Umberto Mura

List of Publications by Citations

63 papers	1,366 citations	24 h-index	34 g-index
65 ext. papers	1,477 ext. citations	4.7 avg, IF	3.55 L-index

#	Paper	IF	Citations
63	Synthesis, activity, and molecular modeling of a new series of tricyclic pyridazinones as selective aldose reductase inhibitors. *Journal of Medicinal Chemistry*, **1996**, 39, 4396-405	8.3	85
62	1-Benzopyran-4-one antioxidants as aldose reductase inhibitors. *Journal of Medicinal Chemistry*, **1999**, 42, 1881-93	8.3	82
61	Identification of 5-arylidene-4-thiazolidinone derivatives endowed with dual activity as aldose reductase inhibitors and antioxidant agents for the treatment of diabetic complications. *European Journal of Medicinal Chemistry*, **2011**, 46, 2797-806	6.8	76
60	Specifically targeted modification of human aldose reductase by physiological disulfides. *Journal of Biological Chemistry*, **1996**, 271, 33539-44	5.4	58
59	Structure-activity relationships and molecular modelling of new 5-arylidene-4-thiazolidinone derivatives as aldose reductase inhibitors and potential anti-inflammatory agents. *European Journal of Medicinal Chemistry*, **2014**, 81, 1-14	6.8	53
58	Glutathione dependent modification of bovine lens aldose reductase. *Experimental Eye Research*, **1994**, 58, 491-501	3.7	52
57	Oxidative modification of aldose reductase induced by copper ion. Definition of the metal-protein interaction mechanism. *Journal of Biological Chemistry*, **2002**, 277, 42017-27	5.4	51
56	Site-specific inactivation of aldose reductase by 4-hydroxynonenal. *Archives of Biochemistry and Biophysics*, **1998**, 350, 245-8	4.1	51
55	New role for leucyl aminopeptidase in glutathione turnover. *Biochemical Journal*, **2004**, 378, 35-44	3.8	49
54	In vitro evaluation of 5-arylidene-2-thioxo-4-thiazolidinones active as aldose reductase inhibitors. *Bioorganic and Medicinal Chemistry Letters*, **2011**, 21, 200-3	2.9	44
53	Bovine lens aldose reductase: tight binding of the pyridine coenzyme. *Archives of Biochemistry and Biophysics*, **1990**, 283, 512-8	4.1	40
52	A new approach to control the enigmatic activity of aldose reductase. *PLoS ONE*, **2013**, 8, e74076	3.7	35
51	Identification of new non-carboxylic acid containing inhibitors of aldose reductase. *Bioorganic and Medicinal Chemistry*, **2010**, 18, 4049-55	3.4	30
50	Metal ion substitution in the catalytic site greatly affects the binding of sulfhydryl-containing compounds to leucyl aminopeptidase. *Biochemistry*, **2006**, 45, 3226-34	3.2	30
49	Aldose reductase does catalyse the reduction of glyceraldehyde through a stoichiometric oxidation of NADPH. *Experimental Eye Research*, **2000**, 71, 515-21	3.7	30
48	Bovine lens aldose reductase: identification of two enzyme forms. *Archives of Biochemistry and Biophysics*, **1989**, 270, 604-10	4.1	30
47	Complete protection by alpha-crystallin of lens sorbitol dehydrogenase undergoing thermal stress. *Journal of Biological Chemistry*, **2000**, 275, 32559-65	5.4	29

46	A new approach against sugar cataract through aldose reductase inhibitors. *Experimental Eye Research*, **1999**, 69, 533-8	3.7	29
45	Sorbitol dehydrogenase from bovine lens: purification and properties. *Archives of Biochemistry and Biophysics*, **1997**, 340, 383-91	4.1	26
44	Thioltransferase activity of bovine lens glutathione S-transferase. *Biochemical Journal*, **1998**, 334 (Pt 1), 57-62	3.8	26
43	Thiol and disulfide determination by free zone capillary electrophoresis. *Journal of Proteomics*, **1993**, 26, 335-41		26
42	Design, Synthesis and in Combo Antidiabetic Bioevaluation of Multitarget Phenylpropanoic Acids. *Molecules*, **2018**, 23,	4.8	25
41	Structure-based design of an inhibitor modeled at the substrate active site of aldose reductase. *Bioorganic and Medicinal Chemistry Letters*, **1997**, 7, 1897-1902	2.9	24
40	In vitro modification of bovine lens aldose reductase activity. *Biochemical and Biophysical Research Communications*, **1987**, 148, 369-75	3.4	24
39	Colorimetric coupled enzyme assay for gamma-glutamyltransferase activity using glutathione as substrate. *Journal of Proteomics*, **2006**, 67, 123-30		23
38	Thiol disulfide exchange modulates the activity of aldose reductase in intact bovine lens as a response to oxidative stress. *Experimental Eye Research*, **2000**, 70, 795-803	3.7	20
37	Human carbonyl reductase 1 as efficient catalyst for the reduction of glutathionylated aldehydes derived from lipid peroxidation. *Free Radical Biology and Medicine*, **2016**, 99, 323-332	7.8	20
36	NADP(+)-dependent dehydrogenase activity of carbonyl reductase on glutathionylhydroxynonanal as a new pathway for hydroxynonenal detoxification. *Free Radical Biology and Medicine*, **2015**, 83, 66-76	7.8	19
35	Physiological thiols as promoters of glutathione oxidation and modifying agents in protein S-thiolation. *Archives of Biochemistry and Biophysics*, **2002**, 397, 392-8	4.1	19
34	L-Idose: an attractive substrate alternative to D-glucose for measuring aldose reductase activity. *Biochemical and Biophysical Research Communications*, **2015**, 456, 891-5	3.4	18
33	Oxidative modification of aldose reductase induced by copper ion. Factors and conditions affecting the process. *Biochemistry*, **1998**, 37, 14167-74	3.2	18
32	7-Hydroxy-2-substituted-4-H-1-benzopyran-4-one derivatives as aldose reductase inhibitors: a SAR study. *European Journal of Medicinal Chemistry*, **2001**, 36, 697-703	6.8	18
31	Modulation of aldose reductase activity through S-thiolation by physiological thiols. *Chemico-Biological Interactions*, **2001**, 130-132, 597-608	5	18
30	The use of dimethylsulfoxide as a solvent in enzyme inhibition studies: the case of aldose reductase. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2017**, 32, 1152-1158	5.6	17
29	Thiol/disulfide interconversion in bovine lens aldose reductase induced by intermediates of glutathione turnover. *Biochemistry*, **2001**, 40, 11985-94	3.2	16

28	Rapid colorimetric determination of reduced and oxidized glutathione using an end point coupled enzymatic assay. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 1779-85	4.4	15
27	Zolfino landrace (Phaseolus vulgaris L.) from Pratomagno: general and specific features of a functional food. *Food and Nutrition Research*, **2016**, 60, 31792	3.1	13
26	Modulation of aldose reductase activity by aldose hemiacetals. *Biochimica Et Biophysica Acta - General Subjects*, **2015**, 1850, 2329-39	4	12
25	Basic models for differential inhibition of enzymes. *Biochemical and Biophysical Research Communications*, **2014**, 445, 556-60	3.4	12
24	Acid Derivatives of Pyrazolo[1,5-a]pyrimidine as Aldose Reductase Differential Inhibitors. *Cell Chemical Biology*, **2018**, 25, 1414-1418.e3	8.2	9
23	Interaction of arabinogalactan with mucins. *International Journal of Biological Macromolecules*, **2014** , 67, 446-51	7.9	9
22	Chaperone-like activity of alpha-crystallin toward aldose reductase oxidatively stressed by copper ion. *Archives of Biochemistry and Biophysics*, **2006**, 453, 13-7	4.1	9
21	Soyasaponins from Zolfino bean as aldose reductase differential inhibitors. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2019**, 34, 350-360	5.6	9
20	Binding of 1-benzopyran-4-one derivatives to aldose reductase: a free energy perturbation study. *Bioorganic and Medicinal Chemistry*, **2002**, 10, 1427-36	3.4	8
19	Edible vegetables as a source of aldose reductase differential inhibitors. *Chemico-Biological Interactions*, **2017**, 276, 155-159	5	7
18	Cysteinyl-glycine in the control of glutathione homeostasis in bovine lenses. *Molecular Vision*, **2010**, 16, 1025-33	2.3	7
17	Kinetic features of carbonyl reductase 1 acting on glutathionylated aldehydes. *Chemico-Biological Interactions*, **2017**, 276, 127-132	5	6
16	Aldose Reductase Differential Inhibitors in Green Tea. *Biomolecules*, **2020**, 10,	5.9	6
15	Stereoselectivity of Aldose Reductase in the Reduction of Glutathionyl-Hydroxynonanal Adduct. *Antioxidants*, **2019**, 8,	7.1	6
14	Pathways of 4-Hydroxy-2-Nonenal Detoxification in a Human Astrocytoma Cell Line. *Antioxidants*, **2020**, 9,	7.1	4
13	The furanosidic scaffold of d-ribose: a milestone for cell life. *Biochemical Society Transactions*, **2019**, 47, 1931-1940	5.1	4
12	Intra-site differential inhibition of multi-specific enzymes. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2020**, 35, 840-846	5.6	3
11	How the chemical features of molecules may have addressed the settlement of metabolic steps. *Metabolomics*, **2017**, 14, 2	4.7	2

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10	Impact on enzyme activity as a new quality index of wastewater. *Journal of Environmental Management*, **2013**, 117, 76-84	7.9	2
9	Thiol oxidase ability of copper ion is specifically retained upon chelation by aldose reductase. *Journal of Biological Inorganic Chemistry*, **2017**, 22, 559-565	3.7	2
8	Zofenoprilat-glutathione mixed disulfide as a specific S-thiolating agent of bovine lens aldose reductase. *Antioxidants and Redox Signaling*, **2005**, 7, 841-8	8.4	2
7	Dehydrogenase/reductase activity of human carbonyl reductase 1 with NADP(H) acting as a prosthetic group. *Biochemical and Biophysical Research Communications*, **2020**, 522, 259-263	3.4	2
6	Interconversion pathways of aldose reductase induced by thiol compounds. *Advances in Experimental Medicine and Biology*, **1999**, 463, 453-8	3.6	2
5	Apparent cooperativity and apparent hyperbolic behavior of enzyme mixtures acting on the same substrate. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2016**, 31, 1556-9	5.6	1
4	Purification and characterization of a Cys-Gly hydrolase from the gastropod mollusk, Patella caerulea. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2016**, 31, 1560-5	5.6	0
3	Models of enzyme inhibition and apparent dissociation constants from kinetic analysis to study the differential inhibition of aldose reductase. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2022**, 37, 1426-1436	5.6	0
2	Colorimetric Coupled Enzyme Assay for Cystathionine β-Synthase. *Analytical Sciences*, **2016**, 32, 901-6	1.7	
1	Modelling Biochemical Pathways with the Calculus of Looping Sequences. *SIMAI Springer Series*, **2012**, 105-125		