Seishiro Hirano

List of Publications by Citations

130 papers	4,716 citations	36 h-index	63 g-index
140 ext. papers	5,174 ext. citations	4.3 avg, IF	5.65 L-index

#	Paper	IF	Citations
130	A new metabolic pathway of arsenite: arsenic-glutathione complexes are substrates for human arsenic methyltransferase Cyt19. *Archives of Toxicology*, **2005**, 79, 183-91	5.8	388
129	Metabolism of arsenic and its toxicological relevance. *Archives of Toxicology*, **2013**, 87, 969-79	5.8	216
128	Oxidative damage to mitochondria is a preliminary step to caspase-3 activation in fluoride-induced apoptosis in HL-60 cells. *Free Radical Biology and Medicine*, **2001**, 31, 367-73	7.8	183
127	Multi-walled carbon nanotubes injure the plasma membrane of macrophages. *Toxicology and Applied Pharmacology*, **2008**, 232, 244-51	4.6	167
126	The accumulation and toxicity of methylated arsenicals in endothelial cells: important roles of thiol compounds. *Toxicology and Applied Pharmacology*, **2004**, 198, 458-67	4.6	148
125	Effects of multi-walled carbon nanotubes on a murine allergic airway inflammation model. *Toxicology and Applied Pharmacology*, **2009**, 237, 306-16	4.6	132
124	Chronic oral exposure to inorganic arsenate interferes with methylation status of p16INK4a and RASSF1A and induces lung cancer in A/J mice. *Toxicological Sciences*, **2006**, 91, 372-81	4.4	119
123	Extrapulmonary translocation of intratracheally instilled fine and ultrafine particles via direct and alveolar macrophage-associated routes. *Archives of Toxicology*, **2009**, 83, 429-37	5.8	117
122	Effects of airway exposure to nanoparticles on lung inflammation induced by bacterial endotoxin in mice. *Environmental Health Perspectives*, **2006**, 114, 1325-30	8.4	114
121	Arsenic trioxide inhibits DNA methyltransferase and restores methylation-silenced genes in human liver cancer cells. *Human Pathology*, **2006**, 37, 298-311	3.7	109
120	Arsenic metabolism and thioarsenicals in hamsters and rats. *Chemical Research in Toxicology*, **2007**, 20, 616-24	4	102
119	Oxidative-stress potency of organic extracts of diesel exhaust and urban fine particles in rat heart microvessel endothelial cells. *Toxicology*, **2003**, 187, 161-70	4.4	100
118	Uptake and cytotoxic effects of multi-walled carbon nanotubes in human bronchial epithelial cells. *Toxicology and Applied Pharmacology*, **2010**, 249, 8-15	4.6	91
117	Effects of phytoestrogens and environmental estrogens on osteoblastic differentiation in MC3T3-E1 cells. *Toxicology*, **2004**, 196, 137-45	4.4	90
116	Difference in uptake and toxicity of trivalent and pentavalent inorganic arsenic in rat heart microvessel endothelial cells. *Archives of Toxicology*, **2003**, 77, 305-12	5.8	90
115	A murine scavenger receptor MARCO recognizes polystyrene nanoparticles. *Toxicological Sciences*, **2007**, 97, 398-406	4.4	89
114	Speciation of arsenic in tube-well water samples collected from West Bengal, India, by high-performance liquid chromatography–inductively coupled plasma mass spectrometry. *Applied Organometallic Chemistry*, **2002**, 16, 202-209	3.1	72

113	Arsenic speciation in the urine and hair of individuals exposed to airborne arsenic through coal-burning in Guizhou, PR China. *Toxicology Letters*, **2003**, 137, 35-48	4.4	69
112	Arsenic speciation in bile and urine following oral and intravenous exposure to inorganic and organic arsenics in rats. *Toxicological Sciences*, **2004**, 82, 478-87	4.4	68
111	Spatial learning and memory function-related gene expression in the hippocampus of mouse exposed to nanoparticle-rich diesel exhaust. *NeuroToxicology*, **2008**, 29, 940-7	4.4	65
110	Effects of inhaled nanoparticles on acute lung injury induced by lipopolysaccharide in mice. *Toxicology*, **2007**, 238, 99-110	4.4	61
109	Characteristics and modifying factors of asbestos-induced oxidative DNA damage. *Cancer Science*, **2008**, 99, 2142-51	6.9	57
108	cDNA microarray analysis of gene expression in rat alveolar macrophages in response to organic extract of diesel exhaust particles. *Toxicological Sciences*, **2002**, 67, 241-6	4.4	57
107	Difference in the toxicity mechanism between ion and nanoparticle forms of silver in the mouse lung and in macrophages. *Toxicology*, **2015**, 328, 84-92	4.4	56
106	Western blot analysis. *Methods in Molecular Biology*, **2012**, 926, 87-97	1.4	51
105	Nanoparticle-rich diesel exhaust affects hippocampal-dependent spatial learning and NMDA receptor subunit expression in female mice. *Nanotoxicology*, **2012**, 6, 543-53	5.3	48
104	Effects of PAMAM dendrimers with various surface functional groups and multiple generations on cytotoxicity and neuronal differentiation using human neural progenitor cells. *Journal of Toxicological Sciences*, **2016**, 41, 351-70	1.9	48
103	The role of toll-like receptor 4 in airway inflammation induced by diesel exhaust particles. *Archives of Toxicology*, **2006**, 80, 275-9	5.8	46
102	Stability of arsenic metabolites, arsenic triglutathione [As(GS)3] and methylarsenic diglutathione [CH3As(GS)2], in rat bile. *Toxicology*, **2005**, 211, 115-23	4.4	45
101	Subchronic exposure to arsenic through drinking water alters expression of cancer-related genes in rat liver. *Toxicologic Pathology*, **2004**, 32, 64-72	2.1	42
100	Seasonal differences of the atmospheric particle size distribution in a metropolitan area in Japan. *Science of the Total Environment*, **2012**, 437, 339-47	10.2	40
99	Induction of oxidative stress and inhibition of plasminogen activator inhibitor-1 production in endothelial cells following exposure to organic extracts of diesel exhaust particles and urban fine particles. *Archives of Toxicology*, **2006**, 80, 154-62	5.8	39
98	cDNA microarray analysis of rat alveolar epithelial cells following exposure to organic extract of diesel exhaust particles. *Toxicology and Applied Pharmacology*, **2004**, 201, 178-85	4.6	39
97	A current overview of health effect research on nanoparticles. *Environmental Health and Preventive Medicine*, **2009**, 14, 223-5	4.2	36
96	Effects of the phytoestrogen coumestrol on RANK-ligand-induced differentiation of osteoclasts. *Toxicology*, **2004**, 203, 211-20	4.4	36

95	Changes in element concentration and distribution in breast-milk fractions of a healthy lactating mother. *Biological Trace Element Research*, **1991**, 28, 109-21	4.5	36
94	Inhaled nitric oxide reduces tyrosine nitration after lipopolysaccharide instillation into lungs of rats. *American Journal of Respiratory and Critical Care Medicine*, **1999**, 160, 678-88	10.2	34
93	Apoptotic cell death following exposure to fluoride in rat alveolar macrophages. *Archives of Toxicology*, **1996**, 70, 249-51	5.8	34
92	Distribution, localization, and pulmonary effects of yttrium chloride following intratracheal instillation into the rat. *Toxicology and Applied Pharmacology*, **1990**, 104, 301-11	4.6	34
91	Effects of PAMAM dendrimers in the mouse brain after a single intranasal instillation. *Toxicology Letters*, **2014**, 228, 207-15	4.4	33
90	Theoretical calculations and reaction analysis on the interaction of pentavalent thioarsenicals with biorelevant thiol compounds. *Chemical Research in Toxicology*, **2008**, 21, 550-3	4	33
89	Effects of diesel engine exhaust origin secondary organic aerosols on novel object recognition ability and maternal behavior in BALB/c mice. *International Journal of Environmental Research and Public Health*, **2014**, 11, 11286-307	4.6	31
88	Nano-QSAR modeling for ecosafe design of heterogeneous TiO2-based nano-photocatalysts. *Environmental Science: Nano*, **2018**, 5, 1150-1160	7.1	30
87	Extracellular glutamate level and NMDA receptor subunit expression in mouse olfactory bulb following nanoparticle-rich diesel exhaust exposure. *Inhalation Toxicology*, **2009**, 21, 828-36	2.7	30
86	Transfer of hexachlorobenzene (HCB) from mother to newborn baby through placenta and milk. *Archives of Toxicology*, **1985**, 56, 195-200	5.8	30
85	Macrophage receptor with collagenous structure (MARCO) is a dynamic adhesive molecule that enhances uptake of carbon nanotubes by CHO-K1 cells. *Toxicology and Applied Pharmacology*, **2012**, 259, 96-103	4.6	29
84	Novel object recognition ability in female mice following exposure to nanoparticle-rich diesel exhaust. *Toxicology and Applied Pharmacology*, **2012**, 262, 355-62	4.6	29
83	Speciation analysis of selenium metabolites in urine and breath by HPLC- and GC-inductively coupled plasma-MS after administration of selenomethionine and methylselenocysteine to rats. *Chemical Research in Toxicology*, **2009**, 22, 1795-801	4	29
82	Pulmonary clearance and inflammatory potency of intratracheally instilled or acutely inhaled nickel sulfate in rats. *Archives of Toxicology*, **1994**, 68, 548-54	5.8	29
81	Characterization of dilution conditions for diesel nanoparticle inhalation studies. *Inhalation Toxicology*, **2009**, 21, 200-9	2.7	28
80	Characterization and influence of hydroxyapatite nanopowders on living cells. *Beilstein Journal of Nanotechnology*, **2018**, 9, 3079-3094	3	28
79	Differential Regulation of IL-1β and IL-6 Release in Murine Macrophages. *Inflammation*, **2017**, 40, 1933-1943	3.1	27
78	Identification of arsenite-and arsenic diglutathione-binding proteins in human hepatocarcinoma cells. *Toxicology and Applied Pharmacology*, **2010**, 242, 119-25	4.6	27

77	Comparison of Oxidative Abilities of PM2.5 Collected at Traffic and Residential Sites in Japan. Contribution of Transition Metals and Primary and Secondary Aerosols. *Aerosol and Air Quality Research*, **2017**, 17, 574-587	4.6	27
76	Toxicity of cadmium oxide instilled into the rat lung. II. Inflammatory responses in broncho-alveolar lavage fluid. *Toxicology*, **1989**, 55, 25-35	4.4	26
75	Pulmonary clearance and toxicity of zinc oxide instilled into the rat lung. *Archives of Toxicology*, **1989**, 63, 336-42	5.8	26
74	Combined experimental and computational approach to developing efficient photocatalysts based on Au/Pd□iO2 nanoparticles. *Environmental Science: Nano*, **2016**, 3, 1425-1435	7.1	26
73	Evaluating the toxicity of TiO-based nanoparticles to Chinese hamster ovary cells and a complementary experimental and computational approach. *Beilstein Journal of Nanotechnology*, **2017**, 8, 2171-2180	3	25
72	Quantitative time-course profiles of bronchoalveolar lavage cells following intratracheal instillation of lipopolysaccharide in mice. *Industrial Health*, **1997**, 35, 353-8	2.5	25
71	Cytotoxic effects of S-(dimethylarsino)-glutathione: a putative intermediate metabolite of inorganic arsenicals. *Toxicology*, **2006**, 227, 45-52	4.4	25
70	Analysis of arsenic metabolites in HepG2 and AS3MT-transfected cells. *Archives of Toxicology*, **2011**, 85, 577-88	5.8	24
69	Transcription of krox-20/egr-2 is upregulated after exposure to fibrous particles and adhesion in rat alveolar macrophages. *American Journal of Respiratory Cell and Molecular Biology*, **2000**, 23, 313-9	5.7	24
68	The role of Rho-kinases in IL-1□release through phagocytosis of fibrous particles in human monocytes. *Archives of Toxicology*, **2015**, 89, 73-85	5.8	23
67	Toxicity of cadmium oxide instilled into the rat lung. I. Metabolism of cadmium oxide in the lung and its effects on essential elements. *Toxicology*, **1989**, 55, 15-24	4.4	23
66	Biotransformation of arsenic and toxicological implication of arsenic metabolites. *Archives of Toxicology*, **2020**, 94, 2587-2601	5.8	23
65	Nasal instillation of nanoparticle-rich diesel exhaust particles slightly affects emotional behavior and learning capability in rats. *Journal of Toxicological Sciences*, **2011**, 36, 267-76	1.9	21
64	Diphenylarsinic acid increased the synthesis and release of neuroactive and vasoactive peptides in rat cerebellar astrocytes. *Journal of Neuropathology and Experimental Neurology*, **2012**, 71, 468-79	3.1	21
63	Localization of zinc after in vitro mineralization in osteoblastic cells. *Biological Trace Element Research*, **2001**, 83, 39-47	4.5	21
62	Particle deposition efficiency at air□quid interface of a cell exposure chamber. *Journal of Aerosol Science*, **2015**, 81, 90-99	4.3	20
61	Mitochondrial electron transport is inhibited by disappearance of metallothionein in human bronchial epithelial cells following exposure to silver nitrate. *Toxicology*, **2013**, 305, 20-9	4.4	19
60	Metabolism and pulmonary toxicity of intratracheally instilled cupric sulfate in rats. *Toxicology*, **1990**, 64, 223-33	4.4	19

59	Developmental subchronic exposure to diphenylarsinic acid induced increased exploratory behavior, impaired learning behavior, and decreased cerebellar glutathione concentration in rats. *Toxicological Sciences*, **2013**, 136, 478-86	4.4	18
58	Expression and activity of arsenic methyltransferase Cyt19 in rat tissues. *Environmental Toxicology and Pharmacology*, **2007**, 23, 115-20	5.8	18
57	Effects of intratracheal pretreatment with yttrium chloride (YCl3) on inflammatory responses of the rat lung following intratracheal instillation of YCl3. *Toxicology Letters*, **1998**, 99, 43-51	4.4	18
56	Effects of endogenous hydrogen peroxide and glutathione on the stability of arsenic metabolites in rat bile. *Toxicology and Applied Pharmacology*, **2008**, 232, 33-40	4.6	17
55	Interaction of rat alveolar macrophages with pulmonary epithelial cells following exposure to lipopolysaccharide. *Archives of Toxicology*, **1996**, 70, 230-6	5.8	17
54	Benzalkonium chloride and cetylpyridinium chloride induce apoptosis in human lung epithelial cells and alter surface activity of pulmonary surfactant monolayers. *Chemico-Biological Interactions*, **2020**, 317, 108962	5	16
53	Distribution and excretion of arsenic in cynomolgus monkey following repeated administration of diphenylarsinic acid. *Archives of Toxicology*, **2008**, 82, 553-61	5.8	16
52	Exposure of BALB/c Mice to Diesel Engine Exhaust Origin Secondary Organic Aerosol (DE-SOA) during the Developmental Stages Impairs the Social Behavior in Adult Life of the Males. *Frontiers in Neuroscience*, **2015**, 9, 524	5.1	16
51	Effects of exposure to nanoparticle-rich or -depleted diesel exhaust on allergic pathophysiology in the murine lung. *Journal of Toxicological Sciences*, **2013**, 38, 35-48	1.9	15
50	Selective activation of NF-kappaB and E2F by low concentration of arsenite in U937 human monocytic leukemia cells. *Journal of Biochemical and Molecular Toxicology*, **2008**, 22, 136-46	3.4	15
49	Inflammatory responses of rat alveolar macrophages following exposure to fluoride. *Archives of Toxicology*, **1999**, 73, 310-5	5.8	15
48	Biochemical changes in the rat lung and liver following intratracheal instillation of cadmium oxide. *Toxicology Letters*, **1990**, 50, 97-105	4.4	15
47	Generation of Airborne Multi-Walled Carbon Nanotubes for Inhalation Studies. *Aerosol Science and Technology*, **2009**, 43, 881-890	3.4	14
46	Effects of organic chemicals derived from ambient particulate matter on lung inflammation related to lipopolysaccharide. *Archives of Toxicology*, **2006**, 80, 833-8	5.8	14
45	Pulmonary clearance and toxicity of intratracheally instilled cupric oxide in rats. *Archives of Toxicology*, **1993**, 67, 312-7	5.8	14
44	Effects of acute single intranasal instillation of secondary organic aerosol on neurological and immunological biomarkers in the brain and lung of BALB/c mice. *Journal of Toxicological Sciences*, **2013**, 38, 71-82	1.9	13
43	Type I collagen is a non-adhesive extracellular matrix for macrophages. *Archives of Histology and Cytology*, **2000**, 63, 71-9		13
42	Role of TLR4 in olfactory-based spatial learning activity of neonatal mice after developmental exposure to diesel exhaust origin secondary organic aerosol. *NeuroToxicology*, **2017**, 63, 155-165	4.4	12

41	Accumulation and toxicity of monophenyl arsenicals in rat endothelial cells. *Archives of Toxicology*, **2005**, 79, 54-61	5.8	12
40	The toxicological analysis of secondary organic aerosol in human lung epithelial cells and macrophages. *Environmental Science and Pollution Research*, **2019**, 26, 22747-22755	5.1	11
39	Functional and biochemical effects on rat lung following instillation of crocidolite and chrysotile asbestos. *Journal of Toxicology and Environmental Health - Part A: Current Issues*, **1988**, 24, 27-39	3.2	11
38	The role of glutathione in the metabolism of diphenylarsinic acid in rats. *Metallomics*, **2013**, 5, 469-78	4.5	10
37	Macrophage Receptor with Collagenous Structure (MARCO) Is Processed by either Macropinocytosis or Endocytosis-Autophagy Pathway. *PLoS ONE*, **2015**, 10, e0142062	3.7	10
36	Effects of eicosane, a component of nanoparticles in diesel exhaust, on surface activity of pulmonary surfactant monolayers. *Archives of Toxicology*, **2008**, 82, 841-50	5.8	10
35	Nanoparticles in Emissions and Atmospheric Environment: Now and Future. *Journal of Nanoparticle Research*, **2003**, 5, 311-321	2.3	10
34	Chemotactic responses of osteoblastic MC3T3-E1 cells toward zinc chloride. *Biological Trace Element Research*, **2001**, 83, 49-55	4.5	10
33	Cellular uptake of paraquat determines subsequent toxicity including mitochondrial damage in lung epithelial cells. *Legal Medicine*, **2019**, 37, 7-14	1.9	10
32	Oxidative stress and cytotoxic effects of silver ion in mouse lung macrophages J774.1 cells. *Journal of Applied Toxicology*, **2017**, 37, 471-478	4.1	9
31	Effects of arsenic on modification of promyelocytic leukemia (PML): PML responds to low levels of arsenite. *Toxicology and Applied Pharmacology*, **2013**, 273, 590-9	4.6	9
30	In vitro and in vivo cytotoxic effects of nitric oxide on metastatic cells. *Cancer Letters*, **1997**, 115, 57-62	9.9	9
29	Nano-Sized Secondary Organic Aerosol of Diesel Engine Exhaust Origin Impairs Olfactory-Based Spatial Learning Performance in Preweaning Mice. *Nanomaterials*, **2015**, 5, 1147-1162	5.4	8
28	A novel genotoxicity assay of carbon nanotubes using functional macrophage receptor with collagenous structure (MARCO)-expressing chicken B lymphocytes. *Archives of Toxicology*, **2014**, 88, 145-60	5.8	8
27	Upregulation of heme oxygenase gene expression in rat lung epithelial cells following exposure to cadmium. *Archives of Toxicology*, **1999**, 73, 410-2	5.8	8
26	Rapid speciation and quantification of selenium compounds by HPLC-ICP MS using multiple standards labelled with different isotopes. *Isotopes in Environmental and Health Studies*, **2011**, 47, 330-40	1.5	7
25	krox-20/egr-2 is up-regulated following non-specific and homophilic adhesion in rat macrophages. *Immunology*, **2002**, 107, 86-92	7.8	7
24	Scavenger receptor MARCO contributes to cellular internalization of exosomes by dynamin-dependent endocytosis and macropinocytosis. *Scientific Reports*, **2020**, 10, 21795	4.9	7

23	Dysregulation of MAP Kinase Signaling Pathways Including p38MAPK, SAPK/JNK, and ERK1/2 in Cultured Rat Cerebellar Astrocytes Exposed to Diphenylarsinic Acid. *Toxicological Sciences*, **2017**, 156, 509-519	4.4	6
22	Solubility shift and SUMOylaltion of promyelocytic leukemia (PML) protein in response to arsenic(III) and fate of the SUMOylated PML. *Toxicology and Applied Pharmacology*, **2015**, 287, 191-201	4.6	6
21	Effects of diesel exhaust-derived secondary organic aerosol (SOA) on oocytes: Potential risks to meiotic maturation. *Reproductive Toxicology*, **2018**, 75, 56-64	3.4	6
20	Application of thermoresponsive HPLC to forensic toxicology: determination of barbiturates in human urine. *Forensic Toxicology*, **2009**, 27, 103-106	2.6	6
19	Relevance of autophagy markers to cytotoxicity of zinc compounds in macrophages. *Toxicology in Vitro*, **2020**, 65, 104816	3.6	5
18	Aggregation is a critical cause of poor transfer into the brain tissue of intravenously administered cationic PAMAM dendrimer nanoparticles. *International Journal of Nanomedicine*, **2017**, 12, 3967-3975	7.3	5
17	Distribution and Excretion of Arsenic Metabolites after Oral Administration of Seafood-Related Organoarsenicals in Rats. *Metals*, **2016**, 6, 231	2.3	5
16	Solubility changes of promyelocytic leukemia (PML) and SUMO monomers and dynamics of PML nuclear body proteins in arsenite-treated cells. *Toxicology and Applied Pharmacology*, **2018**, 360, 150-159	4.6	5
15	Automatic Control of Aerosol Concentrations in Exposure Chambers. *AIHA Journal*, **1987**, 48, 972-976		4
14	Perinatal Exposure to Diesel Exhaust-Origin Secondary Organic Aerosol Induces Autism-Like Behavior in Rats. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
13	Pharmacodynamics of S-dimethylarsino-glutathione, a putative metabolic intermediate of inorganic arsenic, in mice. *Biochemical Pharmacology*, **2017**, 126, 79-86	6	3
12	PCR-based subtraction analyses for upregulated gene transcription in cadmium-exposed rat lung type 2 epithelial cells. *Biochemical and Biophysical Research Communications*, **2003**, 308, 133-8	3.4	3
11	Correlation between inflammatory cellular responses and chemotactic activity in bronchoalveolar lavage fluid following intratracheal instillation of nickel sulfate in rats. *Archives of Toxicology*, **1994**, 68, 444-9	5.8	3
10	Diphenylarsinic Acid Induced Activation of Cultured Rat Cerebellar Astrocytes: Phosphorylation of Mitogen-Activated Protein Kinases, Upregulation of Transcription Factors, and Release of Brain-Active Cytokines. *Toxicological Sciences*, **2016**, 150, 74-83	4.4	2
9	Health Effects of Silver Nanoparticles and Silver Ions. *Current Topics in Environmental Health and Preventive Medicine*, **2016**, 137-147	0.3	2
8	A Proportional Method for the Dilution of Submicron Hygroscopic Aerosols. *AIHA Journal*, **1987**, 48, 969-971		1
7	SUMOylation regulates the number and size of promyelocytic leukemia-nuclear bodies (PML-NBs) and arsenic perturbs SUMO dynamics on PML by insolubilizing PML in THP-1 cells.. *Archives of Toxicology*, **2022**, 96, 545	5.8	1
6	Revisit to health effects of asbestos. *Japanese Journal of Thrombosis and Hemostasis*, **2006**, 17, 74-77	0	1

5	Effects of arsenic on the topology and solubility of promyelocytic leukemia (PML)-nuclear bodies.. *PLoS ONE*, **2022**, 17, e0268835	3.7	0
4	Proteomic study of human bronchial epithelial cells exposed to SiC nanoparticles. *Journal of Physics: Conference Series*, **2011**, 304, 012088	0.3	
3	Effects of diesel exhaust derived secondary organic aerosol (DE-SOA) exposure during developmental period on anxiety and depression in mice. *Indoor Environment*, **2019**, 22, 23-32	0	
2	Studies on the Nature and Significance of Collagen in Experimentally Induced Oral Submucous Fibrosis in Rats.. *Journal of Clinical Biochemistry and Nutrition*, **1999**, 27, 123-130	3.1	
1	Autophagy as a Biomarker of Cytotoxicity. *Biomarkers in Disease*, **2022**, 1-20		