

Hartmut Kuhn

List of Publications by Year in descending order

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191
papers

9,403
citations

34105

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195
docs citations

195
times ranked

7515
citing authors

#	ARTICLE	IF	CITATIONS
1	Mammalian lipoxygenases and their biological relevance. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2015, 1851, 308-330.	2.4	449
2	Expanding expression of the 5-lipoxygenase pathway within the arterial wall during human atherogenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 1238-1243.	7.1	419
3	Inflammation and immune regulation by 12/15-lipoxygenases. <i>Progress in Lipid Research</i> , 2006, 45, 334-356.	11.6	340
4	The diversity of the lipoxygenase family. <i>FEBS Letters</i> , 1999, 449, 7-11.	2.8	282
5	Molecular enzymology of lipoxygenases. <i>Archives of Biochemistry and Biophysics</i> , 2010, 503, 161-174.	3.0	258
6	Regulation of enzymatic lipid peroxidation: the interplay of peroxidizing and peroxide reducing enzymes 1 This article is part of a series of reviews on "Regulatory and Cytoprotective Aspects of Lipid Hydroperoxide Metabolism." The full list of papers may be found on the homepage of the journal. <i>Free Radical Biology and Medicine</i> , 2002, 33, 154-172.	2.9	209
7	Mammalian arachidonate 15-lipoxygenases. <i>Prostaglandins and Other Lipid Mediators</i> , 2002, 68-69, 263-290.	1.9	176
8	The Selenoenzyme Phospholipid Hydroperoxide Glutathione Peroxidase Controls the Activity of the 15-Lipoxygenase with Complex Substrates and Preserves the Specificity of the Oxygenation Products. <i>Journal of Biological Chemistry</i> , 1996, 271, 4653-4658.	3.4	171
9	Lipoxygenase-dependent degradation of storage lipids. <i>Trends in Plant Science</i> , 2001, 6, 268-273.	8.8	167
10	Structural and functional biology of arachidonic acid 15-lipoxygenase-1 (ALOX15). <i>Gene</i> , 2015, 573, 1-32.	2.2	167
11	Oxygenation of lipoproteins by mammalian lipoxygenases. <i>FEBS Journal</i> , 1993, 213, 251-261.	0.2	145
12	IL-4-induced Oxidative Stress Upregulates VCAM-1 Gene Expression in Human Endothelial Cells. <i>Journal of Molecular and Cellular Cardiology</i> , 2001, 33, 83-94.	1.9	139
13	Structural Basis for Catalytic Activity and Enzyme Polymerization of Phospholipid Hydroperoxide Glutathione Peroxidase-4 (GPx4) ^{<sup></sup> <sup></sup>. <i>Biochemistry</i>, 2007, 46, 9041-9049.}	2.5	138
14	12/15-Lipoxygenase Counteracts Inflammation and Tissue Damage in Arthritis. <i>Journal of Immunology</i> , 2009, 183, 3383-3389.	0.8	138
15	Molecular dioxygen enters the active site of 12/15-lipoxygenase via dynamic oxygen access channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 13319-13324.	7.1	134
16	Shape and Specificity in Mammalian 15-Lipoxygenase Active Site. <i>Journal of Biological Chemistry</i> , 1999, 274, 37345-37350.	3.4	123
17	Acetylation by Histone Acetyltransferase CREB-binding Protein/p300 of STAT6 Is Required for Transcriptional Activation of the 15-Lipoxygenase-1 Gene. <i>Journal of Biological Chemistry</i> , 2001, 276, 42753-42760.	3.4	123
18	Flavonoids of Cocoa Inhibit Recombinant Human 5-Lipoxygenase. <i>Journal of Nutrition</i> , 2002, 132, 1825-1829.	2.9	122

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19	Overexpression, purification and characterization of human recombinant 15-lipoxygenase. <i>Lipids and Lipid Metabolism</i> , 1993, 1169, 80-89.	2.6	120
20	Polyphenols of Cocoa: Inhibition of Mammalian 15-Lipoxygenase. <i>Biological Chemistry</i> , 2001, 382, 1687-96.	2.5	115
21	Structural biology of mammalian lipoxygenases: Enzymatic consequences of targeted alterations of the protein structure. <i>Biochemical and Biophysical Research Communications</i> , 2005, 338, 93-101.	2.1	113
22	Redox Control in Mammalian Embryo Development. <i>Antioxidants and Redox Signaling</i> , 2010, 13, 833-875.	5.4	110
23	The Rabbit 15-Lipoxygenase Preferentially Oxygenates LDL Cholesterol Esters, and This Reaction Does Not Require Vitamin E. <i>Journal of Biological Chemistry</i> , 1998, 273, 23225-23232.	3.4	102
24	Molecular biology of glutathione peroxidase 4: from genomic structure to developmental expression and neural function. <i>Biological Chemistry</i> , 2007, 388, 1007-1017.	2.5	100
25	Translational regulation of glutathione peroxidase 4 expression through guanine-rich sequence-binding factor 1 is essential for embryonic brain development. <i>Genes and Development</i> , 2008, 22, 1838-1850.	5.9	95
26	Expression of Inactive Glutathione Peroxidase 4 Leads to Embryonic Lethality, and Inactivation of the <i>Alox15</i> Gene Does Not Rescue Such Knock-In Mice. <i>Antioxidants and Redox Signaling</i> , 2015, 22, 281-293.	5.4	91
27	Regulation of 15-lipoxygenase expression in lung epithelial cells by interleukin-4. <i>Biochemical Journal</i> , 1996, 318, 305-312.	3.7	86
28	Enzymology and Physiology of Reticulocyte Lipoxygenase: Comparison with Other Lipoxygenases. <i>Advances in Enzymology and Related Areas of Molecular Biology</i> , 2006, 58, 191-272.	1.3	86
29	Role for glutathione peroxidase-4 in brain development and neuronal apoptosis: Specific induction of enzyme expression in reactive astrocytes following brain injury. <i>Free Radical Biology and Medicine</i> , 2007, 43, 191-201.	2.9	84
30	15-Lipoxygenase Catalytically Consumes Nitric Oxide and Impairs Activation of Guanylate Cyclase. <i>Journal of Biological Chemistry</i> , 1999, 274, 20083-20091.	3.4	83
31	Investigation of the oxygenation of phospholipids by the porcine leukocyte and human platelet arachidonate 12-lipoxygenases. <i>FEBS Journal</i> , 1993, 218, 165-171.	0.2	82
32	Biosynthesis, metabolization and biological importance of the primary 15-lipoxygenase metabolites 15-hydro(pero)xy-5Z,8Z,11Z,13E-eicosatetraenoic acid and 13-hydro(pero)xy-9Z,11E-octadecadienoic acid. <i>Progress in Lipid Research</i> , 1996, 35, 203-226.	11.6	82
33	Phenylalanine 353 is a Primary Determinant for the Positional Specificity of Mammalian 15-Lipoxygenases. <i>Journal of Molecular Biology</i> , 1996, 264, 1145-1153.	4.2	81
34	Evolutionary aspects of lipoxygenases and genetic diversity of human leukotriene signaling. <i>Progress in Lipid Research</i> , 2015, 57, 13-39.	11.6	81
35	Structural Basis for Lipoxygenase Specificity. <i>Journal of Biological Chemistry</i> , 2001, 276, 773-779.	3.4	79
36	The Role of Phospholipid Hydroperoxide Glutathione Peroxidase Isoforms in Murine Embryogenesis. <i>Journal of Biological Chemistry</i> , 2006, 281, 19655-19664.	3.4	79

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37	Applicability of the Triad Concept for the Positional Specificity of Mammalian Lipoxygenases. <i>Journal of Biological Chemistry</i> , 2010, 285, 5369-5376.	3.4	77
38	The mechanism of inactivation of lipoxygenases by acetylenic fatty acids. <i>FEBS Journal</i> , 1984, 139, 577-583.	0.2	76
39	Inverse regulation of lipid-oxidizing and hydroperoxyl lipid-reducing enzymes by interleukins 4 and 13. <i>FASEB Journal</i> , 1999, 13, 143-154.	0.5	75
40	Phosphatidylethanolamine-esterified Eicosanoids in the Mouse. <i>Journal of Biological Chemistry</i> , 2009, 284, 21185-21191.	3.4	72
41	Formation, Signaling and Occurrence of Specialized Pro-Resolving Lipid Mediators—What is the Evidence so far?. <i>Frontiers in Pharmacology</i> , 2022, 13, 838782.	3.5	70
42	The oxygenation of cholesterol esters by the reticulocyte lipoxygenase. <i>FEBS Letters</i> , 1991, 279, 110-114.	2.8	69
43	Investigations into Calcium-dependent Membrane Association of 15-Lipoxygenase-1. <i>Journal of Biological Chemistry</i> , 2004, 279, 3717-3725.	3.4	69
44	The N-terminal Domain of the Reticulocyte-type 15-Lipoxygenase Is Not Essential for Enzymatic Activity but Contains Determinants for Membrane Binding. <i>Journal of Biological Chemistry</i> , 2002, 277, 27360-27366.	3.4	68
45	12- and 15-lipoxygenases in human carotid atherosclerotic lesions: Associations with cerebrovascular symptoms. <i>Atherosclerosis</i> , 2011, 215, 411-416.	0.8	68
46	Structural basis for the positional specificity of lipoxygenases. <i>Prostaglandins and Other Lipid Mediators</i> , 2000, 62, 255-270.	1.9	64
47	Human Platelet 12-Lipoxygenase, New Findings about Its Activity, Membrane Binding and Low-resolution Structure. <i>Journal of Molecular Biology</i> , 2008, 376, 193-209.	4.2	63
48	Formation of lipoxin B by the pure reticulocyte lipoxygenase via sequential oxygenation of the substrate. <i>FEBS Journal</i> , 1987, 169, 593-601.	0.2	60
49	Mammalian ALOX15 orthologs exhibit pronounced dual positional specificity with docosahexaenoic acid. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2017, 1862, 666-675.	2.4	60
50	Quasi-Lipoxygenase Activity of Haemoglobin. A Model for Lipoxygenases. <i>FEBS Journal</i> , 1981, 120, 161-168.	0.2	58
51	The Specificity of Lipoxygenase-Catalyzed Lipid Peroxidation and the Effects of Radical- Scavenging Antioxidants. <i>Biological Chemistry</i> , 2002, 383, 619-626.	2.5	58
52	Monoamine oxidases in development. <i>Cellular and Molecular Life Sciences</i> , 2013, 70, 599-630.	5.4	58
53	Interleukin 4 induces transcription of the 15-lipoxygenase I gene in human endothelial cells. <i>Journal of Lipid Research</i> , 2001, 42, 783-791.	4.2	58
54	Gene expression alterations of human peripheral blood monocytes induced by medium-term treatment with the TH2-cytokines interleukin-4 and -13. <i>Cytokine</i> , 2005, 30, 366-377.	3.2	57

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55	Evolutionary alteration of ALOX15 specificity optimizes the biosynthesis of antiinflammatory and proresolving lipoxins. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4266-75.	7.1	54
56	Simultaneous expression of leukocyte-type 12-lipoxygenase and reticulocyte-type 15-lipoxygenase in rabbits 1 Edited by F. Cohen. Journal of Molecular Biology, 1998, 278, 935-948.	4.2	53
57	The Inhibition of Mammalian 15-Lipoxygenases by the Anti-Inflammatory Drug Ebselen: Dual-Type Mechanism Involving Covalent Linkage and Alteration of the Iron Ligand Sphere. Molecular Pharmacology, 1999, 56, 196-203.	2.3	52
58	Regulation of Expression of the Phospholipid Hydroperoxide/Sperm Nucleus Glutathione Peroxidase Gene. Journal of Biological Chemistry, 2003, 278, 2571-2580.	3.4	52
59	Monoamine oxidaseâ€A modulates apoptotic cell death induced by staurosporine in human neuroblastoma cells. Journal of Neurochemistry, 2007, 103, 2189-2199.	3.9	52
60	Transgenic rabbits with the integrated human 15-lipoxygenase gene driven by a lysozyme promoter: macrophage-specific expression and variable positional specificity of the transgenic enzyme.. FASEB Journal, 1995, 9, 1623-1631.	0.5	51
61	Structural Flexibility of the N-terminal Î²-Barrel Domain of 15-Lipoxygenase-1 Probed by Small Angle X-ray Scattering. Functional Consequences for Activity Regulation and Membrane Binding. Journal of Molecular Biology, 2004, 343, 917-929.	4.2	51
62	mRNA Silencing in Human Erythroid Cell Maturation. Journal of Biological Chemistry, 2008, 283, 18461-18472.	3.4	51
63	Photoactivation of an Inhibitor of the 12/15â€Lipoxygenase Pathway. ChemBioChem, 2006, 7, 1089-1095.	2.6	50
64	Elevated Endothelial Nitric Oxide Bioactivity and Resistance to Angiotensin-Dependent Hypertension in 12/15-Lipoxygenase Knockout Mice. American Journal of Pathology, 2005, 166, 653-662.	3.8	48
65	Structural and functional basis of phospholipid oxygenase activity of bacterial lipoxygenase from Pseudomonas aeruginosa. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2016, 1861, 1681-1692.	2.4	46
66	The evolutionary hypothesis of reaction specificity of mammalian ALOX15 orthologs. Progress in Lipid Research, 2018, 72, 55-74.	11.6	46
67	Crystal structure and functional characterization of selenocysteine-containing glutathione peroxidase 4 suggests an alternative mechanism of peroxide reduction. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2018, 1863, 1095-1107.	2.4	45
68	Probing the Substrate Alignment at the Active Site of 15-Lipoxygenases by Targeted Substrate Modification and Site-Directed Mutagenesis. Evidence for an Inverse Substrate Orientation. Biochemistry, 1998, 37, 15327-15335.	2.5	44
69	A near null variant of 12/15-LOX encoded by a novel SNP in ALOX15 and the risk of coronary artery disease. Atherosclerosis, 2008, 198, 136-144.	0.8	44
70	The Stereochemistry of the Reactions of Lipoxygenases and Their Metabolites. Proposed Nomenclature of Lipoxygenases and Related Enzymes. Advances in Enzymology and Related Areas of Molecular Biology, 2006, 58, 273-311.	1.3	42
71	The suppression of 5-lipoxygenation of arachidonic acid in human polymorphonuclear leucocytes by the 15-lipoxygenase product (15<i>S</i>)-hydroxy-(5<i>Z</i>,8<i>Z</i>,11<i>Z</i>,13<i>E</i>)-eicosatetraenoic acid: structure-activity relationship and mechanism of action. Biochemical Journal. 1996. 314. 911-916.	3.7	41
72	Specific oxygenation of plasma membrane phospholipids by Pseudomonas aeruginosa lipoxygenase induces structural and functional alterations in mammalian cells. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2018, 1863, 152-164.	2.4	41

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73	Subcellular distribution of lipoxygenase products in rabbit reticulocyte membranes*. FEBS Journal, 1990, 191, 221-227.	0.2	40
74	A Kinetic Model for the Interaction of Nitric Oxide with a Mammalian Lipoxygenase. FEBS Journal, 1997, 245, 608-616.	0.2	40
75	Regulation of cellular 15-lipoxygenase activity on pretranslational, translational, and posttranslational levels. Lipids, 1999, 34, S273-S279.	1.7	40
76	15-Lipoxygenation of phospholipids may precede the sn-2 cleavage by phospholipases A2: reaction specificities of secretory and cytosolic phospholipases A2 towards native and 15-lipoxygenated arachidonoyl phospholipids. FEBS Letters, 1998, 434, 437-441.	2.8	38
77	Inhibition of carcinogenesis in transgenic mouse models over-expressing 15-lipoxygenase in the vascular wall under the control of murine preproendothelin-1 promoter. Cancer Letters, 2005, 229, 127-134.	7.2	38
78	Secreted lipoxygenase from Pseudomonas aeruginosa exhibits biomembrane oxygenase activity and induces hemolysis in human red blood cells. Archives of Biochemistry and Biophysics, 2015, 584, 116-124.	3.0	38
79	Probing Dimerization and Structural Flexibility of Mammalian Lipoxygenases by Small-Angle X-ray Scattering. Journal of Molecular Biology, 2011, 409, 654-668.	4.2	37
80	Nitric oxide oxidises a ferrous mammalian lipoxygenase to a pre-activated ferric species. FEBS Letters, 1996, 389, 229-232.	2.8	36
81	Lipoxygenase treatment render low-density lipoprotein susceptible to Cu ²⁺ -catalysed oxidation. Biochemical Journal, 1996, 314, 577-585.	3.7	36
82	Arachidonic Acid Metabolites in the Cardiovascular System: The Role of Lipoxygenase Isoforms in Atherogenesis With Particular Emphasis on Vascular Remodeling. Journal of Cardiovascular Pharmacology, 2007, 50, 609-620.	1.9	36
83	Oxidation of low density lipoprotein and plasma by 15-lipoxygenase and free radicals. FEBS Letters, 1999, 445, 287-290.	2.8	35
84	Sequence Determinants for the Reaction Specificity of Murine (12R)-Lipoxygenase. Journal of Biological Chemistry, 2005, 280, 36633-36641.	3.4	35
85	Stereocontrol of Arachidonic Acid Oxygenation by Vertebrate Lipoxygenases. Journal of Biological Chemistry, 2011, 286, 37804-37812.	3.4	35
86	15-Lipoxygenase-mediated modification of high-density lipoproteins impairs SR-BI- and ABCA1-dependent cholesterol efflux from macrophages. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2006, 1761, 292-300.	2.4	34
87	The N-terminal β -barrel domain of mammalian lipoxygenases including mouse 5-lipoxygenase is not essential for catalytic activity and membrane binding but exhibits regulatory functions. Archives of Biochemistry and Biophysics, 2011, 516, 1-9.	3.0	34
88	Monoamine Oxidase A Expression Is Vital for Embryonic Brain Development by Modulating Developmental Apoptosis. Journal of Biological Chemistry, 2011, 286, 28322-28330.	3.4	34
89	Functional characterization of cis- and trans-regulatory elements involved in expression of phospholipid hydroperoxide glutathione peroxidase. Nucleic Acids Research, 2003, 31, 4293-4303.	14.5	33
90	Th2 Response of Human Peripheral Monocytes Involves Isoform-Specific Induction of Monoamine Oxidase-A. Journal of Immunology, 2004, 173, 4821-4827.	0.8	33

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91	Ligand-induced formation of transient dimers of mammalian 12/15-lipoxygenase: A key to allosteric behavior of this class of enzymes?. <i>Proteins: Structure, Function and Bioinformatics</i> , 2012, 80, 703-712.	2.6	33
92	Dual role of oxygen during lipoxygenase reactions. <i>FEBS Journal</i> , 2005, 272, 2523-2535.	4.7	31
93	The role of lipoxygenase-isoforms in atherogenesis. <i>Molecular Nutrition and Food Research</i> , 2005, 49, 1014-1029.	3.3	31
94	Reticulocyte 15-Lipoxygenase-I Is Important in Acetylcholine-Induced Endothelium-Dependent Vasorelaxation in Rabbit Aorta. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2006, 26, 78-84.	2.4	31
95	The stoichiometry of oxygen uptake and conjugated diene formation during the dioxygenation of linoleic acid by the pure reticulocyte lipoxygenase. Evidence for aerobic hydroperoxidase activity. <i>Lipids and Lipid Metabolism</i> , 1986, 876, 187-193.	2.6	30
96	Occurrence of free and esterified lipoxygenase products in leaves of <i>Glechoma hederacea</i> L. and other Labiatae. <i>FEBS Journal</i> , 1989, 186, 155-162.	0.2	29
97	Conversion of pro-inflammatory murine Alox5 into an anti-inflammatory 15S-lipoxygenating enzyme by multiple mutations of sequence determinants. <i>Archives of Biochemistry and Biophysics</i> , 2013, 530, 40-47.	3.0	29
98	Amino Acid Differences in the Deduced 5-Lipoxygenase Sequence of CAST Atherosclerosis-Resistance Mice Confer Impaired Activity When Introduced Into the Human Ortholog. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2003, 23, 1072-1076.	2.4	28
99	The iron ligand sphere geometry of mammalian 15-lipoxygenases. <i>Biochemical Journal</i> , 1998, 332, 237-242.	3.7	27
100	Pentane formation during the anaerobic reactions of reticulocyte lipoxygenase. <i>Lipids and Lipid Metabolism</i> , 1984, 795, 535-542.	2.6	26
101	Functional characterization of genetic enzyme variations in human lipoxygenases. <i>Redox Biology</i> , 2013, 1, 566-577.	9.0	26
102	The crystal structure of <i>Pseudomonas aeruginosa</i> lipoxygenase Ala420Gly mutant explains the improved oxygen affinity and the altered reaction specificity. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2017, 1862, 463-473.	2.4	26
103	On the reaction specificity of the lipoxygenase from tomato fruits. <i>Lipids and Lipid Metabolism</i> , 1994, 1210, 297-302.	2.6	25
104	Alterations of lipoxygenase specificity by targeted substrate modification and site-directed mutagenesis. <i>Chemistry and Biology</i> , 2001, 8, 779-790.	6.0	24
105	The 15-Lipoxygenase-Modified High Density Lipoproteins 3 Fail to Inhibit the TNF- α -Induced Inflammatory Response in Human Endothelial Cells. <i>Journal of Immunology</i> , 2008, 181, 2821-2830.	0.8	24
106	Male Subfertility Induced by Heterozygous Expression of Catalytically Inactive Glutathione Peroxidase 4 Is Rescued in Vivo by Systemic Inactivation of the Alox15 Gene. <i>Journal of Biological Chemistry</i> , 2016, 291, 23578-23588.	3.4	24
107	^3H -Oxidation impairs oxidizability of polyenoic fatty acids by 15-lipoxygenases: consequences for substrate orientation at the active site. <i>Biochemical Journal</i> , 1998, 336, 345-352.	3.7	23
108	Expression of 12/15-Lipoxygenase Attenuates Intracellular Lipid Deposition During In Vitro Foam Cell Formation. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2005, 25, 797-802.	2.4	23

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109	Structural Properties of Plant and Mammalian Lipoxygenases. Temperature-Dependent Conformational Alterations and Membrane Binding Ability. <i>Biochemistry</i> , 2008, 47, 9234-9242.	2.5	23
110	Upregulation of lectin-like oxidized low density lipoprotein receptor 1 (LOX-1) expression in human endothelial cells by modified high density lipoproteins. <i>Biochemical and Biophysical Research Communications</i> , 2012, 428, 230-233.	2.1	23
111	Mutagenesis of triad determinants of rat Alox15 alters the specificity of fatty acid and phospholipid oxygenation. <i>Archives of Biochemistry and Biophysics</i> , 2015, 571, 50-57.	3.0	22
112	Grsf1-Induced Translation of the SNARE Protein Use1 Is Required for Expansion of the Erythroid Compartment. <i>PLoS ONE</i> , 2014, 9, e104631.	2.5	22
113	Cloning of the mouse phospholipid hydroperoxide glutathione peroxidase gene1. <i>FEBS Letters</i> , 1999, 446, 223-227.	2.8	21
114	Synthesis of a New Seleninic Acid Anhydride and Mechanistic Studies into Its Glutathione Peroxidase Activity. <i>Chemistry - A European Journal</i> , 2008, 14, 7066-7071.	3.3	21
115	Discovery of a Functional Retrotransposon of the Murine Phospholipid Hydroperoxide Glutathione Peroxidase: Chromosomal Localization and Tissue-Specific Expression Pattern. <i>Genomics</i> , 2002, 79, 387-394.	2.9	20
116	Suicidal inactivation of the rabbit 15-lipoxygenase by 15S-HpETE is paralleled by covalent modification of active site peptides. <i>Free Radical Biology and Medicine</i> , 2003, 34, 304-315.	2.9	20
117	Determinants of umbilical cord arterial 8-iso-prostaglandin F2alpha concentrations. <i>BJOG: an International Journal of Obstetrics and Gynaecology</i> , 2000, 107, 973-981.	2.3	19
118	Biologic relevance of lipoxygenase isoforms in atherogenesis. <i>Expert Review of Cardiovascular Therapy</i> , 2005, 3, 1099-1110.	1.5	19
119	5-Selenization of salicylic acid derivatives yielded isoform-specific 5-lipoxygenase inhibitors. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 828-834.	2.8	19
120	Tight association of N-terminal and catalytic subunits of rabbit 12/15-lipoxygenase is important for protein stability and catalytic activity. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2011, 1811, 1001-1010.	2.4	19
121	Molecular Basis for the Reduced Catalytic Activity of the Naturally Occurring T560M Mutant of Human 12/15-Lipoxygenase That Has Been Implicated in Coronary Artery Disease. <i>Journal of Biological Chemistry</i> , 2011, 286, 23920-23927.	3.4	19
122	Female mice carrying a defective Alox15 gene are protected from experimental colitis via sustained maintenance of the intestinal epithelial barrier function. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2018, 1863, 866-880.	2.4	19
123	High-Level Expression of Rabbit 15-Lipoxygenase Induces Collapse of the Mitochondrial pH Gradient in Cell Culture. <i>Biochemistry</i> , 2004, 43, 15296-15302.	2.5	18
124	Identification of an amino acid determinant of pH regiospecificity in a seed lipoxygenase from <i>Momordica charantia</i> . <i>Phytochemistry</i> , 2008, 69, 2774-2780.	2.9	17
125	Human platelet 12-lipoxygenase: Naturally occurring Q261/R261 variants and N544L mutant show altered activity but unaffected substrate binding and membrane association behavior. <i>International Journal of Molecular Medicine</i> , 2009, 24, 759-64.	4.0	17
126	Role of Arg403 for thermostability and catalytic activity of rabbit 12/15-lipoxygenase. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2013, 1831, 1079-1088.	2.4	17

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127	The lipoxygenase pathway in zebrafish. Expression and characterization of zebrafish ALOX5 and comparison with its human ortholog. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2016, 1861, 1-11.	2.4	17
128	Affinity Labeling of the Rabbit 12/15-Lipoxygenase Using Azido Derivatives of Arachidonic Acid. <i>Biochemistry</i> , 2006, 45, 3554-3562.	2.5	15
129	Macrophage cholesteryl ester hydrolases and hormone-sensitive lipase prefer specifically oxidized cholesteryl esters as substrates over their non-oxidized counterparts. <i>Biochemical Journal</i> , 2000, 352, 125-133.	3.7	15
130	Leukotriene signaling in the extinct human subspecies <i>Homo denisovan</i> and <i>Homo neanderthalensis</i> . Structural and functional comparison with <i>Homo sapiens</i> . <i>Archives of Biochemistry and Biophysics</i> , 2015, 565, 17-24.	3.0	14
131	Functional characterization of novel ALOX15 orthologs representing key steps in mammalian evolution supports the Evolutionary Hypothesis of reaction specificity. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2019, 1864, 372-385.	2.4	14
132	Functional characterization of a novel arachidonic acid 12S-lipoxygenase in the halotolerant bacterium <i>Myxococcus fulvus</i> exhibiting complex social living patterns. <i>MicrobiologyOpen</i> , 2019, 8, e775.	3.0	14
133	Specificity of soybean lipoxygenase-1 in hydrated reverse micelles of sodiumbis(2-ethylhexyl)sulfosuccinate (aerosol OT). <i>Lipids</i> , 1992, 27, 690-693.	1.7	13
134	Total Synthesis of the Lipoxygenase Substrates (5Z,8Z,11Z,14Z)-Nonadeca-5,8,11,14-tetraene-1,19-dioic Acid and (5Z,8Z,11Z,14Z)-20,20-Dimethylheneicosa-5,8,11,14-tetraenoic Acid. <i>Synthesis</i> , 2000, 2000, 691-694.	2.3	13
135	Association of polymorphisms in the ALOX15B gene with coronary artery disease. <i>Clinical Biochemistry</i> , 2014, 47, 349-355.	1.9	13
136	Mutagenesis of Sequence Determinants of Truncated Porcine ALOX15 Induces Changes in the Reaction Specificity by Altering the Catalytic Mechanism of Initial Hydrogen Abstraction. <i>Chemistry - A European Journal</i> , 2018, 24, 962-973.	3.3	13
137	Mutations of Triad Determinants Changes the Substrate Alignment at the Catalytic Center of Human ALOX5. <i>ACS Chemical Biology</i> , 2019, 14, 2768-2782.	3.4	13
138	Expression regulation of MAO isoforms in monocytic cells in response to Th2 cytokines. <i>Medical Science Monitor</i> , 2005, 11, BR259-65.	1.1	13
139	Lipoxygenase pathways in <i>Homo neanderthalensis</i> : functional comparison with <i>Homo sapiens</i> isoforms. <i>Journal of Lipid Research</i> , 2013, 54, 1397-1409.	4.2	12
140	Omega-3 fatty acids protect from colitis via an Alox15-derived eicosanoid. <i>FASEB Journal</i> , 2021, 35, e21491.	0.5	12
141	Positional specificity of lipoxygenases and their suitability for testing potential drugs. <i>Prostaglandins, Leukotrienes, and Medicine</i> , 1986, 23, 155-160.	0.7	11
142	Alterations in Leukotriene Synthase Activity of the Human 5-Lipoxygenase by Site-Directed Mutagenesis Affecting Its Positional Specificity. <i>Biochemistry</i> , 2000, 39, 14515-14521.	2.5	11
143	Serotonin Receptor 6 Mediates Defective Brain Development in Monoamine Oxidase A-deficient Mouse Embryos. <i>Journal of Biological Chemistry</i> , 2014, 289, 8252-8263.	3.4	11
144	Oxygenation of mitochondrial membranes by the reticulocyte lipoxygenase. Action on monoamine oxidase activities A and B. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1989, 986, 11-17.	2.6	10

#	ARTICLE	IF	CITATIONS
145	15-Lipoxygenase-2 is differentially expressed in normal and neoplastic ovary. <i>European Journal of Cancer Prevention</i> , 2007, 16, 568-575.	1.3	10
146	Development of myeloproliferative disease in 12/15-lipoxygenase deficiency. <i>Blood</i> , 2012, 119, 6173-6174.	1.4	10
147	Phosphorylation mimicking mutations of ALOX5 orthologs of different vertebrates do not alter reaction specificities of the enzymes. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2014, 1841, 1460-1466.	2.4	10
148	On the mechanistic reasons for the dual positional specificity of the reticulocyte lipoxygenase. <i>Lipids and Lipid Metabolism</i> , 1991, 1081, 129-134.	2.6	9
149	A simple method for the preparation of (5Z,8Z,11Z,14Z)-16-Hydroxyeicosa-5,8,11,14-tetraenoic acid enantiomers and the corresponding 14,15-Dehydro analogues: role of the 16-Hydroxy group for the lipoxygenase reaction. <i>Bioorganic and Medicinal Chemistry</i> , 2002, 10, 2335-2343.	3.0	9
150	Differential expression of secretoglobins in normal ovary and in ovarian carcinoma – Overexpression of mammaglobin-1 is linked to tumor progression. <i>Archives of Biochemistry and Biophysics</i> , 2014, 547, 27-36.	3.0	9
151	Probing conformational changes in lipoxygenases upon membrane binding: Fine-tuning by the active site inhibitor ETYA. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2014, 1841, 1-10.	2.4	9
152	Knock-In Mice Expressing a 15-Lipoxygenating Alox5 Mutant Respond Differently to Experimental Inflammation Than Reported Alox5 ^{+/+} Mice. <i>Metabolites</i> , 2021, 11, 698.	2.9	9
153	Macrophage cholesteryl ester hydrolases and hormone-sensitive lipase prefer specifically oxidized cholesteryl esters as substrates over their non-oxidized counterparts. <i>Biochemical Journal</i> , 2000, 352, 125.	3.7	8
154	A convergent synthesis of (17R,5Z,8Z,11Z,14Z)-17-hydroxyeicosa-5,8,11,14-tetraenoic acid analogues and their tritiated derivatives. <i>Tetrahedron</i> , 2003, 59, 8091-8097.	1.9	8
155	Systemic deficiency of mouse arachidonate 15-lipoxygenase induces defective erythropoiesis and transgenic expression of the human enzyme rescues this phenotype. <i>FASEB Journal</i> , 2020, 34, 14318-14335.	0.5	8
156	Human lipoxygenase isoforms form complex patterns of double and triple oxygenated compounds from eicosapentaenoic acid. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2020, 1865, 158806.	2.4	8
157	Expression Regulation, Protein Chemistry and Functional Biology of the Guanine-Rich Sequence Binding Factor 1 (GRSF1). <i>Journal of Molecular Biology</i> , 2021, 433, 166922.	4.2	8
158	Total synthesis of (5Z,8Z,11Z,14Z)-18- and 19-oxoeicosa-5,8,11,14-tetraenoic acids. <i>Tetrahedron</i> , 2002, 58, 8483-8487.	1.9	7
159	Enantioselective Substrate Specificity of 15-Lipoxygenase 1. <i>Biochemistry</i> , 2004, 43, 15720-15728.	2.5	7
160	Cytokine-Dependent Expression Regulation of ALOX15. <i>Journal of Cytokine Biology</i> , 2016, 01, .	1.5	7
161	Functional characterization of naturally occurring genetic variations of the human guanine-rich RNA sequence binding factor 1 (GRSF1). <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2018, 1862, 866-876.	2.4	7
162	Eicosanoid biosynthesis in marine mammals. <i>FEBS Journal</i> , 2021, 288, 1387-1406.	4.7	7

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163	The Reaction Specificity of Mammalian ALOX15 Orthologs is Changed During Late Primate Evolution and These Alterations Might Offer Evolutionary Advantages for Hominidae. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, 871585.	3.7	7
164	Male Knock-in Mice Expressing an Arachidonic Acid Lipoxygenase 15B (Alox15B) with Humanized Reaction Specificity Are Prematurely Growth Arrested When Aging. <i>Biomedicines</i> , 2022, 10, 1379.	3.2	7
165	Functional characterization of isolated RNA-binding domains of the GRSF1 protein. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2018, 1862, 946-957.	2.4	6
166	Atopic Patients Show Increased Interleukin 4 Plasma Levels but the Degree of Elevation Is Not Sufficient to Upregulate Interleukin-4-Sensitive Genes. <i>Skin Pharmacology and Physiology</i> , 2019, 32, 192-200.	2.5	6
167	Identification of the COMM-domain containing protein 1 as specific binding partner for the guanine-rich RNA sequence binding factor 1. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2020, 1864, 129678.	2.4	6
168	A role of Gln596 in fine-tuning mammalian ALOX15 specificity, protein stability and allosteric properties. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2020, 1865, 158680.	2.4	6
169	Synthesis of (5Z,8Z,11Z,14Z)-18- and 19-azido-eicosa-5,8,11,14-tetraenoic acids and their [5,6,8,9,11,12,14,15-3H8]-analogues through a common synthetic route. <i>Chemistry and Physics of Lipids</i> , 2004, 130, 117-126.	3.2	5
170	Defining the immunoreactive epitope for the monoclonal anti-human glutathione peroxidase-4 antibody anti-hGPx4 Mab63-1. <i>Immunology Letters</i> , 2010, 133, 85-93.	2.5	5
171	Hydrophobicity and glutathione peroxidase-like activity of substituted salicyloyl-5-seleninic acids: Re-investigations on aromatic selenium compounds based on their hydrophobicity. <i>Journal of Organometallic Chemistry</i> , 2018, 862, 86-94.	1.8	5
172	The lipoxygenase pathway of <i>Tupaia belangeri</i> representing Scandentia. Genomic multiplicity and functional characterization of the ALOX15 orthologs in the tree shrew. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2020, 1865, 158550.	2.4	5
173	New insight into the role of glutathione reductase in glutathione peroxidase-like activity determination by coupled reductase assay: Molecular Docking Study. <i>Journal of Inorganic Biochemistry</i> , 2021, 215, 111276.	3.5	5
174	Conformational Heterogeneity and Cooperative Effects of Mammalian ALOX15. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3285.	4.1	5
175	Paralog- and ortholog-specificity of inhibitors of human and mouse lipoxygenase-isoforms. <i>Biomedicine and Pharmacotherapy</i> , 2022, 145, 112434.	5.6	5
176	Molecular basis for the catalytic inactivity of a naturally occurring near-null variant of human ALOX15. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2013, 1831, 1702-1713.	2.4	4
177	Is Regioselectivity in the Enzyme-Catalyzed Hydroperoxidation of Arachidonic Acid Necessarily Determined by Hydrogen Abstraction? The Case of Rabbit Leu597Ala/Ile663Ala ALOX15 Mutant. <i>ChemPhysChem</i> , 2016, 17, 3321-3332.	2.1	4
178	Functional Characterization of Knock-In Mice Expressing a 12/15-Lipoxygenating Alox5 Mutant Instead of the 5-Lipoxygenating Wild-Type Enzyme. <i>Antioxidants and Redox Signaling</i> , 2020, 32, 1-17.	5.4	4
179	<i>N</i> -Substituted 5-(1 <i>H</i> -Indol-2-yl)-2-methoxyanilines Are Allosteric Inhibitors of the Linoleate Oxygenase Activity of Selected Mammalian ALOX15 Orthologs: Mechanism of Action. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 1979-1995.	6.4	4
180	Formation of atherosclerotic lesions is independent of eosinophils in male mice. <i>Atherosclerosis</i> , 2020, 311, 67-72.	0.8	3

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181	Oxygenation of endocannabinoids by mammalian lipoxygenase isoforms. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2021, 1866, 158918.	2.4	3
182	Induction of 15-lipoxygenase-1 impairs expression of HIV-1 receptors CD4 and CXCR4 in monocytic cells. <i>FEBS Letters</i> , 2005, 579, 3691-3694.	2.8	2
183	Do lipoxygenases occur in viruses?. <i>Prostaglandins Leukotrienes and Essential Fatty Acids</i> , 2018, 138, 14-23.	2.2	2
184	Specific overexpression of 15-lipoxygenase in endothelial cells promotes cancer cell death in an in vivo Lewis lung carcinoma mouse model. <i>Advances in Medical Sciences</i> , 2020, 65, 111-119.	2.1	2
185	Expression Silencing of Glutathione Peroxidase 4 in Mouse Erythroleukemia Cells Delays In Vitro Erythropoiesis. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7795.	4.1	2
186	Structural and functional evaluation mammalian and plant lipoxygenases upon association with nanodics as membrane mimetics. <i>Biophysical Chemistry</i> , 2022, 288, 106855.	2.8	2
187	How do lipoxygenases control the stereochemistry of fatty acid oxygenation?. <i>International Congress Series</i> , 2002, 1233, 291-296.	0.2	1
188	Functionalized Homologues and Positional Isomers of Rabbit 15-Lipoxygenase RS75091 Inhibitor. <i>Medicinal Chemistry</i> , 2021, 17, .	1.5	1
189	X-Ray Absorption Studies into the iron Ligand Sphere of Plant and Animal Lipoxygenases. <i>Advances in Experimental Medicine and Biology</i> , 1999, 469, 99-104.	1.6	1
190	Initiative on #4openScienceStandsForUkraine scientists and students. <i>4open</i> , 2022, 5, E2.	0.4	1
191	Catalytic Multiplicity of 15-Lipoxygenase-1 Orthologs (ALOX15) of Different Species. , 2016, , 47-82.		0