Xin-Gen Lei

List of Publications by Year in Descending Order

167 papers	6,998 citations	45 h-index	78 g-index
175 ext. papers	7,923 ext. citations	5.2 avg, IF	5.99 L-index

#	Paper	IF	Citations
167	Dietary microalgae on poultry meat and eggs: explained versus unexplained effects.. *Current Opinion in Biotechnology*, **2022**, 75, 102689	11.4	2
166	Excessive Aurantiochytrium acetophilum docosahexaenoic acid supplementation decreases growth performance and breast muscle mass of broiler chickens. *Algal Research*, **2022**, 63, 102648	5	0
165	Combined innovations in public policy, the private sector and culture can drive sustainability transitions in food systems. *Nature Food*, **2021**, 2, 282-290	14.4	12
164	Supplemental dietary full-fatted and defatted Desmodesmus sp. exerted similar effects on growth performance, gut health, and excreta hydrothermal liquefaction of broiler chicks. *Algal Research*, **2021**, 54, 102205	5	4
163	Unveiling the keratinolytic transcriptome of the black carpet beetle (Attagenus unicolor) for sustainable poultry feather recycling. *Applied Microbiology and Biotechnology*, **2021**, 105, 5577-5587	5.7	1
162	Glutathione peroxidase-1 and neuromodulation: Novel potentials of an old enzyme. *Food and Chemical Toxicology*, **2021**, 148, 111945	4.7	11
161	GPx-1-encoded adenoviral vector attenuates dopaminergic impairments induced by methamphetamine in GPx-1 knockout mice through modulation of NF-B transcription factor. *Food and Chemical Toxicology*, **2021**, 154, 112313	4.7	3
160	Loss of Selenov predisposes mice to extra fat accumulation and attenuated energy expenditure. *Redox Biology*, **2021**, 45, 102048	11.3	2
159	Gut Microbiota as a Mediator of Essential and Toxic Effects of Zinc in the Intestines and Other Tissues. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
158	High Dietary Fat and Selenium Concentrations Exert Tissue- and Glutathione Peroxidase 1-Dependent Impacts on Lipid Metabolism of Young-Adult Mice. *Journal of Nutrition*, **2020**, 150, 1738-1748	4.1	4
157	The Effects of Endoplasmic-Reticulum-Resident Selenoproteins in a Nonalcoholic Fatty Liver Disease Pig Model Induced by a High-Fat Diet. *Nutrients*, **2020**, 12,	6.7	4
156	Supplemental methionine and stocking density affect antioxidant status, fatty acid profiles, and growth performance of broiler chickens. *Journal of Animal Science*, **2020**, 98,	0.7	9
155	The proteomic profiling of multiple tissue damage in chickens for a selenium deficiency biomarker discovery. *Food and Function*, **2020**, 11, 1312-1321	6.1	40
154	Selenium and Selenoproteins in Adipose Tissue Physiology and Obesity. *Biomolecules*, **2020**, 10,	5.9	32
153	Corncob cellulose nanosphere as an eco-friendly detergent. *Nature Sustainability*, **2020**, 3, 448-458	22.1	28
152	Knockout of Selenoprotein V Affects Regulation of Selenoprotein Expression by Dietary Selenium and Fat Intakes in Mice. *Journal of Nutrition*, **2020**, 150, 483-491	4.1	13
151	Selenoprotein V protects against endoplasmic reticulum stress and oxidative injury induced by pro-oxidants. *Free Radical Biology and Medicine*, **2020**, 160, 670-679	7.8	11

150	Dietary supplemental microalgal astaxanthin modulates molecular profiles of stress, inflammation, and lipid metabolism in broiler chickens and laying hens under high ambient temperatures. *Poultry Science*, **2020**, 99, 4853-4860	3.9	7
149	Supplemental Microalgal Iron Helps Replete Blood Hemoglobin in Moderately Anemic Mice Fed a Rice-Based Diet. *Nutrients*, **2020**, 12,	6.7	3
148	Effect of a Multi-Carbohydrase and Phytase Complex on the Ileal and Total Tract Digestibility of Nutrients in Cannulated Growing Pigs. *Animals*, **2020**, 10,	3.1	4
147	Glutathione peroxidase-1 inhibits transcription of regenerating islet-derived protein-2 in pancreatic islets. *Free Radical Biology and Medicine*, **2019**, 134, 385-393	7.8	5
146	Sulforaphane Prevents Hepatic Insulin Resistance by Blocking Serine Palmitoyltransferase 3-Mediated Ceramide Biosynthesis. *Nutrients*, **2019**, 11,	6.7	14
145	Supplemental Docosahexaenoic-Acid-Enriched Microalgae Affected Fatty Acid and Metabolic Profiles and Related Gene Expression in Several Tissues of Broiler Chicks. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 6497-6507	5.7	3
144	Inclusion of Dietary Defatted Microalgae Dose-Dependently Enriches □B Fatty Acids in Egg Yolk and Tissues of Laying Hens. *Journal of Nutrition*, **2019**, 149, 942-950	4.1	8
143	2-Deoxyglucose-Modified Folate Derivative: Self-Assembling Nanoparticle Able to Load Cisplatin. *Molecules*, **2019**, 24,	4.8	2
142	Supplemental methionine exerted chemical form-dependent effects on antioxidant status, inflammation-related gene expression, and fatty acid profiles of broiler chicks raised at high ambient temperature1. *Journal of Animal Science*, **2019**, 97, 4883-4894	0.7	8
141	Effects of Dietary Selenium Deficiency or Excess on Selenoprotein Gene Expression in the Spleen Tissue of Pigs. *Animals*, **2019**, 9,	3.1	11
140	Astrocytic mobilization of glutathione peroxidase-1 contributes to the protective potential against cocaine kindling behaviors in mice via activation of JAK2/STAT3 signaling. *Free Radical Biology and Medicine*, **2019**, 131, 408-431	7.8	11
139	Meeting Global Feed Protein Demand: Challenge, Opportunity, and Strategy. *Annual Review of Animal Biosciences*, **2019**, 7, 221-243	13.7	76
138	Avian selenogenome: response to dietary Se and vitamin E deficiency and supplementation. *Poultry Science*, **2019**, 98, 4247-4254	3.9	16
137	Cloning, expression, and characterization of a porcine pancreatic □amylase in. *Animal Nutrition*, **2018**, 4, 234-240	4.8	0
136	PCV2 infection aggravates ochratoxin A-induced nephrotoxicity via autophagy involving p38 signaling pathway in□vivo and in□vitro. *Environmental Pollution*, **2018**, 238, 656-662	9.3	14
135	Regulation and function of avian selenogenome. *Biochimica Et Biophysica Acta - General Subjects*, **2018**, 1862, 2473-2479	4	9
134	Sustaining the Future of Animal Feed Protein. *Industrial Biotechnology*, **2018**, 14, 74-76	1.3	1
133	Characterization and milk coagulating properties of Cynanchum otophyllum Schneid. proteases. *Journal of Dairy Science*, **2018**, 101, 2842-2850	4	12

132	miR-200a-5p regulates myocardial necroptosis induced by Se deficiency via targeting RNF11. *Redox Biology*, **2018**, 15, 159-169	11.3	104
131	Graded levels of a defatted green microalgae inclusion in diets for broiler chicks led to moderate up-regulation of protein synthesis pathway in the muscle and liver. *Algal Research*, **2018**, 29, 290-296	5	9
130	Evolution, regulation, and function of porcine selenogenome. *Free Radical Biology and Medicine*, **2018**, 127, 116-123	7.8	19
129	Genetic overexpression of glutathione peroxidase-1 attenuates microcystin-leucine-arginine-induced memory impairment in mice. *Neurochemistry International*, **2018**, 118, 152-165	4.4	15
128	Glutathione peroxidase-1 overexpressing transgenic mice are protected from neurotoxicity induced by microcystin-leucine-arginine. *Environmental Toxicology*, **2018**, 33, 1019-1028	4.2	9
127	Protective potential of glutathione peroxidase-1 gene against cocaine-induced acute hepatotoxic consequences in mice. *Journal of Applied Toxicology*, **2018**, 38, 1502-1520	4.1	5
126	Dose-Dependent Enrichments and Improved Redox Status in Tissues of Broiler Chicks under Heat Stress by Dietary Supplemental Microalgal Astaxanthin. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 5521-5530	5.7	12
125	90th Anniversary Commentary: Beginning of the Selenoprotein Era. *Journal of Nutrition*, **2018**, 148, 1652-1655	4.1	3
124	Selenium and Diabetes. *Molecular and Integrative Toxicology*, **2018**, 317-344	0.5	2
123	Defatted Microalgae-Mediated Enrichment of n-3 Polyunsaturated Fatty Acids in Chicken Muscle Is Not Affected by Dietary Selenium, Vitamin E, or Corn Oil. *Journal of Nutrition*, **2018**, 148, 1547-1555	4.1	10
122	Role of glutathione peroxidase 1 in glucose and lipid metabolism-related diseases. *Free Radical Biology and Medicine*, **2018**, 127, 108-115	7.8	44
121	Supplemental microalgal astaxanthin produced coordinated changes in intrinsic antioxidant systems of layer hens exposed to heat stress. *Algal Research*, **2018**, 33, 84-90	5	14
120	A Novel Organic Selenium Compound Exerts Unique Regulation of Selenium Speciation, Selenogenome, and Selenoproteins in Broiler Chicks. *Journal of Nutrition*, **2017**, 147, 789-797	4.1	42
119	Oxidative stress induced by Se-deficient high-energy diet implicates neutrophil dysfunction via Nrf2 pathway suppression in swine. *Oncotarget*, **2017**, 8, 13428-13439	3.3	24
118	Defatted microalgae serve as a dual dietary source of highly bioavailable iron and protein in an anemic pig model. *Algal Research*, **2017**, 26, 409-414	5	16
117	Dietary Selenium Deficiency or Excess Reduces Sperm Quality and Testicular mRNA Abundance of Nuclear Glutathione Peroxidase 4 in Rats. *Journal of Nutrition*, **2017**, 147, 1947-1953	4.1	24
116	Protective Potential of the Glutathione Peroxidase-1 Gene in Abnormal Behaviors Induced by Phencyclidine in Mice. *Molecular Neurobiology*, **2017**, 54, 7042-7062	6.2	27
115	Selenium Deficiency-Induced Apoptosis of Chick Embryonic Vascular Smooth Muscle Cells and Correlations with 25 Selenoproteins. *Biological Trace Element Research*, **2017**, 176, 407-415	4.5	14

114	Characterization of Selenoprotein M and Its Response to Selenium Deficiency in Chicken Brain. *Biological Trace Element Research*, **2016**, 170, 449-58	4.5	15
113	Algal food and fuel coproduction can mitigate greenhouse gas emissions while improving land and water-use efficiency. *Environmental Research Letters*, **2016**, 11, 114006	6.2	33
112	Glutathione Peroxidase 1: Models for Diabetes and Obesity **2016**, 587-594		1
111	Supplemental defatted microalgae affects egg and tissue fatty acid composition differently in laying hens fed diets containing corn and flaxseed oil. *Journal of Applied Poultry Research*, **2016**, 25, 528-538	2	7
110	Potential of combining flaxseed oil and microalgal biomass in producing eggs-enriched with n B fatty acids for meeting human needs. *Algal Research*, **2016**, 17, 31-37	5	11
109	Selenium. *Advances in Nutrition*, **2016**, 7, 415-7	10	37
108	Paradoxical Roles of Antioxidant Enzymes: Basic Mechanisms and Health Implications. *Physiological Reviews*, **2016**, 96, 307-64	47.9	196
107	Marine Microalgae: Climate, Energy, and Food Security from the Sea. *Oceanography*, **2016**, 29,	2.3	21
106	Genetic overexpressing of GPx-1 attenuates cocaine-induced renal toxicity via induction of anti-apoptotic factors. *Clinical and Experimental Pharmacology and Physiology*, **2016**, 43, 428-37	3	14
105	Selenium Deficiency Influences the Expression of Selenoproteins and Inflammatory Cytokines in Chicken Aorta Vessels. *Biological Trace Element Research*, **2016**, 173, 501-13	4.5	14
104	Genetic depletion of glutathione peroxidase-1 potentiates nephrotoxicity induced by multiple doses of cocaine via activation of angiotensin II AT1 receptor. *Free Radical Research*, **2016**, 50, 467-83	4	10
103	High Dietary Selenium Intake Alters Lipid Metabolism and Protein Synthesis in Liver and Muscle of Pigs. *Journal of Nutrition*, **2016**, 146, 1625-33	4.1	61
102	Selenoproteins protect against avian nutritional muscular dystrophy by metabolizing peroxides and regulating redox/apoptotic signaling. *Free Radical Biology and Medicine*, **2015**, 83, 129-38	7.8	62
101	Starch and starch hydrolysates are favorable carbon sources for bifidobacteria in the human gut. *BMC Microbiology*, **2015**, 15, 54	4.5	34
100	Creating B Fatty-Acid-Enriched Chicken Using Defatted Green Microalgal Biomass. *Journal of Agricultural and Food Chemistry*, **2015**, 63, 9315-22	5.7	30
99	Continual feeding of two types of microalgal biomass affected protein digestion and metabolism in laying hens. *Journal of Animal Science*, **2015**, 93, 287-97	0.7	21
98	Expression of Selenoprotein Genes Is Affected by Obesity of Pigs Fed a High-Fat Diet. *Journal of Nutrition*, **2015**, 145, 1394-401	4.1	46
97	Effect of dietary defatted diatom biomass on egg production and quality of laying hens. *Journal of Animal Science and Biotechnology*, **2014**, 5, 3	6	21

96	Nutritional and metabolic impacts of a defatted green marine microalgal (Desmodesmus sp.) biomass in diets for weanling pigs and broiler chickens. *Journal of Agricultural and Food Chemistry*, **2014**, 62, 9783-91	5.7	44
95	Glutathione peroxidase mimic ebselen improves glucose-stimulated insulin secretion in murine islets. *Antioxidants and Redox Signaling*, **2014**, 20, 191-203	8.4	38
94	Malondialdehyde regulates glucose-stimulated insulin secretion in murine islets via TCF7L2-dependent Wnt signaling pathway. *Molecular and Cellular Endocrinology*, **2014**, 382, 8-16	4.4	24
93	Selenium and diabetes--evidence from animal studies. *Free Radical Biology and Medicine*, **2013**, 65, 1548-1556	7.8	123
92	Potential and limitation of a new defatted diatom microalgal biomass in replacing soybean meal and corn in diets for broiler chickens. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 7341-8	5.7	62
91	Dual potential of microalgae as a sustainable biofuel feedstock and animal feed. *Journal of Animal Science and Biotechnology*, **2013**, 4, 53	6	143
90	Phytase, a new life for an "old" enzyme. *Annual Review of Animal Biosciences*, **2013**, 1, 283-309	13.7	162
89	A novel upregulation of glutathione peroxidase 1 by knockout of liver-regenerating protein Reg3 aggravates acetaminophen-induced hepatic protein nitration. *Free Radical Biology and Medicine*, **2013**, 65, 291-300	7.8	10
88	Selenoprotein W serves as an antioxidant in chicken myoblasts. *Biochimica Et Biophysica Acta - General Subjects*, **2013**, 1830, 3112-20	4	158
87	Porcine serum can be biofortified with selenium to inhibit proliferation of three types of human cancer cells. *Journal of Nutrition*, **2013**, 143, 1115-22	4.1	23
86	Gene expression of endoplasmic reticulum resident selenoproteins correlates with apoptosis in various muscles of se-deficient chicks. *Journal of Nutrition*, **2013**, 143, 613-9	4.1	173
85	Knockout of SOD1 alters murine hepatic glycolysis, gluconeogenesis, and lipogenesis. *Free Radical Biology and Medicine*, **2012**, 53, 1689-96	7.8	31
84	A high-selenium diet induces insulin resistance in gestating rats and their offspring. *Free Radical Biology and Medicine*, **2012**, 52, 1335-42	7.8	91
83	Dietary selenium deficiency partially rescues type 2 diabetes-like phenotypes of glutathione peroxidase-1-overexpressing male mice. *Journal of Nutrition*, **2012**, 142, 1975-82	4.1	32
82	Prolonged dietary selenium deficiency or excess does not globally affect selenoprotein gene expression and/or protein production in various tissues of pigs. *Journal of Nutrition*, **2012**, 142, 1410-6	4.1	86
81	Association of selenoprotein gene expression with pancreatic atrophy in broiler chicks. *FASEB Journal*, **2012**, 26, 241.8	0.9	
80	Two tales of antioxidant enzymes on cells and diabetes. *Antioxidants and Redox Signaling*, **2011**, 14, 489-503	8.4	88
79	Mineral Elements: Micro (Trace) **2011**, 777-780		

78	Antioxidants in foods: state of the science important to the food industry. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 6837-46	5.7	238
77	Lipopolysaccharide-induced hepatic oxidative injury is not potentiated by knockout of GPX1 and SOD1 in mice. *Biochemical and Biophysical Research Communications*, **2011**, 404, 559-63	3.4	15
76	Enhanced water-holding capacity of meat was associated with increased Sepw1 gene expression in pigs fed selenium-enriched yeast. *Meat Science*, **2011**, 87, 95-100	6.4	42
75	Knockout of SOD1 promotes conversion of selenocysteine to dehydroalanine in murine hepatic GPX1 protein. *Free Radical Biology and Medicine*, **2011**, 51, 197-204	7.8	19
74	Glutathione Peroxidase 1 and Diabetes **2011**, 261-270		
73	Molecular characterization and NF-B-regulated transcription of selenoprotein S from the Bama mini-pig. *Molecular Biology Reports*, **2011**, 38, 4281-6	2.8	15
72	Impacts of dietary selenium deficiency on metabolic phenotypes of diet-restricted GPX1-overexpressing mice. *Antioxidants and Redox Signaling*, **2011**, 14, 383-90	8.4	29
71	The selenium deficiency disease exudative diathesis in chicks is associated with downregulation of seven common selenoprotein genes in liver and muscle. *Journal of Nutrition*, **2011**, 141, 1605-10	4.1	91
70	Knockouts of SOD1 and GPX1 exert different impacts on murine islet function and pancreatic integrity. *Antioxidants and Redox Signaling*, **2011**, 14, 391-401	8.4	65
69	Differentially Expressed Genes in Subcutaneous FatTissue in an Obese Pig Model Induced by a High-Fat Diet. *Journal of Animal and Veterinary Advances*, **2011**, 10, 1804-1810	0.1	3
68	Gene expression profile of selenoproteins in an obese pig model induced by a high-fat diet. *FASEB Journal*, **2010**, 24, 916.3	0.9	
67	Effects of dietary Se deficiency or excess on gene expression of 13 novel selenoproteins in growing pigs. *FASEB Journal*, **2010**, 24, 916.2	0.9	
66	Selenoprotein gene expression in thyroid and pituitary of young pigs is not affected by dietary selenium deficiency or excess. *Journal of Nutrition*, **2009**, 139, 1061-6	4.1	83
65	Supplemental dietary inulin influences expression of iron and inflammation related genes in young pigs. *Journal of Nutrition*, **2009**, 139, 2018-23	4.1	36
64	Comparative impacts of knockouts of two antioxidant enzymes on acetaminophen-induced hepatotoxicity in mice. *Experimental Biology and Medicine*, **2009**, 234, 1477-83	3.7	15
63	Impact of assay conditions on activity estimate and kinetics comparison of Aspergillus niger PhyA and Escherichia coli AppA2 phytases. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 5315-20	5.7	11
62	Iron and zinc bioavailabilities to pigs from red and white beans (Phaseolus vulgaris L.) are similar. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 3134-40	5.7	26
61	Role of copper,zinc-superoxide dismutase in catalyzing nitrotyrosine formation in murine liver. *Free Radical Biology and Medicine*, **2008**, 45, 611-8	7.8	34

60	The pig as an experimental model for elucidating the mechanisms governing dietary influence on mineral absorption. *Experimental Biology and Medicine*, **2008**, 233, 651-64	3.7	173
59	Cumulative improvements of thermostability and pH-activity profile of Aspergillus niger PhyA phytase by site-directed mutagenesis. *Applied Microbiology and Biotechnology*, **2008**, 77, 1033-40	5.7	28
58	Enhancing thermostability of Escherichia coli phytase AppA2 by error-prone PCR. *Applied Microbiology and Biotechnology*, **2008**, 79, 69-75	5.7	68
57	Assembly of mutations for improving thermostability of Escherichia coli AppA2 phytase. *Applied Microbiology and Biotechnology*, **2008**, 79, 751-8	5.7	24
56	Molecular mechanisms for hyperinsulinaemia induced by overproduction of selenium-dependent glutathione peroxidase-1 in mice. *Diabetologia*, **2008**, 51, 1515-24	10.3	110
55	Knockouts of Se-glutathione peroxidase-1 and Cu,Zn superoxide dismutase exert different impacts on femoral mechanical performance of growing mice. *Molecular Nutrition and Food Research*, **2008**, 52, 1334-9	5.9	8
54	Supplemental Escherichia coli phytase and strontium enhance bone strength of young pigs fed a phosphorus-adequate diet. *Journal of Nutrition*, **2007**, 137, 1795-801	4.1	18
53	Metabolic regulation and function of glutathione peroxidase-1. *Annual Review of Nutrition*, **2007**, 27, 41-61	9.9	187
52	Altering the substrate specificity site of Aspergillus niger PhyB shifts the pH optimum to pH 3.2. *Applied Microbiology and Biotechnology*, **2007**, 76, 117-22	5.7	8
51	Adopting selected hydrogen bonding and ionic interactions from Aspergillus fumigatus phytase structure improves the thermostability of Aspergillus niger PhyA phytase. *Applied and Environmental Microbiology*, **2007**, 73, 3069-76	4.8	57
50	Phytase: Source, Structure and Application **2007**, 505-529		43
49	Shifting the pH profile of Aspergillus niger PhyA phytase to match the stomach pH enhances its effectiveness as an animal feed additive. *Applied and Environmental Microbiology*, **2006**, 72, 4397-403	4.8	71
48	Double null of selenium-glutathione peroxidase-1 and copper, zinc-superoxide dismutase enhances resistance of mouse primary hepatocytes to acetaminophen toxicity. *Experimental Biology and Medicine*, **2006**, 231, 545-52	3.7	15
47	Impact of Cu, Zn-superoxide dismutase and Se-dependent glutathione peroxidase-1 knockouts on acetaminophen-induced cell death and related signaling in murine liver. *Experimental Biology and Medicine*, **2006**, 231, 1726-32	3.7	13
46	Mice deficient in Cu,Zn-superoxide dismutase are resistant to acetaminophen toxicity. *Biochemical Journal*, **2006**, 399, 455-61	3.8	58
45	Supplemental dietary inulin affects the bioavailability of iron in corn and soybean meal to young pigs. *Journal of Nutrition*, **2006**, 136, 3033-8	4.1	62
44	Red and white beans provide equivalent amounts of bioavailable iron to weanling piglets. *FASEB Journal*, **2006**, 20, LB88	0.9	
43	New roles of glutathione peroxidase-1 in oxidative stress and diabetes **2006**, 173-182		2

42	Expression of Microbial Phytases in Yeast Systems and Characterization of the Recombinant Enzymes **2005**, 209-224		1
41	Effects of gpx4 haploid insufficiency on GPx4 activity, selenium concentration, and paraquat-induced protein oxidation in murine tissues. *Experimental Biology and Medicine*, **2005**, 230, 709-14	3.7	10
40	Expression and characterization of a thermostable serine protease (TfpA) from Thermomonospora fusca YX in Pichia pastoris. *Applied Microbiology and Biotechnology*, **2005**, 68, 355-9	5.7	21
39	Expression of Escherichia coli AppA2 phytase in four yeast systems. *Biotechnology Letters*, **2005**, 27, 327-34	3	21
38	New roles for an old selenoenzyme: evidence from glutathione peroxidase-1 null and overexpressing mice. *Journal of Nutrition*, **2005**, 135, 2295-8	4.1	41
37	Development of insulin resistance and obesity in mice overexpressing cellular glutathione peroxidase. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 8852-7	11.5	394
36	Crystallographic snapshots of Aspergillus fumigatus phytase, revealing its enzymatic dynamics. *Structure*, **2004**, 12, 1575-83	5.2	25
35	Crystal structure of a heat-resilient phytase from Aspergillus fumigatus, carrying a phosphorylated histidine. *Journal of Molecular Biology*, **2004**, 339, 437-45	6.5	47
34	Low levels of glutathione peroxidase 1 activity in selenium-deficient mouse liver affect c-Jun N-terminal kinase activation and p53 phosphorylation on Ser-15 in pro-oxidant-induced aponecrosis. *Biochemical Journal*, **2003**, 370, 927-34	3.8	52
33	Comparison of extracellular Escherichia coli AppA phytases expressed in Streptomyces lividans and Pichia pastoris. *Biotechnology Letters*, **2003**, 25, 827-31	3	32
32	Phytase enzymology, applications, and biotechnology. *Biotechnology Letters*, **2003**, 25, 1787-94	3	145
31	Impacts of glutathione peroxidase-1 knockout on the protection by injected selenium against the pro-oxidant-induced liver aponecrosis and signaling in selenium-deficient mice. *Free Radical Biology and Medicine*, **2003**, 34, 918-27	7.8	41
30	Functional expression of keratinase (kerA) gene from Bacillus licheniformis in Pichia pastoris. *Biotechnology Letters*, **2002**, 24, 631-636	3	26
29	Analysis of phospholipid hydroperoxide glutathione peroxidase mRNA. *Methods in Molecular Biology*, **2002**, 196, 183-93	1.4	
28	In vivo antioxidant role of glutathione peroxidase: evidence from knockout mice. *Methods in Enzymology*, **2002**, 347, 213-25	1.7	44
27	Site-directed mutagenesis of Aspergillus niger NRRL 3135 phytase at residue 300 to enhance catalysis at pH 4.0. *Biochemical and Biophysical Research Communications*, **2002**, 297, 1016-20	3.4	52
26	Comparative impacts of glutathione peroxidase-1 gene knockout on oxidative stress induced by reactive oxygen and nitrogen species in mouse hepatocytes. *Biochemical Journal*, **2001**, 359, 687-95	3.8	14
25	Comparative impacts of glutathione peroxidase-1 gene knockout on oxidative stress induced by reactive oxygen and nitrogen species in mouse hepatocytes. *Biochemical Journal*, **2001**, 359, 687-695	3.8	25

24	Biotechnological development of effective phytases for mineral nutrition and environmental protection. *Applied Microbiology and Biotechnology*, **2001**, 57, 474-81	5.7	144
23	Glutathione peroxidase-1 gene knockout on body antioxidant defense in mice. *BioFactors*, **2001**, 14, 93-9	6.1	45
22	Lipopolysaccharide and interferon-gamma-induced nitric oxide production and protein oxidation in mouse peritoneal macrophages are affected by glutathione peroxidase-1 gene knockout. *Free Radical Biology and Medicine*, **2001**, 31, 450-9	7.8	16
21	Opposite roles of selenium-dependent glutathione peroxidase-1 in superoxide generator diquat- and peroxynitrite-induced apoptosis and signaling. *Journal of Biological Chemistry*, **2001**, 276, 43004-9	5.4	81
20	Differential Regulation and Function of Glutathione Peroxidases and Other Selenoproteins. *Modern Nutrition*, **2001**, 425-448		
19	Preferential resistance of dopaminergic neurons to the toxicity of glutathione depletion is independent of cellular glutathione peroxidase and is mediated by tetrahydrobiopterin. *Journal of Neurochemistry*, **2000**, 74, 2305-14	6	36
18	A new phytase expressed in yeast effectively improves the bioavailability of phytate phosphorus to weanling pigs. *Journal of Animal Science*, **2000**, 78, 668-74	0.7	29
17	Site-directed mutagenesis improves catalytic efficiency and thermostability of Escherichia coli pH 2.5 acid phosphatase/phytase expressed in Pichia pastoris. *Archives of Biochemistry and Biophysics*, **2000**, 382, 105-12	4.1	99
16	Expression of the Aspergillus fumigatus phytase gene in Pichia pastoris and characterization of the recombinant enzyme. *Biochemical and Biophysical Research Communications*, **2000**, 268, 373-8	3.4	99
15	Phytase activity in Aspergillus fumigatus isolates. *Biochemical and Biophysical Research Communications*, **2000**, 275, 759-63	3.4	15
14	Meat enhances nonheme iron absorption in pigs. *Nutrition Research*, **2000**, 20, 1749-1759	4	22
13	Selenium-dependent cellular glutathione peroxidase protects mice against a pro-oxidant-induced oxidation of NADPH, NADH, lipids, and protein. *FASEB Journal*, **1999**, 13, 1467-75	0.9	102
12	High levels of dietary vitamin E do not replace cellular glutathione peroxidase in protecting mice from acute oxidative stress. *Journal of Nutrition*, **1999**, 129, 1951-7	4.1	32
11	Knockout of cellular glutathione peroxidase gene renders mice susceptible to diquat-induced oxidative stress. *Free Radical Biology and Medicine*, **1999**, 27, 605-11	7.8	95
10	Cellular glutathione peroxidase protects mice against lethal oxidative stress induced by various doses of diquat. *Proceedings of the Society for Experimental Biology and Medicine*, **1999**, 222, 164-9		37
9	Role of glycosylation in the functional expression of an Aspergillus niger phytase (phyA) in Pichia pastoris. *Archives of Biochemistry and Biophysics*, **1999**, 364, 83-90	4.1	112
8	Different sensitivity of recombinant Aspergillus niger phytase (r-PhyA) and Escherichia coli pH 2.5 acid phosphatase (r-AppA) to trypsin and pepsin in vitro. *Archives of Biochemistry and Biophysics*, **1999**, 365, 262-7	4.1	80
7	Cloning, sequencing, and expression of an Escherichia coli acid phosphatase/phytase gene (appA2) isolated from pig colon. *Biochemical and Biophysical Research Communications*, **1999**, 257, 117-23	3.4	112

6	Expression of an Aspergillus niger phytase gene (phyA) in Saccharomyces cerevisiae. *Applied and Environmental Microbiology*, **1999**, 65, 1915-8	4.8	99
5	Knockout of cellular glutathione peroxidase affects selenium-dependent parameters similarly in mice fed adequate and excessive dietary selenium. *BioFactors*, **1998**, 7, 311-21	6.1	36
4	Cellular glutathione peroxidase is the mediator of body selenium to protect against paraquat lethality in transgenic mice. *Journal of Nutrition*, **1998**, 128, 1070-6	4.1	150
3	Comparison of age-related differences in expression of phospholipid hydroperoxide glutathione peroxidase mRNA and activity in various tissues of pigs. *Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology*, **1997**, 117, 109-14	2.3	12
2	Cellular glutathione peroxidase knockout mice express normal levels of selenium-dependent plasma and phospholipid hydroperoxide glutathione peroxidases in various tissues. *Journal of Nutrition*, **1997**, 127, 1445-50	4.1	121
1	Overexpression of cellular glutathione peroxidase does not affect expression of plasma glutathione peroxidase or phospholipid hydroperoxide glutathione peroxidase in mice offered diets adequate or deficient in selenium. *Journal of Nutrition*, **1997**, 127, 675-80	4.1	66