# Umberto Mura

List of Publications by Year
in descending order



| 64 | 1,597 | 236612 | 315357 |
|---|---|---|---|
| papers | citations | 25 h-index | 38 g-index |

| 65 | 65 | 65 | 1573 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 1-Benzopyran-4-one Antioxidants as Aldose Reductase Inhibitors. Journal of Medicinal Chemistry, 1999, 42, 1881-1893. | 2.9 | 95 |
| 2 | 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, 2797-2806. | 2.6 | 94 |
| 3 | Synthesis, Activity, and Molecular Modeling of a New Series of Tricyclic Pyridazinones as Selective Aldose Reductase Inhibitors. Journal of Medicinal Chemistry, 1996, 39, 4396-4405. | 2.9 | 90 |
| 4 | Structureâ€“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. | 2.6 | 63 |
| 5 | Specifically Targeted Modification of Human Aldose Reductase by Physiological Disulfides. Journal of Biological Chemistry, 1996, 271, 33539-33544. | 1.6 | 62 |
| 6 | New role for leucyl aminopeptidase in glutathione turnover. Biochemical Journal, 2004, 378, 35-44. | 1.7 | 58 |
| 7 | Site-Specific Inactivation of Aldose Reductase by 4-Hydroxynonenal. Archives of Biochemistry and Biophysics, 1998, 350, 245-248. | 1.4 | 57 |
| 8 | Oxidative Modification of Aldose Reductase Induced by Copper Ion. Journal of Biological Chemistry, 2002, 277, 42017-42027. | 1.6 | 56 |
| 9 | In vitro evaluation of 5-arylidene-2-thioxo-4-thiazolidinones active as aldose reductase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 200-203. | 1.0 | 56 |
| 10 | Glutathione Dependent Modification of Bovine Lens Aldose Reductase. Experimental Eye Research, 1994, 58, 491-501. | 1.2 | 54 |
| 11 | Bovine lens aldose reductase: Tight binding of the pyridine coenzyme. Archives of Biochemistry and Biophysics, 1990, 283, 512-518. | 1.4 | 43 |
| 12 | A New Approach to Control the Enigmatic Activity of Aldose Reductase. PLoS ONE, 2013, 8, e74076. | 1.1 | 39 |
| 13 | Metal Ion Substitution in the Catalytic Site Greatly Affects the Binding of Sulfhydryl-Containing Compounds to Leucyl Aminopeptidase,. Biochemistry, 2006, 45, 3226-3234. | 1.2 | 34 |
| 14 | Bovine lens aldose reductase: Identification of two enzyme forms. Archives of Biochemistry and Biophysics, 1989, 270, 604-610. | 1.4 | 33 |
| 15 | Complete Protection by Î±-Crystallin of Lens Sorbitol Dehydrogenase Undergoing Thermal Stress. Journal of Biological Chemistry, 2000, 275, 32559-32565. | 1.6 | 33 |
| 16 | Identification of new non-carboxylic acid containing inhibitors of aldose reductase. Bioorganic and Medicinal Chemistry, 2010, 18, 4049-4055. | 1.4 | 33 |
| 17 | Design, Synthesis and in Combo Antidiabetic Bioevaluation of Multitarget Phenylpropanoic Acids. Molecules, 2018, 23, 340. | 1.7 | 33 |
| 18 | Aldose Reductase does Catalyse the Reduction of Glyceraldehyde Through a Stoichiometric Oxidation of NADPH. Experimental Eye Research, 2000, 71, 515-521. | 1.2 | 31 |

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|---|---|---|---|
| 19 | A New Approach Against Sugar Cataract Through Aldose Reductase Inhibitors. Experimental Eye Research, 1999, 69, 533-538. | 1.2 | 30 |
| 20 | 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. | 2.5 | 29 |
| 21 | Thiol and disulfide determination by free zone capillar electrophoresis. Journal of Proteomics, 1993, 26, 335-341. | 2.4 | 28 |
| 22 | Thioltransferase activity of bovine lens glutathione S-transferase. Biochemical Journal, 1998, 334, 57-62. | 1.7 | 28 |
| 23 | Colorimetric coupled enzyme assay for Î³-glutamyltransferase activity using glutathione as substrate. Journal of Proteomics, 2006, 67, 123-130. | 2.4 | 28 |
| 24 | Sorbitol Dehydrogenase from Bovine Lens: Purification and Properties. Archives of Biochemistry and Biophysics, 1997, 340, 383-391. | 1.4 | 26 |
| 25 | Structure-based design of an inhibitor modeled at the substrate active site of aldose reductase. Bioorganic and Medicinal Chemistry Letters, 1997, 7, 1897-1902. | 1.0 | 26 |
| 26 | In vitro modification of bovine lens aldose reductase activity. Biochemical and Biophysical Research Communications, 1987, 148, 369-375. | 1.0 | 25 |
| 27 | 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. | 1.2 | 22 |
| 28 | 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. | 2.6 | 22 |
| 29 | l-Idose: an attractive substrate alternative to d-glucose for measuring aldose reductase activity. Biochemical and Biophysical Research Communications, 2015, 456, 891-895. | 1.0 | 22 |
| 30 | 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. | 1.3 | 22 |
| 31 | Physiological Thiols as Promoters of Glutathione Oxidation and Modifying Agents in Protein S-Thiolation. Archives of Biochemistry and Biophysics, 2002, 397, 392-398. | 1.4 | 20 |
| 32 | 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. | 1.3 | 20 |
| 33 | Modulation of aldose reductase activity through S-thiolation by physiological thiols. Chemico-Biological Interactions, 2001, 130-132, 597-608. | 1.7 | 19 |
| 34 | In Search of Differential Inhibitors of Aldose Reductase. Biomolecules, 2022, 12, 485. | 1.8 | 19 |
| 35 | Oxidative Modification of Aldose Reductase Induced by Copper Ion. Factors and Conditions Affecting the Processâ€. Biochemistry, 1998, 37, 14167-14174. | 1.2 | 18 |
| 36 | Rapid colorimetric determination of reduced and oxidized glutathione using an end point coupled enzymatic assay. Analytical and Bioanalytical Chemistry, 2013, 405, 1779-1785. | 1.9 | 17 |

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|---|---|---|---|
| 37 | Thiol/Disulfide Interconversion in Bovine Lens Aldose Reductase Induced by Intermediates of Glutathione Turnoverâ€. Biochemistry, 2001, 40, 11985-11994. | 1.2 | 16 |
| 38 | Modulation of aldose reductase activity by aldose hemiacetals. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 2329-2339. | 1.1 | 16 |
| 39 | Zolfino landrace (Phaseolus vulgarisL.) from Pratomagno: general and specific features of a functional food. Food and Nutrition Research, 2016, 60, 31792. | 1.2 | 16 |
| 40 | Acid Derivatives of Pyrazolo[1,5-a]pyrimidine as Aldose Reductase Differential Inhibitors. Cell Chemical Biology, 2018, 25, 1414-1418.e3. | 2.5 | 16 |
| 41 | Basic models for differential inhibition of enzymes. Biochemical and Biophysical Research Communications, 2014, 445, 556-560. | 1.0 | 13 |
| 42 | Stereoselectivity of Aldose Reductase in the Reduction of Glutathionyl-Hydroxynonanal Adduct. Antioxidants, 2019, 8, 502. | 2.2 | 12 |
| 43 | Interaction of arabinogalactan with mucins. International Journal of Biological Macromolecules, 2014, 67, 446-451. | 3.6 | 11 |
| 44 | Soyasaponins from Zolfino bean as aldose reductase differential inhibitors. Journal of Enzyme Inhibition and Medicinal Chemistry, 2019, 34, 350-360. | 2.5 | 11 |
| 45 | Aldose Reductase Differential Inhibitors in Green Tea. Biomolecules, 2020, 10, 1003. | 1.8 | 11 |
| 46 | Chaperone-like activity of Î±-crystallin toward aldose reductase oxidatively stressed by copper ion. Archives of Biochemistry and Biophysics, 2006, 453, 13-17. | 1.4 | 10 |
| 47 | Edible vegetables as a source of aldose reductase differential inhibitors. Chemico-Biological Interactions, 2017, 276, 155-159. | 1.7 | 10 |
| 48 | Binding of 1-Benzopyran-4-one Derivatives to Aldose Reductase: A Free Energy Perturbation Study. Bioorganic and Medicinal Chemistry, 2002, 10, 1427-1436. | 1.4 | 8 |
| 49 | Kinetic features of carbonyl reductase 1 acting on glutathionylated aldehydes. Chemico-Biological Interactions, 2017, 276, 127-132. | 1.7 | 8 |
| 50 | Cysteinyl-glycine in the control of glutathione homeostasis in bovine lenses. Molecular Vision, 2010, 16, 1025-33. | 1.1 | 8 |
| 51 | Pathways of 4-Hydroxy-2-Nonenal Detoxification in a Human Astrocytoma Cell Line. Antioxidants, 2020, 9, 385. | 2.2 | 7 |
| 52 | The furanosidic scaffold of <scp>d</scp>-ribose: a milestone for cell life. Biochemical Society Transactions, 2019, 47, 1931-1940. | 1.6 | 7 |
| 53 | Intra-site differential inhibition of multi-specific enzymes. Journal of Enzyme Inhibition and Medicinal Chemistry, 2020, 35, 840-846. | 2.5 | 6 |
| 54 | How the chemical features of molecules may have addressed the settlement of metabolic steps. Metabolomics, 2018, 14, 2. | 1.4 | 4 |

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| 55 | 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. | 2.5 | 4 |
| 56 | Impact on enzyme activity as a new quality index of wastewater. Journal of Environmental Management, 2013, 117, 76-84. | 3.8 | 3 |
| 57 | Zofenoprilat-Glutathione Mixed Disulfide as a Specific S-Thiolating Agent of Bovine Lens Aldose Reductase. Antioxidants and Redox Signaling, 2005, 7, 841-848. | 2.5 | 2 |
| 58 | Thiol oxidase ability of copper ion is specifically retained upon chelation by aldose reductase. Journal of Biological Inorganic Chemistry, 2017, 22, 559-565. | 1.1 | 2 |
| 59 | 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. | 1.0 | 2 |
| 60 | Interconversion Pathways of Aldose Reductase Induced by Thiol Compounds. Advances in Experimental Medicine and Biology, 1999, 463, 453-458. | 0.8 | 2 |
| 61 | Purification and characterization of a Cys-Gly hydrolase from the gastropod mollusk,Patella caerulea. Journal of Enzyme Inhibition and Medicinal Chemistry, 2016, 31, 1560-1565. | 2.5 | 1 |
| 62 | Apparent cooperativity and apparent hyperbolic behavior of enzyme mixtures acting on the same substrate. Journal of Enzyme Inhibition and Medicinal Chemistry, 2016, 31, 1556-1559. | 2.5 | 1 |
| 63 | Colorimetric Coupled Enzyme Assay for Cystathionine β-Synthase. Analytical Sciences, 2016, 32, 901-906. | 0.8 | 0 |
| 64 | Modelling Biochemical Pathways with the Calculus of Looping Sequences. SIMAI Springer Series, 2012, , 105-125. | 0.4 | 0 |