Miroslav Styblo

List of Publications by Year in descending order

119 papers	9,863 citations	31976 53 h-index	34986 98 g-index
122 all docs	122 docs citations	122 times ranked	5673 citing authors

#	Article	IF	Citations
1	Comparative toxicity of trivalent and pentavalent inorganic and methylated arsenicals in rat and human cells. Archives of Toxicology, 2000, 74, 289-299.	4.2	881
2	The Cellular Metabolism and Systemic Toxicity of Arsenic. Toxicology and Applied Pharmacology, 2001, 176, 127-144.	2.8	540
3	Methylated Trivalent Arsenic Species Are Genotoxic. Chemical Research in Toxicology, 2001, 14, 355-361.	3.3	479
4	A Novel S-Adenosyl-l-methionine:Arsenic(III) Methyltransferase from Rat Liver Cytosol. Journal of Biological Chemistry, 2002, 277, 10795-10803.	3.4	299
5	Evaluation of the Association between Arsenic and Diabetes: A National Toxicology Program Workshop Review. Environmental Health Perspectives, 2012, 120, 1658-1670.	6.0	299
6	The role of biomethylation in toxicity and carcinogenicity of arsenic: a research update.. Environmental Health Perspectives, 2002, 110, 767-771.	6.0	296
7	Comparative Inhibition of Yeast Glutathione Reductase by Arsenicals and Arsenothiols. Chemical Research in Toxicology, 1997, 10, 27-33.	3.3	272
8	Elucidating the pathway for arsenic methylation*1. Toxicology and Applied Pharmacology, 2004, 198, 319-326.	2.8	262
9	Differential Effects of Trivalent and Pentavalent Arsenicals on Cell Proliferation and Cytokine Secretion in Normal Human Epidermal Keratinocytes. Toxicology and Applied Pharmacology, 2001, 172, 225-232.	2.8	257
10	Determination of Trivalent Methylated Arsenicals in Biological Matrices. Toxicology and Applied Pharmacology, 2001, 174, 282-293.	2.8	217
11	Exposure to arsenic in drinking water is associated with increased prevalence of diabetes: a cross-sectional study in the ZimapÃ¡n and Lagunera regions in Mexico. Environmental Health, 2011, 10, 73.	4.0	182
12	Arsenic (+3 oxidation state) methyltransferase and the methylation of arsenicals. Experimental Biology and Medicine, 2007, 232, 3-13.	2.4	179
13	Prenatal arsenic exposure and the epigenome: Altered microRNAs associated with innate and adaptive immune signaling in newborn cord blood. Environmental and Molecular Mutagenesis, 2014, 55, 196-208.	2.2	171
14	Inhibition of insulin-dependent glucose uptake by trivalent arsenicals: possible mechanism of arsenic-induced diabetes. Toxicology and Applied Pharmacology, 2004, 198, 424-433.	2.8	161
15	Prenatal Arsenic Exposure and the Epigenome: Identifying Sites of 5-methylcytosine Alterations that Predict Functional Changes in Gene Expression in Newborn Cord Blood and Subsequent Birth Outcomes. Toxicological Sciences, 2015, 143, 97-106.	3.1	157
16	Molecular events associated with arsenic-induced malignant transformation of human prostatic epithelial cells: aberrant genomic DNA methylation and K-ras oncogene activation. Toxicology and Applied Pharmacology, 2005, 206, 288-298.	2.8	155
17	Arsenicals Inhibit Thioredoxin Reductase in Cultured Rat Hepatocytes. Chemical Research in Toxicology, 2001, 14, 305-311.	3.3	152
18	Epigenetic Changes in Individuals with Arsenicosis. Chemical Research in Toxicology, 2011, 24, 165-167.	3.3	147

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19	Disruption of the Arsenic (+3 Oxidation State) Methyltransferase Gene in the Mouse Alters the Phenotype for Methylation of Arsenic and Affects Distribution and Retention of Orally Administered Arsenate. Chemical Research in Toxicology, 2009, 22, 1713-1720.	3.3	145
20	Molecular Mechanisms of the Diabetogenic Effects of Arsenic: Inhibition of Insulin Signaling by Arsenite and Methylarsonous Acid. Environmental Health Perspectives, 2007, 115, 734-742.	6.0	138
21	Metabolism of Arsenic in Primary Cultures of Human and Rat Hepatocytes. Chemical Research in Toxicology, 1999, 12, 560-565.	3.3	132
22	Metabolism and toxicity of arsenic in human urothelial cells expressing rat arsenic (+3 oxidation) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	2.8	122
23	Examination of the effects of arsenic on glucose homeostasis in cell culture and animal studies: Development of a mouse model for arsenic-induced diabetes. Toxicology and Applied Pharmacology, 2007, 222, 305-314.	2.8	121
24	Maternal Arsenic Exposure, Arsenic Methylation Efficiency, and Birth Outcomes in the Biomarkers of Exposure to ARsenic (BEAR) Pregnancy Cohort in Mexico. Environmental Health Perspectives, 2015, 123, 186-192.	6.0	121
25	Characterization of the Impaired Glucose Homeostasis Produced in C57BL/6 Mice by Chronic Exposure to Arsenic and High-Fat Diet. Environmental Health Perspectives, 2011, 119, 1104-1109.	6.0	116
26	Endogenous Reductants Support the Catalytic Function of Recombinant Rat Cyt19, an Arsenic Methyltransferase. Chemical Research in Toxicology, 2004, 17, 404-409.	3.3	111
27	Metabolism of arsenic in human liver: the role of membrane transporters. Archives of Toxicology, 2010, 84, 3-16.	4.2	111
28	Requirement of Arsenic Biomethylation for Oxidative DNA Damage. Journal of the National Cancer Institute, 2009, 101, 1670-1681.	6.3	110
29	Association of AS3MT polymorphisms and the risk of premalignant arsenic skin lesions. Toxicology and Applied Pharmacology, 2009, 239, 200-207.	2.8	104
30	Speciation analysis of arsenic in biological matrices by automated hydride generation-cryotrapping-atomic absorption spectrometry with multiple microflame quartz tube atomizer (multiatomizer). Journal of Analytical Atomic Spectrometry, 2008, 23, 342-351.	3.0	102
31	Methylated trivalent arsenicals are potent inhibitors of glucose stimulated insulin secretion by murine pancreatic islets. Toxicology and Applied Pharmacology, 2013, 267, 11-15.	2.8	98
32	Arsenic and the Epigenome: Interindividual Differences in Arsenic Metabolism Related to Distinct Patterns of DNA Methylation. Journal of Biochemical and Molecular Toxicology, 2013, 27, 106-115.	3.0	97
33	Chronic Exposure to Arsenic and Markers of Cardiometabolic Risk: A Cross-Sectional Study in Chihuahua, Mexico. Environmental Health Perspectives, 2016, 124, 104-111.	6.0	96
34	Complexation of Arsenic Species in Rabbit Erythrocytes. Chemical Research in Toxicology, 1994, 7, 621-627.	3.3	91
35	Mono- and dimethylation of arsenic in rat liver cytosol in vitro. Chemico-Biological Interactions, 1996, 99, 147-164.	4.0	90
36	Binding of Arsenicals to Proteins in anin VitroMethylation System. Toxicology and Applied Pharmacology, 1997, 147, 1-8.	2.8	87

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37	Selenium Modifies the Metabolism and Toxicity of Arsenic in Primary Rat Hepatocytes. Toxicology and Applied Pharmacology, 2001, 172, 52-61.	2.8	87
38	Oxidation state specific generation of arsines from methylated arsenicals based on l-cysteine treatment in buffered media for speciation analysis by hydride generation-automated cryotrapping-gas chromatography-atomic absorption spectrometry with the multiatomizer. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 396-406.	2.9	81
39	Selenium Compounds Modulate the Activity of Recombinant Rat AsIII-Methyltransferase and the Methylation of Arsenite by Rat and Human Hepatocytes. Chemical Research in Toxicology, 2003, 16, 261-265.	3.3	78
40	Interindividual variation in the metabolism of arsenic in cultured primary human hepatocytes. Toxicology and Applied Pharmacology, 2004, 201, 166-177.	2.8	78
41	Methylated metabolites of arsenic trioxide are more potent than arsenic trioxide as apoptotic but not differentiation inducers in leukemia and lymphoma cells. Cancer Research, 2003, 63, 1853-9.	0.9	76
42	shRNA Silencing of AS3MT Expression Minimizes Arsenic Methylation Capacity of HepG2 Cells. Chemical Research in Toxicology, 2006, 19, 894-898.	3.3	74
43	A Concurrent Exposure to Arsenic and Fluoride from Drinking Water in Chihuahua, Mexico. International Journal of Environmental Research and Public Health, 2015, 12, 4587-4601.	2.6	71
44	Differential activation of APâ€1 in human bladder epithelial cells by inorganic and methylated arsenicals. FASEB Journal, 2003, 17, 67-69.	0.5	70
45	Comprehensive analysis of arsenic metabolites by pH-specific hydride generation atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2004, 19, 1460-1467.	3.0	69
46	Methylarsonous Acid Transport by Aquaglyceroporins. Environmental Health Perspectives, 2006, 114, 527-531.	6.0	66
47	Glutathione Modulates Recombinant Rat Arsenic (+3 Oxidation State) Methyltransferase-Catalyzed Formation of Trimethylarsine Oxide and Trimethylarsine. Chemical Research in Toxicology, 2004, 17, 1621-1629.	3.3	63
48	Arsenic (+3 oxidation state) methyltransferase genotype affects steady-state distribution and clearance of arsenic in arsenate-treated mice. Toxicology and Applied Pharmacology, 2010, 249, 217-223.	2.8	63
49	The Association of Arsenic Exposure and Metabolism With Type 1 and Type 2 Diabetes in Youth: The SEARCH Case-Control Study. Diabetes Care, 2017, 40, 46-53.	8.6	61
50	Glutathione-S-transferase Ï€ inhibits As2O3-induced apoptosis in lymphoma cells: involvement of hydrogen peroxide catabolism. Blood, 2005, 105, 1198-1203.	1.4	60
51	Arsenic (+3 oxidation state) methyltransferase and the inorganic arsenic methylation phenotype. Toxicology and Applied Pharmacology, 2005, 204, 164-169.	2.8	60
52	Liberation and analysis of protein-bound arsenicals. Biomedical Applications, 1996, 677, 161-166.	1.7	59
53	Interspecies differences in metabolism of arsenic by cultured primary hepatocytes. Toxicology and Applied Pharmacology, 2010, 245, 47-56.	2.8	56
54	An Overview of Arsenic Metabolism and Toxicity. Current Protocols in Toxicology / Editorial Board, Mahin D Maines (editor-in-chief) [et Al], 2009, 42, 4.31.1-4.31.6.	1.1	55

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55	The epigenetic effects of a high prenatal folate intake in male mouse fetuses exposed in utero to arsenic. Toxicology and Applied Pharmacology, 2012, 264, 439-450.	2.8	54
56	Environmental exposure to arsenic, AS3MT polymorphism and prevalence of diabetes in Mexico. Journal of Exposure Science and Environmental Epidemiology, 2013, 23, 151-155.	3.9	51
57	Speciation Analysis of Arsenic by Selective Hydride Generation-Cryotrapping-Atomic Fluorescence Spectrometry with Flame-in-Gas-Shield Atomizer: Achieving Extremely Low Detection Limits with Inexpensive Instrumentation. Analytical Chemistry, 2014, 86, 10422-10428.	6.5	50
58	Tissue dosimetry, metabolism and excretion of pentavalent and trivalent monomethylated arsenic in mice after oral administration. Toxicology and Applied Pharmacology, 2005, 208, 186-197.	2.8	49
59	Associations between Arsenic Species in Exfoliated Urothelial Cells and Prevalence of Diabetes among Residents of Chihuahua, Mexico. Environmental Health Perspectives, 2014, 122, 1088-1094.	6.0	48
60	Tissue dosimetry, metabolism and excretion of pentavalent and trivalent dimethylated arsenic in mice after oral administration. Toxicology and Applied Pharmacology, 2008, 227, 26-35.	2.8	47
61	Selective hydride generation-cryotrapping-ICP-MS for arsenic speciation analysis at picogram levels: analysis of river and sea water reference materials and human bladder epithelial cells. Journal of Analytical Atomic Spectrometry, 2013, 28, 1456.	3.0	47
62	Methylation of arsenic by recombinant human wild-type arsenic (+ 3 oxidation state) methyltransferase and its methionine 287 threonine (M287T) polymorph: Role of glutathione. Toxicology and Applied Pharmacology, 2012, 264, 121-130.	2.8	46
63	Time dependence of accumulation and binding of inorganic and organic arsenic species in rabbit erythrocytes. Chemico-Biological Interactions, 1995, 98, 69-83.	4.0	45
64	Metabolomic Characteristics of Arsenic-Associated Diabetes in a Prospective Cohort in Chihuahua, Mexico. Toxicological Sciences, 2015, 144, 338-346.	3.1	44
65	Arsenite induces delayed mutagenesis and transformation in human osteosarcoma cells at extremely low concentrations. Environmental and Molecular Mutagenesis, 2003, 41, 322-331.	2.2	43
66	Biological and behavioral factors modify urinary arsenic metabolic profiles in a U.S. population. Environmental Health, 2016, 15, 62.	4.0	43
67	Genetic and epigenetic mechanisms underlying arsenic-associated diabetes mellitus: a perspective of the current evidence. Epigenomics, 2017, 9, 701-710.	2.1	43
68	Prenatal arsenic exposure and dietary folate and methylcobalamin supplementation alter the metabolic phenotype of C57BL/6J mice in a sex-specific manner. Archives of Toxicology, 2018, 92, 1925-1937.	4.2	43
69	Origins, fate, and actions of methylated trivalent metabolites of inorganic arsenic: progress and prospects. Archives of Toxicology, 2021, 95, 1547-1572.	4.2	42
70	Direct Speciation Analysis of Arsenic in Whole Blood and Blood Plasma at Low Exposure Levels by Hydride Generation-Cryotrapping-Inductively Coupled Plasma Mass Spectrometry. Analytical Chemistry, 2017, 89, 9633-9637.	6.5	39
71	Arsenite and methylarsonite inhibit mitochondrial metabolism and glucose-stimulated insulin secretion in INS-1 832/13 Î² cells. Archives of Toxicology, 2018, 92, 693-704.	4.2	39
72	Knockout of arsenic (+3 oxidation state) methyltransferase is associated with adverse metabolic phenotype in mice: the role of sex and arsenic exposure. Archives of Toxicology, 2017, 91, 2617-2627.	4.2	36

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73	Speciation of Arsenic in Exfoliated Urinary Bladder Epithelial Cells from Individuals Exposed to Arsenic in Drinking Water. Environmental Health Perspectives, 2008, 116, 1656-1660.	6.0	33
74	Direct Analysis of Methylated Trivalent Arsenicals in Mouse Liver by Hydride Generation-Cryotrapping-Atomic Absorption Spectrometry. Chemical Research in Toxicology, 2011, 24, 478-480.	3.3	32
75	Oxidation state specific analysis of arsenic species in tissues of wild-type and arsenic (+ 3 oxidation) Tj ETQq1 1 0.784314 rgBT /Overlo	6.1	32
76	Arsenic Exposure and Type 2 Diabetes: MicroRNAs as Mechanistic Links?. Current Diabetes Reports, 2017, 17, 18.	4.2	30
77	Neonatal Metabolomic Profiles Related to Prenatal Arsenic Exposure. Environmental Science & Technology, 2017, 51, 625-633.	10.0	30
78	Direct analysis and stability of methylated trivalent arsenic metabolites in cells and tissues. Metallomics, 2011, 3, 1347.	2.4	29
79	Exposures to arsenite and methylarsonite produce insulin resistance and impair insulin-dependent glycogen metabolism in hepatocytes. Archives of Toxicology, 2017, 91, 3811-3821.	4.2	28
80	Impact of in vitro heavy metal exposure on pancreatic Î²-cell function. Toxicology Letters, 2018, 299, 137-144.	0.8	27
81	Arsenic Metabolism in Mice Carrying a BORCS7/AS3MT Locus Humanized by Syntenic Replacement. Environmental Health Perspectives, 2020, 128, 87003.	6.0	27
82	Identification of Novel Gene Targets and Putative Regulators of Arsenic-Associated DNA Methylation in Human Urothelial Cells and Bladder Cancer. Chemical Research in Toxicology, 2015, 28, 1144-1155.	3.3	26
83	Differential sensitivities of bone marrow, spleen and thymus to genotoxicity induced by environmentally relevant concentrations of arsenite. Toxicology Letters, 2016, 262, 55-61.	0.8	26
84	Analysis of maternal polymorphisms in arsenic (+3 oxidation state)-methyltransferase AS3MT and fetal sex in relation to arsenic metabolism and infant birth outcomes: Implications for risk analysis. Reproductive Toxicology, 2016, 61, 28-38.	2.9	26
85	Circulating miRNAs Associated with Arsenic Exposure. Environmental Science & Technology, 2018, 52, 14487-14495.	10.0	25
86	Metabolomic profiles of arsenic (+3 oxidation state) methyltransferase knockout mice: effect of sex and arsenic exposure. Archives of Toxicology, 2017, 91, 189-202.	4.2	24
87	Metabolic Phenotype of Wild-Type and As3mt -Knockout C57BL/6J Mice Exposed to Inorganic Arsenic: The Role of Dietary Fat and Folate Intake. Environmental Health Perspectives, 2018, 126, 127003.	6.0	22
88	Activation of superoxide dismutase in selenium-deficient mice infected with influenza virus. Journal of Trace Elements in Medicine and Biology, 2007, 21, 52-62.	3.0	21
89	Arsenite and its trivalent methylated metabolites inhibit glucose-stimulated calcium influx and insulin secretion in murine pancreatic islets. Archives of Toxicology, 2019, 93, 2525-2533.	4.2	20
90	Arsenic is more potent than cadmium or manganese in disrupting the INS-1 beta cell microRNA landscape. Archives of Toxicology, 2019, 93, 3099-3109.	4.2	20

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91	Comparative oxidation state specific analysis of arsenic species by high-performance liquid chromatography-inductively coupled plasma-mass spectrometry and hydride generation-cryotrapping-atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2013, 28, 843.	3.0	19
92	Maternal one carbon metabolism and arsenic methylation in a pregnancy cohort in Mexico. Journal of Exposure Science and Environmental Epidemiology, 2018, 28, 505-514.	3.9	19
93	Pharmacokinetic modeling of arsenite uptake and metabolism in hepatocytes--mechanistic insights and implications for further experiments. Journal of Pharmacokinetics and Pharmacodynamics, 2002, 29, 207-234.	1.8	18
94	Dose and Diet â€“ Sources of Arsenic Intake in Mouse in Utero Exposure Scenarios. Chemical Research in Toxicology, 2018, 31, 156-164.	3.3	18
95	Exposure to inorganic arsenic and its methylated metabolites alters metabolomics profiles in INS-1 832/13 insulinoma cells and isolated pancreatic islets. Archives of Toxicology, 2020, 94, 1955-1972.	4.2	17
96	Environmental arsenic as a disruptor of insulin signaling. Me, 2008, 10, 1-7.	1.0	16
97	Differential metabolism of inorganic arsenic in mice from genetically diverse Collaborative Cross strains. Archives of Toxicology, 2019, 93, 2811-2822.	4.2	15
98	Metabolism and Toxicity of Arsenicals in Cultured Cells. , 1999, , 311-323.		15
99	Association Between Variants in Arsenic (+3 Oxidation State) Methyltranserase (AS3MT) and Urinary Metabolites of Inorganic Arsenic: Role of Exposure Level. Toxicological Sciences, 2016, 153, 112-123.	3.1	14
100	Genotoxicity induced by monomethylarsonous acid (MMA +3) in mouse thymic developing T cells. Toxicology Letters, 2017, 279, 60-66.	0.8	14
101	Efflux Transporters Regulate Arsenite-Induced Genotoxicity in Double Negative and Double Positive T Cells. Toxicological Sciences, 2017, 158, 127-139.	3.1	10
102	Phase I and pharmacokinetic evaluation of the anti-telomerase agent KML-001 with cisplatin in advanced solid tumors. Cancer Chemotherapy and Pharmacology, 2016, 78, 959-967.	2.3	9
103	Identification of theGST-T1andGST-M1Null Genotypes Using High Resolution Melting Analysis. Chemical Research in Toxicology, 2012, 25, 216-224.	3.3	8
104	Expression of the Longest RGS4 Splice Variant in the Prefrontal Cortex Is Associated with Single Nucleotide Polymorphisms in Schizophrenia Patients. Frontiers in Psychiatry, 2016, 7, 26.	2.6	8
105	Effects of Preconception and in Utero Inorganic Arsenic Exposure on the Metabolic Phenotype of Genetically Diverse Collaborative Cross Mice. Chemical Research in Toxicology, 2019, 32, 1487-1490.	3.3	7
106	Sex-dependent effects of preconception exposure to arsenite on gene transcription in parental germ cells and on transcriptomic profiles and diabetic phenotype of offspring. Archives of Toxicology, 2021, 95, 473-488.	4.2	7
107	Analysis of Arsenical Metabolites in Biological Samples. Current Protocols in Toxicology / Editorial Board, Mahin D Maines (editor-in-chief) [et Al], 2009, 42, 4.33.1-4.33.17.	1.1	6
108	Knockout of arsenic (+3 oxidation state) methyltransferase results in sex-dependent changes in phosphatidylcholine metabolism in mice. Archives of Toxicology, 2016, 90, 3125-3128.	4.2	6

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109	Candidate master microRNA regulator of arsenic-induced pancreatic beta cell impairment revealed by multi-omics analysis. Archives of Toxicology, 2022, 96, 1685-1699.	4.2	6
110	An interaction of inorganic arsenic exposure with body weight and composition on type 2 diabetes indicators in Diversity Outbred mice. Mammalian Genome, 2022, 33, 575-589.	2.2	4
111	Metabolism of Inorganic Arsenic in Mice Lacking Genes Encoding GST-P, GST-M, and GST-T. Chemical Research in Toxicology, 2020, 33, 2043-2046.	3.3	3
112	The pharmacokinetics of therapeutic arsenic trioxide in acute promyelocytic leukemia patients. Leukemia and Lymphoma, 2022, 63, 653-663.	1.3	3
113	Diverse genetic backgrounds play a prominent role in the metabolic phenotype of CC021/Unc and CC027/GeniUNC mice exposed to inorganic arsenic. Toxicology, 2021, 452, 152696.	4.2	2
114	Metabolism of arsenic and gene transcription regulation. , 2003, , 267-281.		2
115	Arsenic 3 methyltransferase (AS3MT) automethylates on cysteine residues in vitro. Archives of Toxicology, 2022, 96, 1371-1386.	4.2	2
116	Maternal serum concentrations of one-carbon metabolism factors modify the association between biomarkers of arsenic methylation efficiency and birth weight. Environmental Health, 2022, 21, .	4.0	2
117	Bâ€vitamins influence arsenic metabolism in Mexico. FASEB Journal, 2013, 27, 1077.20.	0.5	1
118	Nutritional modulation of fetal susceptibility to iAs-associated gene expression underlying oxidative stress and inflammation in cord blood. ISEE Conference Abstracts, 2021, 2021, .	0.0	0
119	Selenoprotein P is not essential for an effective immune response to influenza infection in mice. FASEB Journal, 2006, 20, A1067.	0.5	0