

Elias Arnr

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

180
papers

14,406
citations

55
h-index

117
g-index

210
ext. papers

16,109
ext. citations

7.4
avg. IF

6.86
L-index

#	Paper	IF	Citations
180	Reactive oxygen species, antioxidants, and the mammalian thioredoxin system. <i>Free Radical Biology and Medicine</i> , 2001 , 31, 1287-312	7.8	1903
179	Physiological functions of thioredoxin and thioredoxin reductase. <i>FEBS Journal</i> , 2000 , 267, 6102-9		1793
178	Focus on mammalian thioredoxin reductases--important selenoproteins with versatile functions. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2009 , 1790, 495-526	4	472
177	Mammalian deoxyribonucleoside kinases 1995 , 67, 155-86		463
176	Selenium Utilization by GPX4 Is Required to Prevent Hydroperoxide-Induced Ferroptosis. <i>Cell</i> , 2018 , 172, 409-422.e21	56.2	446
175	The thioredoxin system in cancer. <i>Seminars in Cancer Biology</i> , 2006 , 16, 420-6	12.7	409
174	Structure and mechanism of mammalian thioredoxin reductase: the active site is a redox-active selenolthiol/selenenylsulfide formed from the conserved cysteine-selenocysteine sequence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 5854-9	11.5	382
173	Preparation and assay of mammalian thioredoxin and thioredoxin reductase. <i>Methods in Enzymology</i> , 1999 , 300, 226-39	1.7	256
172	Selenocysteine in proteins-properties and biotechnological use. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2005 , 1726, 1-13	4	249
171	Thioredoxin glutathione reductase from <i>Schistosoma mansoni</i> : an essential parasite enzyme and a key drug target. <i>PLoS Medicine</i> , 2007 , 4, e206	11.6	234
170	Selenoproteins-What unique properties can arise with selenocysteine in place of cysteine?. <i>Experimental Cell Research</i> , 2010 , 316, 1296-303	4.2	211
169	High-level expression in <i>Escherichia coli</i> of selenocysteine-containing rat thioredoxin reductase utilizing gene fusions with engineered bacterial-type SECIS elements and co-expression with the selA, selB and selC genes. <i>Journal of Molecular Biology</i> , 1999 , 292, 1003-16	6.5	207
168	Rat and calf thioredoxin reductase are homologous to glutathione reductase with a carboxyl-terminal elongation containing a conserved catalytically active penultimate selenocysteine residue. <i>Journal of Biological Chemistry</i> , 1998 , 273, 8581-91	5.4	206
167	Paradoxical Roles of Antioxidant Enzymes: Basic Mechanisms and Health Implications. <i>Physiological Reviews</i> , 2016 , 96, 307-64	47.9	196
166	Inhibition of thioredoxin reductase but not of glutathione reductase by the major classes of alkylating and platinum-containing anticancer compounds. <i>Free Radical Biology and Medicine</i> , 2005 , 39, 696-703	7.8	178
165	A novel persulfide detection method reveals protein persulfide- and polysulfide-reducing functions of thioredoxin and glutathione systems. <i>Science Advances</i> , 2016 , 2, e1500968	14.3	175
164	Active sites of thioredoxin reductases: why selenoproteins?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 12618-23	11.5	172

163	Mammalian thioredoxin reductase is irreversibly inhibited by dinitrohalobenzenes by alkylation of both the redox active selenocysteine and its neighboring cysteine residue. <i>Journal of Biological Chemistry</i> , 1998 , 273, 10835-42	5.4	169
162	Efficient reduction of lipoamide and lipoic acid by mammalian thioredoxin reductase. <i>Biochemical and Biophysical Research Communications</i> , 1996 , 225, 268-74	3.4	162
161	1-Chloro-2,4-dinitrobenzene is an irreversible inhibitor of human thioredoxin reductase. Loss of thioredoxin disulfide reductase activity is accompanied by a large increase in NADPH oxidase activity. <i>Journal of Biological Chemistry</i> , 1995 , 270, 3479-82	5.4	157
160	ROS-dependent activation of JNK converts p53 into an efficient inhibitor of oncogenes leading to robust apoptosis. <i>Cell Death and Differentiation</i> , 2014 , 21, 612-23	12.7	151
159	Regulation of the mammalian selenoprotein thioredoxin reductase 1 in relation to cellular phenotype, growth, and signaling events. <i>Antioxidants and Redox Signaling</i> , 2004 , 6, 41-52	8.4	151
158	TrxR1 as a potent regulator of the Nrf2-Keap1 response system. <i>Antioxidants and Redox Signaling</i> , 2015 , 23, 823-53	8.4	149
157	Selenoprotein Gene Nomenclature. <i>Journal of Biological Chemistry</i> , 2016 , 291, 24036-24040	5.4	147
156	Crystal structure and catalysis of the selenoprotein thioredoxin reductase 1. <i>Journal of Biological Chemistry</i> , 2009 , 284, 3998-4008	5.4	146
155	The mammalian cytosolic selenoenzyme thioredoxin reductase reduces ubiquinone. A novel mechanism for defense against oxidative stress. <i>Journal of Biological Chemistry</i> , 2003 , 278, 21411-6	5.4	143
154	Analysis of the inhibition of mammalian thioredoxin, thioredoxin reductase, and glutaredoxin by cis-diamminedichloroplatinum (II) and its major metabolite, the glutathione-platinum complex. <i>Free Radical Biology and Medicine</i> , 2001 , 31, 1170-8	7.8	140
153	Rapid induction of cell death by selenium-compromised thioredoxin reductase 1 but not by the fully active enzyme containing selenocysteine. <i>Journal of Biological Chemistry</i> , 2003 , 278, 15966-72	5.4	131
152	Selective assays for thymidine kinase 1 and 2 and deoxycytidine kinase and their activities in extracts from human cells and tissues. <i>Biochemical and Biophysical Research Communications</i> , 1992 , 188, 712-8	3.4	131
151	The thioredoxin reductase inhibitor auranofin triggers apoptosis through a Bax/Bak-dependent process that involves peroxiredoxin 3 oxidation. <i>Biochemical Pharmacology</i> , 2008 , 76, 1097-109	6	129
150	Cell death by SecTRAPs: thioredoxin reductase as a prooxidant killer of cells. <i>PLoS ONE</i> , 2008 , 3, e1846	3.7	122
149	Interactions of quinones with thioredoxin reductase: a challenge to the antioxidant role of the mammalian selenoprotein. <i>Journal of Biological Chemistry</i> , 2004 , 279, 2583-92	5.4	110
148	APR-246/PRIMA-1MET inhibits thioredoxin reductase 1 and converts the enzyme to a dedicated NADPH oxidase. <i>Cell Death and Disease</i> , 2013 , 4, e881	9.8	108
147	Irreversible inhibition of cytosolic thioredoxin reductase 1 as a mechanistic basis for anticancer therapy. <i>Science Translational Medicine</i> , 2018 , 10,	17.5	106
146	High levels of thioredoxin reductase 1 modulate drug-specific cytotoxic efficacy. <i>Free Radical Biology and Medicine</i> , 2009 , 47, 1661-71	7.8	93

145	Interactions of nitroaromatic compounds with the mammalian selenoprotein thioredoxin reductase and the relation to induction of apoptosis in human cancer cells. <i>Journal of Biological Chemistry</i> , 2006 , 281, 5593-603	5.4	93
144	Effects of selenite and chelating agents on mammalian thioredoxin reductase inhibited by mercury: implications for treatment of mercury poisoning. <i>FASEB Journal</i> , 2011 , 25, 370-81	0.9	90
143	Thioredoxin-related protein of 14 kDa is an efficient L-cystine reductase and S-denitrosylase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 6964-9	11.5	88
142	Truncated thioredoxin is a mitogenic cytokine for resting human peripheral blood mononuclear cells and is present in human plasma. <i>Journal of Biological Chemistry</i> , 2000 , 275, 37474-80	5.4	85
141	Cisplatin and oxaliplatin toxicity: importance of cochlear kinetics as a determinant for ototoxicity. <i>Journal of the National Cancer Institute</i> , 2009 , 101, 37-47	9.7	84
140	Expression of deoxycytidine kinase and phosphorylation of 2-chlorodeoxyadenosine in human normal and tumour cells and tissues. <i>European Journal of Cancer</i> , 1995 , 31A, 202-8	7.5	84
139	Exploiting the 21st amino acid-purifying and labeling proteins by selenolate targeting. <i>Nature Methods</i> , 2004 , 1, 61-6	21.6	82
138	Substrate and inhibitor specificities differ between human cytosolic and mitochondrial thioredoxin reductases: Implications for development of specific inhibitors. <i>Free Radical Biology and Medicine</i> , 2011 , 50, 689-99	7.8	81
137	p53-dependent inhibition of TrxR1 contributes to the tumor-specific induction of apoptosis by RITA. <i>Cell Cycle</i> , 2009 , 8, 3584-91	4.7	77
136	Evidence for intriguingly complex transcription of human thioredoxin reductase 1. <i>Free Radical Biology and Medicine</i> , 2004 , 36, 641-56	7.8	76
135	Assessment of production conditions for efficient use of Escherichia coli in high-yield heterologous recombinant selenoprotein synthesis. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 5159-67	4.8	73
134	Noble metal targeting of thioredoxin reductase-covalent complexes with thioredoxin and thioredoxin-related protein of 14 kDa triggered by cisplatin. <i>Free Radical Biology and Medicine</i> , 2010 , 49, 1765-78	7.8	72
133	Selective activation of oxidized PTP1B by the thioredoxin system modulates PDGF- β receptor tyrosine kinase signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 13398-403	11.5	69
132	Dietary methionine can sustain cytosolic redox homeostasis in the mouse liver. <i>Nature Communications</i> , 2015 , 6, 6479	17.4	67
131	Structure mechanism insights and the role of nitric oxide donation guide the development of oxadiazole-2-oxides as therapeutic agents against schistosomiasis. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 6474-83	8.3	66
130	The core promoter of human thioredoxin reductase 1: cloning, transcriptional activity, and Oct-1, Sp1, and Sp3 binding reveal a housekeeping-type promoter for the AU-rich element-regulated gene. <i>Journal of Biological Chemistry</i> , 2001 , 276, 30542-51	5.4	66
129	Repurposing of auranofin: Thioredoxin reductase remains a primary target of the drug. <i>Biochimie</i> , 2019 , 162, 46-54	4.6	61
128	Control of protein function through oxidation and reduction of persulfidated states. <i>Science Advances</i> , 2020 , 6, eaax8358	14.3	60

127	Measurement of thioredoxin and thioredoxin reductase. <i>Current Protocols in Toxicology / Editorial Board, Mahin D Maines (editor-in-chief) [et Al], 2001</i> , Chapter 7, Unit 7.4.	1	59
126	Properties and levels of deoxynucleoside kinases in normal and tumor cells; implications for chemotherapy. <i>Advances in Enzyme Regulation, 1994</i> , 34, 13-25		59
125	Selenoprotein TRXR-1 and GSR-1 are essential for removal of old cuticle during molting in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America, 2011</i> , 108, 1064-9	11.5	55
124	Mitochondrial peroxiredoxin 3 is rapidly oxidized in cells treated with isothiocyanates. <i>Free Radical Biology and Medicine, 2008</i> , 45, 494-502	7.8	53
123	Deoxycytidine kinase is constitutively expressed in human lymphocytes: consequences for compartmentation effects, unscheduled DNA synthesis, and viral replication in resting cells. <i>Experimental Cell Research, 1988</i> , 178, 335-42	4.2	53
122	A Txnrd1-dependent metabolic switch alters hepatic lipogenesis, glycogen storage, and detoxification. <i>Free Radical Biology and Medicine, 2013</i> , 63, 369-80	7.8	52
121	Hepatocyte DNA replication in growing liver requires either glutathione or a single allele of txnrd1. <i>Free Radical Biology and Medicine, 2012</i> , 52, 803-10	7.8	52
120	The 19S Deubiquitinase inhibitor b-AP15 is enriched in cells and elicits rapid commitment to cell death. <i>Molecular Pharmacology, 2014</i> , 85, 932-45	4.3	51
119	Overexpression of enzymatically active human cytosolic and mitochondrial thioredoxin reductase in HEK-293 cells. Effect on cell growth and differentiation. <i>Journal of Biological Chemistry, 2004</i> , 279, 54510-7	5.4	50
118	Cytosolic thioredoxin reductase 1 is required for correct disulfide formation in the ER. <i>EMBO Journal, 2017</i> , 36, 693-702	13	49
117	The selenium-independent inherent pro-oxidant NADPH oxidase activity of mammalian thioredoxin reductase and its selenium-dependent direct peroxidase activities. <i>Journal of Biological Chemistry, 2010</i> , 285, 21708-23	5.4	49
116	Multilevel regulation of 2-Cys peroxiredoxin reaction cycle by S-nitrosylation. <i>Journal of Biological Chemistry, 2013</i> , 288, 11312-24	5.4	47
115	Regeneration of the antioxidant ubiquinol by lipoamide dehydrogenase, thioredoxin reductase and glutathione reductase. <i>BioFactors, 2003</i> , 18, 45-50	6.1	46
114	The A to Z of modulated cell patterning by mammalian thioredoxin reductases. <i>Free Radical Biology and Medicine, 2018</i> , 115, 484-496	7.8	44
113	Thioredoxin reductase inhibition elicits Nrf2-mediated responses in Clara cells: implications for oxidant-induced lung injury. <i>Antioxidants and Redox Signaling, 2012</i> , 17, 1407-16	8.4	43
112	Hepatocyte Hyperproliferation upon Liver-Specific Co-disruption of Thioredoxin-1, Thioredoxin Reductase-1, and Glutathione Reductase. <i>Cell Reports, 2017</i> , 19, 2771-2781	10.6	42
111	NADPH-dependent and -independent disulfide reductase systems. <i>Free Radical Biology and Medicine, 2018</i> , 127, 248-261	7.8	41
110	Targeting the Selenoprotein Thioredoxin Reductase 1 for Anticancer Therapy. <i>Advances in Cancer Research, 2017</i> , 136, 139-151	5.9	40

109	Redox active motifs in selenoproteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 6976-81	11.5	39
108	Recombinant expression of mammalian selenocysteine-containing thioredoxin reductase and other selenoproteins in <i>Escherichia coli</i> . <i>Methods in Enzymology</i> , 2002 , 347, 226-35	1.7	39
107	Prolonged antigen-exposure with carbohydrate particle based vaccination prevents allergic immune responses in sensitized mice. <i>Allergy: European Journal of Allergy and Clinical Immunology</i> , 2009 , 64, 919-26	9.3	36
106	Details in the catalytic mechanism of mammalian thioredoxin reductase 1 revealed using point mutations and juglone-coupled enzyme activities. <i>Free Radical Biology and Medicine</i> , 2016 , 94, 110-20	7.8	35
105	Human Protein Atlas of redox systems - what can be learnt?. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2011 , 1810, 111-38	4	35
104	Induction of cell membrane protrusions by the N-terminal glutaredoxin domain of a rare splice variant of human thioredoxin reductase 1. <i>Journal of Biological Chemistry</i> , 2008 , 283, 2814-21	5.4	35
103	Thioredoxin reductase 1 is upregulated in atherosclerotic plaques: specific induction of the promoter in human macrophages by oxidized low-density lipoproteins. <i>Free Radical Biology and Medicine</i> , 2004 , 37, 71-85	7.8	35
102	Selenocysteine Insertion at a Predefined UAG Codon in a Release Factor 1 (RF1)-depleted Host Strain Bypasses Species Barriers in Recombinant Selenoprotein Translation. <i>Journal of Biological Chemistry</i> , 2017 , 292, 5476-5487	5.4	34
101	Bicarbonate is essential for protein-tyrosine phosphatase 1B (PTP1B) oxidation and cellular signaling through EGF-triggered phosphorylation cascades. <i>Journal of Biological Chemistry</i> , 2019 , 294, 12330-12338	5.4	33
100	Sepp1(UF) forms are N-terminal selenoprotein P truncations that have peroxidase activity when coupled with thioredoxin reductase-1. <i>Free Radical Biology and Medicine</i> , 2014 , 69, 67-76	7.8	33
99	Tagging recombinant proteins with a Sel-tag for purification, labeling with electrophilic compounds or radiolabeling with ¹¹ C. <i>Nature Protocols</i> , 2006 , 1, 604-13	18.8	33
98	Cross Talk in HEK293 Cells Between Nrf2, HIF, and NF- κ B Activities upon Challenges with Redox Therapeutics Characterized with Single-Cell Resolution. <i>Antioxidants and Redox Signaling</i> , 2017 , 26, 229-246	8.4	30
97	The conserved Trp114 residue of thioredoxin reductase 1 has a redox sensor-like function triggering oligomerization and crosslinking upon oxidative stress related to cell death. <i>Cell Death and Disease</i> , 2015 , 6, e1616	9.8	30
96	Pyrroloquinoline quinone modulates the kinetic parameters of the mammalian selenoprotein thioredoxin reductase 1 and is an inhibitor of glutathione reductase. <i>Biochemical Pharmacology</i> , 2012 , 83, 815-20	6	30
95	Highly active dimeric and low-activity tetrameric forms of selenium-containing rat thioredoxin reductase 1. <i>Free Radical Biology and Medicine</i> , 2009 , 46, 893-904	7.8	30
94	TrxR1, Gsr, and oxidative stress determine hepatocellular carcinoma malignancy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 11408-11417	11.5	28
93	Which Antioxidant System Shapes Intracellular HO Gradients?. <i>Antioxidants and Redox Signaling</i> , 2019 , 31, 664-670	8.4	28
92	Expression of selenocysteine-containing glutathione S-transferase in <i>Escherichia coli</i> . <i>Biochemical and Biophysical Research Communications</i> , 2004 , 321, 94-101	3.4	28

91	Prominent expression of the selenoprotein thioredoxin reductase in the medullary rays of the rat kidney and thioredoxin reductase mRNA variants differing at the 5' untranslated region. <i>Biochemical Journal</i> , 2000 , 347, 661-668	3.8	28
90	Comprehensive chemical proteomics for target deconvolution of the redox active drug auranofin. <i>Redox Biology</i> , 2020 , 32, 101491	11.3	27
89	Differential regulation of expression of cytosolic and mitochondrial thioredoxin reductase in rat liver and kidney. <i>Archives of Biochemistry and Biophysics</i> , 2007 , 459, 178-88	4.1	27
88	Thioredoxin reductase 1 suppresses adipocyte differentiation and insulin responsiveness. <i>Scientific Reports</i> , 2016 , 6, 28080	4.9	26
87	Cisplatin and oxaliplatin are toxic to cochlear outer hair cells and both target thioredoxin reductase in organ of Corti cultures. <i>Acta Oto-Laryngologica</i> , 2014 , 134, 448-54	1.6	26
86	Thioredoxin reductase 1 and NADPH directly protect protein tyrosine phosphatase 1B from inactivation during HO exposure. <i>Journal of Biological Chemistry</i> , 2017 , 292, 14371-14380	5.4	26
85	HER2-positive tumors imaged within 1 hour using a site-specifically ¹¹ C-labeled Sel-tagged affibody molecule. <i>Journal of Nuclear Medicine</i> , 2012 , 53, 1446-53	8.9	26
84	On the phosphorylation of 2-chlorodeoxyadenosine (CdA) and its correlation with clinical response in leukemia treatment. <i>Leukemia and Lymphoma</i> , 1996 , 21, 225-31	1.9	26
83	Superoxide production by dinitrophenyl-derivatized thioredoxin reductase--a model for the mechanism and correlation to immunostimulation by dinitrohalobenzenes. <i>BioFactors</i> , 1999 , 10, 219-26	6.1	26
82	Inhibitory nitrosylation of mammalian thioredoxin reductase 1: Molecular characterization and evidence for its functional role in cellular nitroso-redox imbalance. <i>Free Radical Biology and Medicine</i> , 2016 , 97, 375-385	7.8	25
81	Entinostat up-regulates the CAMP gene encoding LL-37 via activation of STAT3 and HIF-1 transcription factors. <i>Scientific Reports</i> , 2016 , 6, 33274	4.9	25
80	Inhibition of thioredoxin reductase 1 by porphyrins and other small molecules identified by a high-throughput screening assay. <i>Free Radical Biology and Medicine</i> , 2011 , 50, 1114-23	7.8	25
79	Phosphorylation of 2-chlorodeoxyadenosine (CdA) in extracts of peripheral blood mononuclear cells of leukaemic patients. <i>British Journal of Haematology</i> , 1994 , 87, 715-8	4.5	24
78	Rutin protects against HO-triggered impaired relaxation of placental arterioles and induces Nrf2-mediated adaptation in Human Umbilical Vein Endothelial Cells exposed to oxidative stress. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2017 , 1861, 1177-1189	4	23
77	Time- and cell-resolved dynamics of redox-sensitive Nrf2, HIF and NF- κ B activities in 3D spheroids enriched for cancer stem cells. <i>Redox Biology</i> , 2017 , 12, 403-409	11.3	23
76	Homozygous mutation in TXNRD1 is associated with genetic generalized epilepsy. <i>Free Radical Biology and Medicine</i> , 2017 , 106, 270-277	7.8	22
75	Serum thioredoxin reductase levels increase in response to chemically induced acute liver injury. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2014 , 1840, 2105-11	4	22
74	Sec-containing TrxR1 is essential for self-sufficiency of cells by control of glucose-derived H ₂ O ₂ . <i>Cell Death and Disease</i> , 2014 , 5, e1235	9.8	22

73	Biochemical discrimination between selenium and sulfur 1: a single residue provides selenium specificity to human selenocysteine lyase. <i>PLoS ONE</i> , 2012 , 7, e30581	3.7	22
72	Direct Observation of Methylmercury and Auranofin Binding to Selenocysteine in Thioredoxin Reductase. <i>Inorganic Chemistry</i> , 2020 , 59, 2711-2718	5.1	21
71	The human thioredoxin reductase-1 splice variant TXNRD1_v3 is an atypical inducer of cytoplasmic filaments and cell membrane filopodia. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2009 , 1793, 1588-96	4.9	21
70	Irreversible TrxR1 inhibitors block STAT3 activity and induce cancer cell death. <i>Science Advances</i> , 2020 , 6, eaax7945	14.3	21
69	Redox effects and cytotoxic profiles of MJ25 and auranofin towards malignant melanoma cells. <i>Oncotarget</i> , 2015 , 6, 16488-506	3.3	20
68	Red wine triggers cell death and thioredoxin reductase inhibition: effects beyond resveratrol and SIRT1. <i>Experimental Cell Research</i> , 2009 , 315, 1360-71	4.2	20
67	Studies of an active site mutant of the selenoprotein thioredoxin reductase: the Ser-Cys-Cys-Ser motif of the insect orthologue is not sufficient to replace the Cys-Sec dyad in the mammalian enzyme. <i>Free Radical Biology and Medicine</i> , 2006 , 41, 649-56	7.8	20
66	Indolin-2-one compounds targeting thioredoxin reductase as potential anticancer drug leads. <i>Oncotarget</i> , 2016 , 7, 40233-40251	3.3	20
65	Thioredoxin-related protein of 14kDa as a modulator of redox signalling pathways. <i>British Journal of Pharmacology</i> , 2019 , 176, 544-553	8.6	18
64	Prominent expression of the selenoprotein thioredoxin reductase in the medullary rays of the rat kidney and thioredoxin reductase mRNA variants differing at the 5' untranslated region. <i>Biochemical Journal</i> , 2000 , 347, 661	3.8	18
63	Absence of TXNIP in Humans Leads to Lactic Acidosis and Low Serum Methionine Linked to Deficient Respiration on Pyruvate. <i>Diabetes</i> , 2019 , 68, 709-723	0.9	17
62	Redox activation of Fe(III)-thiosemicarbazones and Fe(III)-bleomycin by thioredoxin reductase: specificity of enzymatic redox centers and analysis of reactive species formation by ESR spin trapping. <i>Free Radical Biology and Medicine</i> , 2013 , 60, 183-94	7.8	17
61	The rare TXNRD1_v3 ("v3") splice variant of human thioredoxin reductase 1 protein is targeted to membrane rafts by N-acylation and induces filopodia independently of its redox active site integrity. <i>Journal of Biological Chemistry</i> , 2013 , 288, 10002-10011	5.4	17
60	Selenolthiol and dithiol C-terminal tetrapeptide motifs for one-step purification and labeling of recombinant proteins produced in <i>E. coli</i> . <i>ChemBioChem</i> , 2006 , 7, 1976-81	3.8	17
59	Thiophosphate and selenite conversely modulate cell death induced by glutathione depletion or cisplatin: effects related to activity and Sec contents of thioredoxin reductase. <i>Biochemical Journal</i> , 2012 , 447, 167-74	3.8	16
58	Chemical Reactivity Window Determines Prodrug Efficiency toward Glutathione Transferase Overexpressing Cancer Cells. <i>Molecular Pharmaceutics</i> , 2016 , 13, 2010-25	5.6	16
57	System-wide identification and prioritization of enzyme substrates by thermal analysis. <i>Nature Communications</i> , 2021 , 12, 1296	17.4	16
56	Mitochondrial versus cytosolic activities of deoxyribonucleoside salvage enzymes. <i>Advances in Experimental Medicine and Biology</i> , 1994 , 370, 201-4	3.6	16

55	Wobble decoding by the Escherichia coli selenocysteine insertion machinery. <i>Nucleic Acids Research</i> , 2013 , 41, 9800-11	20.1	15
54	Titration and conditional knockdown of the prfB gene in Escherichia coli: effects on growth and overproduction of the recombinant mammalian selenoprotein thioredoxin reductase. <i>Applied and Environmental Microbiology</i> , 2007 , 73, 432-41	4.8	15
53	Thioredoxin Reductase Inhibition for Cancer Therapy. <i>Annual Review of Pharmacology and Toxicology</i> , 2021 ,	17.9	15
52	Fragment-Based Discovery of a Regulatory Site in Thioredoxin Glutathione Reductase Acting as "Doorstop" for NADPH Entry. <i>ACS Chemical Biology</i> , 2018 , 13, 2190-2202	4.9	14
51	Characterization of Lead Compounds Targeting the Selenoprotein Thioredoxin Glutathione Reductase for Treatment of Schistosomiasis. <i>ACS Infectious Diseases</i> , 2020 , 6, 393-405	5.5	13
50	Cytotoxic unsaturated electrophilic compounds commonly target the ubiquitin proteasome system. <i>Scientific Reports</i> , 2019 , 9, 9841	4.9	12
49	A mouse model for in vivo tracking of the major dust mite allergen Der p 2 after inhalation. <i>FEBS Journal</i> , 2005 , 272, 3449-60	5.7	12
48	Serum thioredoxin reductase is highly increased in mice with hepatocellular carcinoma and its activity is restrained by several mechanisms. <i>Free Radical Biology and Medicine</i> , 2016 , 99, 426-435	7.8	12
47	Inhibition and crosslinking of the selenoprotein thioredoxin reductase-1 by p-benzoquinone. <i>Redox Biology</i> , 2020 , 28, 101335	11.3	12
46	Efficient selenocysteine-dependent reduction of toxoflavin by mammalian thioredoxin reductase. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2018 , 1862, 2511-2517	4	12
45	Expression and substrate specificities of human thymidine kinase 1, thymidine kinase 2 and deoxycytidine kinase. <i>Advances in Experimental Medicine and Biology</i> , 1991 , 309B, 239-43	3.6	12
44	Preclinical PET imaging of EGFR levels: pairing a targeting with a non-targeting Sel-tagged Affibody-based tracer to estimate the specific uptake. <i>EJNMMI Research</i> , 2016 , 6, 58	3.6	11
43	Combining [11C]-AnxA5 PET imaging with serum biomarkers for improved detection in live mice of modest cell death in human solid tumor xenografts. <i>PLoS ONE</i> , 2012 , 7, e42151	3.7	11
42	Deoxycytidine and 2Qdideoxycytidine metabolism in human monocyte-derived macrophages. A study of both anabolic and catabolic pathways. <i>Biochemical and Biophysical Research Communications</i> , 1993 , 197, 1499-504	3.4	11
41	Common modifications of selenocysteine in selenoproteins. <i>Essays in Biochemistry</i> , 2020 , 64, 45-53	7.6	10
40	Selective, Modular Probes for Thioredoxins Enabled by Rational Tuning of a Unique Disulfide Structure Motif. <i>Journal of the American Chemical Society</i> , 2021 , 143, 8791-8803	16.4	9
39	ProPerDP: A Protein Persulfide Detection Protocol. <i>Methods in Molecular Biology</i> , 2019 , 2007, 51-77	1.4	8
38	Biochemical discrimination between selenium and sulfur 2: mechanistic investigation of the selenium specificity of human selenocysteine lyase. <i>PLoS ONE</i> , 2012 , 7, e30528	3.7	8

37	To inhibit TrxR1 is to inactivate STAT3-Inhibition of TrxR1 enzymatic function by STAT3 small molecule inhibitors. <i>Redox Biology</i> , 2020 , 36, 101646	11.3	8
36	Selective Evaluation of Thioredoxin Reductase Enzymatic Activities. <i>Methods in Molecular Biology</i> , 2018 , 1661, 301-309	1.4	7
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