopy imaging of protein nitration. Free Radical Biology and Medicine, 2012, 53, 1877-1885.	1.3	18
83	Oxidation of Human Growth Hormone by Oxygen-Centered Radicals: Formation of Leu-101 Hydroperoxide and Tyr-103 Oxidation Products. Molecular Pharmaceutics, 2012, 9, 803-814.	2.3	30
84	Intramolecular Hydrogen Transfer Reactions of Thiyl Radicals from Glutathione: Formation of Carbon-Centered Radical at Glu, Cys, and Gly. Chemical Research in Toxicology, 2012, 25, 1842-1861.	1.7	28
85	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.	1.2	47
86	Effect of pH and Light on Aggregation and Conformation of an IgG1 mAb. Molecular Pharmaceutics, 2012, 9, 774-790.	2.3	49
87	Tyrosine Modifications in Aging. Antioxidants and Redox Signaling, 2012, 17, 1571-1579.	2.5	73
88	Photodegradation of Oxytocin and Thermal Stability of Photoproducts. Journal of Pharmaceutical Sciences, 2012, 101, 3331-3346.	1.6	12
89	Chemical Modifications in Aggregates of Recombinant Human Insulin Induced by Metal-Catalyzed Oxidation: Covalent Cross-Linking via Michael Addition to Tyrosine Oxidation Products. Pharmaceutical Research, 2012, 29, 2276-2293.	1.7	46
90	Myeloperoxidase-derived oxidants inhibit sarco/endoplasmic reticulum Ca2+-ATPase activity and perturb Ca2+ homeostasis in human coronary artery endothelial cells. Free Radical Biology and Medicine, 2012, 52, 951-961.	1.3	42

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91	Protein Instability and Immunogenicity: Roadblocks to Clinical Application of Injectable Protein Delivery Systems for Sustained Release. Journal of Pharmaceutical Sciences, 2012, 101, 946-954.	1.6	205
92	Photolysis of Recombinant Human Insulin in the Solid State: Formation of a Dithiohemiacetal Product at the C-Terminal Disulfide Bond. Pharmaceutical Research, 2012, 29, 121-133.	1.7	15
93	Reversible Hydrogen Transfer Reactions of Cysteine Thiyl Radicals in Peptides: the Conversion of Cysteine into Dehydroalanine and Alanine, and of Alanine into Dehydroalanine. Journal of Physical Chemistry B, 2011, 115, 12287-12305.	1.2	34
94	Neighboring Pyrrolidine Amide Participation in Thioether Oxidation. Methionine as a â€œHoppingâ€•Site. Organic Letters, 2011, 13, 2837-2839.	2.4	23
95	Cysteine residues as catalysts for covalent peptide and protein modification: a role for thiyl radicals?. Biochemical Society Transactions, 2011, 39, 1254-1259.	1.6	16
96	Biologics Formulation Factors Affecting Metal Leachables from Stainless Steel. AAPS PharmSciTech, 2011, 12, 411-421.	1.5	47
97	A methodology for simultaneous fluorogenic derivatization and boronate affinity enrichment of 3-nitrotyrosine-containing peptides. Analytical Biochemistry, 2011, 418, 184-196.	1.1	29
98	Modeling of the ribonucleotide reductases substrate reaction. Hydrogen atom abstraction by a thiyl free radical and detection of the ribosyl-based carbon radical by pulse radiolysis. Collection of Czechoslovak Chemical Communications, 2011, 76, 1223-1238.	1.0	6
99	Fluorogenic Tagging of Peptide and Protein 3-Nitrotyrosine with 4-(Aminomethyl)benzenesulfonic Acid for Quantitative Analysis of Protein Tyrosine Nitration. Chromatographia, 2010, 71, 37-53.	0.7	28
100	Comparative Evaluation of Disodium Edetate and Diethylenetriaminepentaacetic Acid as Iron Chelators to Prevent Metal -Catalyzed Destabilization of a Therapeutic Monoclonal Antibody. Journal of Pharmaceutical Sciences, 2010, 99, 4239-4250.	1.6	53
101	Photolysis of an Intrachain Peptide Disulfide Bond: Primary and Secondary Processes, Formation of H₂S, and Hydrogen Transfer Reactions. Journal of Physical Chemistry B, 2010, 114, 3668-3688.	1.2	43
102	Reversible Hydrogen Transfer between Cysteine Thiyl Radical and Glycine and Alanine in Model Peptides: Covalent H/D Exchange, Radicalâ^'Radical Reactions, and <scp>l</scp>- to <scp>d</scp>-Ala Conversion. Journal of Physical Chemistry B, 2010, 114, 6751-6762.	1.2	33
103	Exposure of a Monoclonal Antibody, IgG1, to UV-Light Leads to Protein Dithiohemiacetal and Thioether Cross-Links: A Role for Thiyl Radicals?. Chemical Research in Toxicology, 2010, 23, 1310-1312.	1.7	38
104	Bcl-2 Suppresses Sarcoplasmic/Endoplasmic Reticulum Ca²⁺-ATPase Expression in Cystic Fibrosis Airways. American Journal of Respiratory and Critical Care Medicine, 2009, 179, 816-826.	2.5	28
105	Factor analysis of transient spectra. Free radicals in cyclic dipeptides containing methionine. Research on Chemical Intermediates, 2009, 35, 431-442.	1.3	5
106	Neighboring Amide Participation in Thioether Oxidation: Relevance to Biological Oxidation. Journal of the American Chemical Society, 2009, 131, 13791-13805.	6.6	47
107	Intramolecular Addition of Cysteine Thiyl Radical to Phenylalanine and Tyrosine in Model Peptides, Phe(CysS^{â€¢}) and Tyr(CysS^{â€¢}): A Computational Study. Journal of Physical Chemistry A, 2009, 113, 3560-3565.	1.1	11
108	Inactivation of rabbit muscle glycogen phosphorylase b by peroxynitrite revisited: Does the nitration of Tyr613 in the allosteric inhibition site control enzymatic function?. Archives of Biochemistry and Biophysics, 2009, 484, 155-166.	1.4	16

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109	Synthesis of sulfonamide- and sulfonyl-phenylboronic acid-modified silica phases for boronate affinity chromatography at physiological pH. Analytical Biochemistry, 2008, 372, 227-236.	1.1	62
110	Phenylisothiocyanate as a Multiple Chemical Dimension Reagent for the Relative Quantitation of Protein Nitrotyrosine. Chromatographia, 2008, 68, 507-516.	0.7	7
111	Cysteine-674 oxidation and degradation of sarcoplasmic reticulum Ca2+ ATPase in diabetic pig aorta. Free Radical Biology and Medicine, 2008, 45, 756-762.	1.3	60
112	Peptide Cysteine Thiyl Radicals Abstract Hydrogen Atoms from Surrounding Amino Acids: The Photolysis of a Cystine Containing Model Peptide. Journal of Physical Chemistry B, 2008, 112, 9250-9257.	1.2	53
113	Reversible Intramolecular Hydrogen Transfer between Protein Cysteine Thiyl Radicals and ^{Î±}Câ^'H Bonds in Insulin: Control of Selectivity by Secondary Structure. Journal of Physical Chemistry B, 2008, 112, 15921-15932.	1.2	40
114	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.	1.2	69
115	Mechanisms of Protein Damage Induced by Cysteine Thiyl Radical Formation. Chemical Research in Toxicology, 2008, 21, 1175-1179.	1.7	82
116	Selective Fluorogenic Derivatization of 3-Nitrotyrosine and 3,4-Dihydroxyphenylalanine in Peptides: A Method Designed for Quantitative Proteomic Analysis. Methods in Enzymology, 2008, 441, 19-32.	0.4	19
117	Chapter 6 Oxidative Modification of Ca2+ Channels, Ryanodine Receptors, and the Sarco/Endoplasmic Reticulum Ca2+-ATPase. Current Topics in Membranes, 2008, 61, 113-130.	0.5	0
118	SOD1 mutations disrupt redox-sensitive Rac regulation of NADPH oxidase in a familial ALS model. Journal of Clinical Investigation, 2008, 118, 659-70.	3.9	282
119	Proteomic approach to aging research. Expert Review of Proteomics, 2007, 4, 309-321.	1.3	13
120	Oxidation and Inactivation of SERCA by Selective Reaction of Cysteine Residues with Amino Acid Peroxides. Chemical Research in Toxicology, 2007, 20, 1462-1469.	1.7	58
121	Reactions of Halogenated Hydroperoxides and Peroxyl and Alkoxyl Radicals from Isoflurane in Aqueous Solution. Journal of Physical Chemistry A, 2007, 111, 11618-11625.	1.1	7
122	Stabilization of Sulfide Radical Cations through Complexation with the Peptide Bond:â€‰ Mechanisms Relevant to Oxidation of Proteins Containing Multiple Methionine Residues. Journal of Physical Chemistry B, 2007, 111, 9608-9620.	1.2	67
123	Sulfur Radical Cationâ^'Peptide Bond Complex in the One-Electron Oxidation ofS-Methylglutathione. Journal of the American Chemical Society, 2007, 129, 9236-9245.	6.6	59
124	Selective oxidation of Zn2+â€”insulin catalyzed by Cu2+. Journal of Pharmaceutical Sciences, 2007, 96, 1844-1847.	1.6	5
125	Proteomic analysis of protein nitration in rat cerebellum: effect of biological aging. Journal of Neurochemistry, 2007, 100, 070209222715009-???.	2.1	45
126	Proteomic analysis of age dependent nitration of rat cardiac proteins by solution isoelectric focusing coupled to nanoHPLC tandem mass spectrometry. Experimental Gerontology, 2007, 42, 639-651.	1.2	38

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127	Age-dependent oxidation and aggregation of ZnT-1: A role for metal catalyzed oxidation?. Experimental Gerontology, 2007, 42, 1130-1136.	1.2	2
128	Selective Fluorogenic Derivatization with Isotopic Coding of Catechols and 2-Amino Phenols with Benzylamine: A Chemical Basis for the Relative Determination of 3-Hydroxy-tyrosine and 3-Nitro-tyrosine Peptides. Chromatographia, 2007, 66, 649-659.	0.7	10
129	One-electron oxidation of methionine peptides â€" Stability of the three-electron Sâ€"N(amide) bond. Canadian Journal of Chemistry, 2006, 84, 893-904.	0.6	24
130	Displacement of SERCA from SR Lipid Caveolae-Related Domains by Bcl-2:Â A Possible Mechanism for SERCA Inactivationâ€. Biochemistry, 2006, 45, 175-184.	1.2	33
131	Quantitative mapping of oxidation-sensitive cysteine residues in SERCA in vivo and in vitro by HPLCâ€"electrospray-tandem MS: selective protein oxidation during biological aging. Biochemical Journal, 2006, 394, 605-615.	1.7	100
132	Characterization of the metal-binding site of human prolactin by site-specific metal-catalyzed oxidation. Analytical Biochemistry, 2006, 358, 208-215.	1.1	14
133	Mass spectrometry of protein modifications by reactive oxygen and nitrogen species. Free Radical Biology and Medicine, 2006, 41, 1507-1520.	1.3	77
134	Age-associated tyrosine nitration of rat skeletal muscle glycogen phosphorylase b: characterization by HPLCâ€"nanoelectrosprayâ€"Tandem mass spectrometry. Experimental Gerontology, 2006, 41, 407-416.	1.2	43
135	Protein modification in aging: An update. Experimental Gerontology, 2006, 41, 807-812.	1.2	53
136	Detection of sequence-specific tyrosine nitration of manganese SOD and SERCA in cardiovascular disease and aging. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H2220-H2227.	1.5	125
137	Sâ€glutathiolation by peroxynitrite of p21ras at cysteineâ€118 mediates its direct activation and downstream signaling in endothelial cells. FASEB Journal, 2006, 20, 518-520.	0.2	123
138	Methionine oxidation by reactive oxygen species: reaction mechanisms and relevance to Alzheimer's disease. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1703, 111-119.	1.1	314
139	Protein tyrosine nitration in rat brain is associated with raft proteins, flotillin-1 and Î±-tubulin: effect of biological aging. Journal of Neurochemistry, 2005, 93, 1262-1271.	2.1	44
140	Mass spectrometry in aging research. Mass Spectrometry Reviews, 2005, 24, 701-718.	2.8	24
141	Proteomic Analysis of Protein Nitration in Aging Skeletal Muscle and Identification of Nitrotyrosine-containing Sequences in Vivo by Nanoelectrospray Ionization Tandem Mass Spectrometry. Journal of Biological Chemistry, 2005, 280, 24261-24266.	1.6	152
142	Protein Nitration in Biological Aging: Proteomic and Tandem Mass Spectrometric Characterization of Nitrated Sites. Methods in Enzymology, 2005, 396, 160-171.	0.4	46
143	Proteomic identification of 3-nitrotyrosine-containing rat cardiac proteins: effects of biological aging. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H371-H381.	1.5	193
144	3-Nitrotyrosine Modification of SERCA2a in the Aging Heart:â€‰ A Distinct Signature of the Cellular Redox Environment. Biochemistry, 2005, 44, 13071-13081.	1.2	115

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145	Reactions of Aliphatic Thiyl Radicals in the Solid State:â€‰ Photoisomerization of trans-4,5-Dihydroxy-1,2-dithiacyclohexane and Oxidation of Dithiothreitol. Journal of Physical Chemistry A, 2005, 109, 9241-9248.	1.1	6
146	S-Glutathiolation in redox-sensitive signaling. Drug Discovery Today Disease Mechanisms, 2005, 2, 39-46.	0.8	16
147	S-Glutathiolation by peroxynitrite activates SERCA during arterial relaxation by nitric oxide. Nature Medicine, 2004, 10, 1200-1207.	15.2	577
148	Selective Cu2+/Ascorbate-Dependent Oxidation of Alzheimer's Disease Î²-Amyloid Peptides. Annals of the New York Academy of Sciences, 2004, 1012, 164-170.	1.8	15
149	Selective Site-Specific Fenton Oxidation of Methionine in Model Peptides: Evidence for a Metal-Bound Oxidant. Journal of Pharmaceutical Sciences, 2004, 93, 1122-1130.	1.6	17
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