Astrid Borchert

List of Publications by Year
in descending order

25 papers	1,376 citations	430442 18 h-index	580395 25 g-index
25 all docs	25 docs citations	25 times ranked	1855 citing authors

#	Article	IF	Citations
1	Expression Silencing of Glutathione Peroxidase 4 in Mouse Erythroleukemia Cells Delays In Vitro Erythropoiesis. International Journal of Molecular Sciences, 2021, 22, 7795.	1.8	2
2	Systemic deficiency of mouse arachidonate 15â€lipoxygenase induces defective erythropoiesis and transgenic expression of the human enzyme rescues this phenotype. FASEB Journal, 2020, 34, 14318-14335.	0.2	8
3	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.	1.2	45
4	Male Subfertility Induced by Heterozygous Expression of Catalytically Inactive Glutathione Peroxidase 4 Is Rescued in Vivo by Systemic Inactivation of the Alox15 Gene. Journal of Biological Chemistry, 2016, 291, 23578-23588.	1.6	24
5	Expression of Inactive Glutathione Peroxidase 4 Leads to Embryonic Lethality, and Inactivation of theAlox15Gene Does Not Rescue Such Knock-In Mice. Antioxidants and Redox Signaling, 2015, 22, 281-293.	2.5	91
6	Differential expression of secretoglobins in normal ovary and in ovarian carcinoma â€“ Overexpression of mammaglobin-1 is linked to tumor progression. Archives of Biochemistry and Biophysics, 2014, 547, 27-36.	1.4	9
7	Serotonin Receptor 6 Mediates Defective Brain Development in Monoamine Oxidase A-deficient Mouse Embryos. Journal of Biological Chemistry, 2014, 289, 8252-8263.	1.6	11
8	Monoamine oxidases in development. Cellular and Molecular Life Sciences, 2013, 70, 599-630.	2.4	58
9	Monoamine Oxidase A Expression Is Vital for Embryonic Brain Development by Modulating Developmental Apoptosis. Journal of Biological Chemistry, 2011, 286, 28322-28330.	1.6	34
10	Defining the immunoreactive epitope for the monoclonal anti-human glutathione peroxidase-4 antibody anti-hGPx4 Mab63-1. Immunology Letters, 2010, 133, 85-93.	1.1	5
11	Redox Control in Mammalian Embryo Development. Antioxidants and Redox Signaling, 2010, 13, 833-875.	2.5	110
12	Synthesis of a New Seleninic Acid Anhydride and Mechanistic Studies into Its Glutathione Peroxidase Activity. Chemistry - A European Journal, 2008, 14, 7066-7071.	1.7	21
13	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.	0.4	44
14	Translational regulation of glutathione peroxidase 4 expression through guanine-rich sequence-binding factor 1 is essential for embryonic brain development. Genes and Development, 2008, 22, 1838-1850.	2.7	95
15	Molecular biology of glutathione peroxidase 4: from genomic structure to developmental expression and neural function. Biological Chemistry, 2007, 388, 1007-1017.	1.2	100
16	Structural Basis for Catalytic Activity and Enzyme Polymerization of Phospholipid Hydroperoxide Glutathione Peroxidase-4 (GPx4)[,][,]. Biochemistry, 2007, 46, 9041-9049.	1.2	138
17	Role for glutathione peroxidase-4 in brain development and neuronal apoptosis: Specific induction of enzyme expression in reactive astrocytes following brain injury. Free Radical Biology and Medicine, 2007, 43, 191-201.	1.3	84
18	The Role of Phospholipid Hydroperoxide Glutathione Peroxidase Isoforms in Murine Embryogenesis. Journal of Biological Chemistry, 2006, 281, 19655-19664.	1.6	79

#	Article	IF	Citations
19	Regulation of Expression of the Phospholipid Hydroperoxide/Sperm Nucleus Glutathione Peroxidase Gene. Journal of Biological Chemistry, 2003, 278, 2571-2580.	1.6	52
20	Functional characterization of cis- and trans-regulatory elements involved in expression of phospholipid hydroperoxide glutathione peroxidase. Nucleic Acids Research, 2003, 31, 4293-4303.	6.5	33
21	Discovery of a Functional Retrotransposon of the Murine Phospholipid Hydroperoxide Glutathione Peroxidase: Chromosomal Localization and Tissue-Specific Expression Pattern. Genomics, 2002, 79, 387-394.	1.3	20
22	Regulation of enzymatic lipid peroxidation: the interplay of peroxidizing and peroxide reducing enzymes1 1This article is part of a series of reviews on â€œRegulatory and Cytoprotective Aspects of Lipid Hydroperoxide Metabolism.â€•The full list of papers may be found on the homepage of the journal.. Free Radical Biology and Medicine, 2002, 33, 154-172.	1.3	209
23	Bacterial and Nonbacterial Expression of Wild-Type and Mutant Human Phospholipid Hydroperoxide Glutathione Peroxidase and Purification of the Mutant Enzyme in the Milligram Scale. Protein Expression and Purification, 2000, 19, 403-410.	0.6	8
24	Inverse regulation of lipidâ€peroxidizing and hydroperoxyl lipidâ€reducing enzymes by interleukins 4 and 13. FASEB Journal, 1999, 13, 143-154.	0.2	75
25	Cloning of the mouse phospholipid hydroperoxide glutathione peroxidase gene1. FEBS Letters, 1999, 446, 223-227.	1.3	21