Maria Fedorova

List of Publications by Year
in descending order

71 papers	2,693 citations	201385 27 h-index	205818 48 g-index
76 all docs	76 docs citations	76 times ranked	3950 citing authors

#	Article	IF	Citations
1	Protein carbonylation as a major hallmark of oxidative damage: Update of analytical strategies. Mass Spectrometry Reviews, 2014, 33, 79-97.	2.8	402
2	Update on LIPID MAPS classification, nomenclature, and shorthand notation for MS-derived lipid structures. Journal of Lipid Research, 2020, 61, 1539-1555.	2.0	372
3	Peptide profiling of bovine kefir reveals 236 unique peptides released from caseins during its production by starter culture or kefir grains. Journal of Proteomics, 2015, 117, 41-57.	1.2	130
4	Validation of protein carbonyl measurement: A multi-centre study. Redox Biology, 2015, 4, 149-157.	3.9	102
5	Carbonylated Plasma Proteins As Potential Biomarkers of Obesity Induced Type 2 Diabetes Mellitus. Journal of Proteome Research, 2014, 13, 5081-5093.	1.8	64
6	Identification of Cysteine, Methionine and Tryptophan Residues of Actin Oxidized In vivo during Oxidative Stress. Journal of Proteome Research, 2010, 9, 1598-1609.	1.8	61
7	AdipoAtlas: A reference lipidome for human white adipose tissue. Cell Reports Medicine, 2021, 2, 100407.	3.3	60
8	Quality control requirements for the correct annotation of lipidomics data. Nature Communications, 2021, 12, 4771.	5.8	54
9	Simultaneous Detection of Low and High Molecular Weight Carbonylated Compounds Derived from Lipid Peroxidation by Electrospray Ionization-Tandem Mass Spectrometry. Analytical Chemistry, 2013, 85, 156-162.	3.2	53
10	Evaluation of lipid quantification accuracy using HILIC and RPLC MS on the example of NISTÂ® SRMÂ® 1950 metabolites in human plasma. Analytical and Bioanalytical Chemistry, 2020, 412, 3573-3584.	1.9	53
11	Identification of protein carbonylation sites by two-dimensional liquid chromatography in combination with MALDI- and ESI-MS. Journal of Proteomics, 2011, 74, 2338-2350.	1.2	52
12	Proteome-wide profiling of carbonylated proteins and carbonylation sites in HeLa cells under mild oxidative stress conditions. Free Radical Biology and Medicine, 2014, 68, 186-195.	1.3	49
13	LipidHunter Identifies Phospholipids by High-Throughput Processing of LC-MS and Shotgun Lipidomics Datasets. Analytical Chemistry, 2017, 89, 8800-8807.	3.2	49
14	Protein Carbonylation and Glycation in Legume Nodules. Plant Physiology, 2018, 177, 1510-1528.	2.3	47
15	LPPtiger software for lipidome-specific prediction and identification of oxidized phospholipids from LC-MS datasets. Scientific Reports, 2017, 7, 15138.	1.6	46
16	BioPAN: a web-based tool to explore mammalian lipidome metabolic pathways on LIPID MAPS. F1000Research, 2021, 10, 4.	0.8	44
17	The molecular mechanism behind reactive aldehyde action on transmembrane translocations of proton and potassium ions. Free Radical Biology and Medicine, 2015, 89, 1067-1076.	1.3	39
18	Cross-talk between lipid and protein carbonylation in a dynamic cardiomyocyte model of mild nitroxidative stress. Redox Biology, 2017, 11, 438-455.	3.9	38

#	Article	IF	Citations
19	Liquid Chromatography Techniques in Lipidomics Research. Chromatographia, 2019, 82, 77-100.	0.7	37
20	Computational solutions in redox lipidomics â€“ Current strategies and future perspectives. Free Radical Biology and Medicine, 2019, 144, 110-123.	1.3	36
21	Reversible and irreversible modifications of skeletal muscle proteins in a rat model of acute oxidative stress. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2009, 1792, 1185-1193.	1.8	35
22	Identification, Quantification, and Functional Aspects of Skeletal Muscle Protein-Carbonylation in Vivo during Acute Oxidative Stress. Journal of Proteome Research, 2010, 9, 2516-2526.	1.8	35
23	Fluorescence labeling of carbonylated lipids and proteins in cells using coumarin-hydrazide. Redox Biology, 2015, 5, 195-204.	3.9	33
24	A novel role for NUPR1 in the keratinocyte stress response to UV oxidized phospholipids. Redox Biology, 2019, 20, 467-482.	3.9	32
25	Quantitative evaluation of tryptophan oxidation in actin and troponin I from skeletal muscles using a rat model of acute oxidative stress. Proteomics, 2010, 10, 2692-2700.	1.3	31
26	Rational selection of reverse phase columns for high throughput LCâ€“MS lipidomics. Chemistry and Physics of Lipids, 2019, 221, 120-127.	1.5	31
27	Identification of carbonylated lipids from different phospholipid classes by shotgun and LC-MS lipidomics. Analytical and Bioanalytical Chemistry, 2015, 407, 5161-5173.	1.9	29
28	Qualitative and quantitative evaluation of derivatization reagents for different types of protein-bound carbonyl groups. Analyst, The, 2013, 138, 5081.	1.7	27
29	Impact of carbonylation on glutathione peroxidase-1 activity in human hyperglycemic endothelial cells. Redox Biology, 2018, 16, 113-122.	3.9	27
30	BioPAN: a web-based tool to explore mammalian lipidome metabolic pathways on LIPID MAPS. F1000Research, 2021, 10, 4.	0.8	26
31	Identification of carbonylated peptides by tandem mass spectrometry using a precursor ion-like scan in negative ion mode. Journal of Proteomics, 2011, 74, 2351-2359.	1.2	25
32	Identification of dityrosine cross-linked sites in oxidized human serum albumin. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2016, 1019, 147-155.	1.2	25
33	Oxidative modification of skin lipids by cold atmospheric plasma (CAP): A standardizable approach using RP-LC/MS2 and DI-ESI/MS2. Chemistry and Physics of Lipids, 2020, 226, 104786.	1.5	24
34	Fragmentation behavior of Amadoriâ€peptides obtained by nonâ€enzymatic glycosylation of lysine residues with ADPâ€ribose in tandem mass spectrometry. Journal of Mass Spectrometry, 2010, 45, 664-669.	0.7	23
35	Recent Advances on Mass Spectrometry Analysis of Nitrated Phospholipids. Analytical Chemistry, 2016, 88, 2622-2629.	3.2	23
36	2,4-Dinitrophenylhydrazine as a New Reactive Matrix to Analyze Oxidized Phospholipids by MALDI-TOF Mass Spectrometry. Analytical Letters, 2012, 45, 968-976.	1.0	22

#	Article	IF	Citations
37	Steatosis-induced proteins adducts withÂlipid peroxidation products and nuclear electrophilic stress in hepatocytes. Redox Biology, 2015, 4, 158-168.	3.9	22
38	Juggling with lipids, a game of Russian roulette. Trends in Endocrinology and Metabolism, 2021, 32, 463-473.	3.1	21
39	Cytochrome c autocatalyzed carbonylation in the presence of hydrogen peroxide and cardiolipins. Journal of Biological Chemistry, 2019, 294, 1816-1830.	1.6	20
40	Evaluation of Lipid In-Source Fragmentation on Different Orbitrap-based Mass Spectrometers. Journal of the American Society for Mass Spectrometry, 2020, 31, 463-466.	1.2	20
41	Structural, biological and biophysical properties of glycated and glycoxidized phosphatidylethanolamines. Free Radical Biology and Medicine, 2016, 95, 293-307.	1.3	19
42	Evaluation of air oxidized PAPC: A multi laboratory study by LC-MS/MS. Free Radical Biology and Medicine, 2019, 144, 156-166.	1.3	18
43	Derivatization and Detection of Small Aliphatic and Lipid-Bound Carbonylated Lipid Peroxidation Products by ESI-MS. Methods in Molecular Biology, 2015, 1208, 3-20.	0.4	18
44	New covalent modifications of phosphatidylethanolamine by alkanals: mass spectrometry based structural characterization and biological effects. Journal of Mass Spectrometry, 2014, 49, 557-569.	0.7	17
45	Sphingomyelins Prevent Propagation of Lipid Peroxidationâ€"LC-MS/MS Evaluation of Inhibition Mechanisms. Molecules, 2020, 25, 1925.	1.7	17
46	Separation and characterization of oxidized isomeric lipidâ€"peptide adducts by ion mobility mass spectrometry. Journal of Mass Spectrometry, 2015, 50, 1386-1392.	0.7	16
47	Profiling and relative quantification of multiply nitrated and oxidized fatty acids. Analytical and Bioanalytical Chemistry, 2015, 407, 5587-5602.	1.9	16
48	Molecular Mechanisms Responsible for Pharmacological Effects of Genipin on Mitochondrial Proteins. Biophysical Journal, 2019, 117, 1845-1857.	0.2	16
49	Epitope mapping and characterization of 4-hydroxy-2-nonenal modified-human serum albumin using two different polyclonal antibodies. Free Radical Biology and Medicine, 2019, 144, 234-244.	1.3	15
50	Dynamic posttranslational modifications of cytoskeletal proteins unveil hot spots under nitroxidative stress. Redox Biology, 2021, 44, 102014.	3.9	15
51	Characterization of oxidation products from 1-palmitoyl-2-linoleoyl-sn-glycerophosphatidylcholine in aqueous solutions and their reactions with cysteine, histidine and lysine residues. Chemistry and Physics of Lipids, 2012, 165, 186-196.	1.5	14
52	Impact of inhibition of the autophagy-lysosomal pathway on biomolecules carbonylation and proteome regulation in rat cardiac cells. Redox Biology, 2019, 23, 101123.	3.9	14
53	Higher proteotoxic stress rather than mitochondrial damage is involved in higher neurotoxicity of bortezomib compared to carfilzomib. Redox Biology, 2020, 32, 101502.	3.9	13
54	Electrochemical oxidation of cholesterol: An easy way to generate numerous oxysterols in short reaction times. European Journal of Lipid Science and Technology, 2016, 118, 325-331.	1.0	12

#	Article	IF	Citations
55	Protective Role of Sphingomyelin in Eye Lens Cell Membrane Model against Oxidative Stress. Biomolecules, 2021, 11, 276.	1.8	12
56	Heterogeneity of peptide adducts with carbonylated lipid peroxidation products. Journal of Mass Spectrometry, 2015, 50, 603-612.	0.7	11
57	Lipid composition dictates the rate of lipid peroxidation in artificial lipid droplets. Free Radical Research, 2021, 55, 469-480.	1.5	11
58	Dry heat forced degradation of buserelin peptide: Kinetics and degradant profiling. International Journal of Pharmaceutics, 2014, 467, 48-59.	2.6	9
59	Membranous adenylyl cyclase 1 activation is regulated by oxidation of N- and C-terminal methionine residues in calmodulin. Biochemical Pharmacology, 2015, 93, 196-209.	2.0	9
60	Electrochemical oxidation of phosphatidylethanolamines studied by mass spectrometry. Journal of Mass Spectrometry, 2018, 53, 223-233.	0.7	9
61	Redox lipidomics and adductomics - Advanced analytical strategies to study oxidized lipids and lipid-protein adducts. Free Radical Biology and Medicine, 2019, 144, 1-5.	1.3	9
62	The clinical translation of eicosanoids and other oxylipins, although challenging, should be actively pursued. Journal of Mass Spectrometry and Advances in the Clinical Lab, 2021, 21, 27-30.	1.3	8
63	Analysis of oxidised and glycated aminophospholipids: Complete structural characterisation by C30 liquid chromatography-high resolution tandem mass spectrometry. Free Radical Biology and Medicine, 2019, 144, 144-155.	1.3	7
64	Interpreting the lipidome: bioinformatic approaches to embrace the complexity. Metabolomics, 2021, 17, 55.	1.4	7
65	Protein and lipid carbonylation in cellular model of nitrosative stress: mass spectrometry, biochemistry and microscopy study. Free Radical Biology and Medicine, 2014, 75, S15.	1.3	5
66	Preface to the Special Issue on 4-Hydroxynonenal and Related Lipid Oxidation Products. Free Radical Biology and Medicine, 2017, 111, 1.	1.3	5
67	A Novel Technique for Redox Lipidomics Using Mass Spectrometry: Application on Vegetable Oils Used to Fry Potatoes. Journal of the American Society for Mass Spectrometry, 2021, 32, 1798-1809.	1.2	5
68	Single Cell Analysis by High-Resolution Atmospheric-Pressure MALDI MS Imaging. Methods in Molecular Biology, 2020, 2064, 103-111.	0.4	5
69	Research Techniques Made Simple: Lipidomic Analysis in Skin Research. Journal of Investigative Dermatology, 2022, 142, 4-11.e1.	0.3	4
70	Variations in the milk lipidomes of two dairy cow herds fed hay- or silage-based diets over a full year. Food Chemistry, 2022, 390, 133091.	4.2	4
71	Carbonylated HeLa cell proteome. Free Radical Biology and Medicine, 2013, 65, S26.	1.3	0