

## ORoC Bibliography for Antimony and Other Antimony Compounds (as of 8/17/2017)

1. Abbaspour A, Najafi M. 2003. Simultaneous determination of Sb(III) and Sb(V) by partial least squares regression. *Talanta* 60(5): 1079-1084.
2. Abbaspour A, Najafi M, Kamyabi MA. 2004. Quantitative kinetic determination of Sb(V) and Sb(III) by spectrophotometric H-point standard addition method. *Anal Chim Acta* 505(2): 301-305.
3. Abdel Wahab MF, Abdulla WA, Nasr A. 1974. Comparative study on two labelled antimonial drugs, bilharcid and tartar emetic using monkeys. *Egypt J Bilh* 1(1): 101-106.
4. Abdel Wahab MF, Younan EA, Madkour MK. 1973. Disposition and distribution of antimony in bilharziasis using injections and oral drugs. VII. Lack of significant influence of bilharzial infection and route of drug administration on the tissue distribution. *J Drug Res Egypt* 5(1): 59-73.
5. Abdel Wahab MF, Younan EA, Madkour MK. 1973. Disposition and distribution of antimony in bilharziasis using injections and oral drugs. VIII. Alimentary absorption, biological distribution, fate, and rate of excretion of some labelled trivalent antibilharzials in adult male albino rats receiving single specified oral doses. *J Drug Res Egypt* 5(1): 75-92.
6. Abhishek K, Sardar AH, Das S, Kumar A, Ghosh AK, Singh R, Saini S, Mandal A, Verma S, Kumar A, Purkait B, Dikhit MR, Das P. 2017. Phosphorylation of translation initiation factor 2-alpha in *Leishmania donovani* under stress is necessary for parasite survival. *Mol Cell Biol* 37(1).
7. Abok K, Fredriksson BA, Brunk U. 1988. An experimental model system for leishmaniasis. An ultrastructural study on cultured macrophages exposed to *Leishmania* parasites and sodium stibogluconate. *APMIS* 96(7): 589-595.
8. Acheson ED, Cowdell RH, Rang EH. 1981. Nasal cancer in England and Wales: an occupational survey. *Br J Ind Med* 38(3): 218-224.
9. Ackermann S, Giere R, Majzlan J. 2007. Antimony speciation in shooting ranges and its association with iron oxides. *Geochim Cosmochim Acta* 71(15): A5-A5.
10. Ackermann S, Giere R, Newville M, Majzlan J. 2009. Antimony sinks in the weathering crust of bullets from Swiss shooting ranges. *Sci Total Environ* 407(5): 1669-1682.
11. Adams J, Howsmon DP, Kruger U, Geis E, Gehn E, Fimbres V, Pollard E, Mitchell J, Ingram J, Hellmers R, Quig D, Hahn J. 2017. Significant association of urinary toxic metals and autism-related symptoms-a nonlinear statistical analysis with cross validation. *PLoS One* 12(1): e0169526.
12. Adams JB, Audhya T, McDonough-Means S, Rubin RA, Quig D, Geis E, Gehn E, Loresto M, Mitchell J, Atwood S, Barnhouse S, Lee W. 2013. Toxicological status of children with autism vs. neurotypical children and the association with autism severity. *Biol Trace Elem Res* 151(2): 171-180.
13. Adams JB, Baral M, Geis E, Mitchell J, Ingram J, Hensley A, Zappia I, Newmark S, Gehn E, Rubin RA, Mitchell K, Bradstreet J, El-Dahr J. 2009. Safety and efficacy of oral DMSA therapy for children with autism spectrum disorders: Part A--medical results. *BMC Clin Pharmacol* 9: 16.
14. Ades AE, Kazantzis G. 1988. Lung cancer in a non-ferrous smelter: the role of cadmium. *Br J Ind Med* 45(7): 435-442.
15. Adonis M, Martínez V, Marín P, Berrios D, Gil L. 2005. Smoking habit and genetic factors associated with lung cancer in a population highly exposed to arsenic. *Toxicol Lett* 159(1): 32-37.
16. Afzali D, Padash M, Fathirad F, Mostafavi A. 2015. Determination of trace amounts of antimony(III) based on differential pulse voltammetric method with multi-walled carbon-nanotube-modified carbon paste electrode. *Ionics* 21(2): 565-570.
17. Agusa T, Nomura K, Kunito T, Anan Y, Iwata H, Miyazaki N, Tatsukawa R, Tanabe S. 2008. Interelement relationships and age-related variation of trace element concentrations in liver of striped dolphins (*Stenella coeruleoalba*) from Japanese coastal waters. *Marine Poll Bull* 57(6-12): 807-815.
18. Ahmad M, Lee SS, Lim JE, Lee SE, Cho JS, Moon DH, Hashimoto Y, Ok YS. 2014. Speciation and phytoavailability of lead and antimony in a small arms range soil amended with mussel shell, cow bone and biochar: EXAFS spectroscopy and chemical extractions. *Chemosphere* 95: 433-441.

19. Ai X, Wu L, Zhang M, Hou X, Yang L, Zheng C. 2014. Analytical method for the determination of trace toxic elements in milk based on combining Fe<sub>3</sub>O<sub>4</sub> nanoparticles accelerated UV Fenton-like digestion and solid phase extraction. *J Agric Food Chem* 62(34): 8586-8593.
20. Ainsworth N, Cooke JA, Johnson MS. 1991. Behavior and toxicity of antimony in the short-tailed field vole (*Microtus agrestis*). *Ecotoxicol Environ Safety* 21(2): 165-170.
21. Al Jaser M, el-Yazigi A, Kojan M, Croft SL. 1995. Skin uptake, distribution, and elimination of antimony following administration of sodium stibogluconate to patients with cutaneous leishmaniasis. *Antimicrob Agents Chemother* 39(2): 516-519.
22. Al Jaser MH, Radwan MA, Zaghloul IY. 2006. Pharmacokinetics and tissue distribution of antimony(V) after multiple intramuscular administrations in the hamster. *Saudi Pharma J* 14(1): 52-58.
23. Al-Saleh I, Al-Enazi S. 2011. Trace metals in lipsticks. *Toxicol Environ Chem* 93(6): 1149-1165.
24. Alaee R, Albooyeh M, Tretyakov S, Rockstuhl C. 2016. Phase-change material-based nanoantennas with tunable radiation patterns. *Opt Lett* 41(17): 4099-4102.
25. Alderton D, Serafimovski T, Burns L, Tasev G. 2014. Distribution and mobility of arsenic and antimony at mine sites in Fyr Macedonia. *Carpath J Earth Environ Sci* 9(1): 43-56.
26. Alexander F, McKinney PA, Cartwright RA. 1991. The pattern of childhood and related adult malignancies near Kingston-upon-Hull. *J Public Health Med* 13(2): 96-100.
27. Alexander J, Carter KC, Al-Fasi N, Satoskar A, Brombacher F. 2000. Endogenous IL-4 is necessary for effective drug therapy against visceral leishmaniasis. *Eur J Immunol* 30(10): 2935-2943.
28. Alfaro MR, Montero A, Ugarte OM, do Nascimento CWA, de Aguiar Accioly AM, Biondi CM, da Silva YJAB. 2015. Background concentrations and reference values for heavy metals in soils of Cuba. *Environ Monit Assess* 187(1).
29. Alkofahi AS, Abdelaziz AA, Mahmoud, II. 1989. Cytotoxicity and mutagenicity of 'Al-Kohl', an eye cosmetic commonly used in Jordan. *J Clin Pharm Ther* 14(6): 443-450.
30. Almeida VGK, Lima MF, Cassella RJ. 2007. Development of a reversed FIA system for the spectrophotometric determination of Sb(III) and total Sb in antileishmanial drugs. *Talanta* 71(3): 1047-1053.
31. AlSioufi L, Sánchez de la Campa AM, Sánchez-Rodas D. 2016. Microwave extraction as an alternative to ultrasound probe for antimony speciation in airborne particulate matter. *Microchem J* 124: 256-260.
32. Altunay N, Gurkan R. 2015. A new cloud point extraction procedure for determination of inorganic antimony species in beverages and biological samples by flame atomic absorption spectrometry. *Food Chem* 175: 507-515.
33. Altunay N, Gurkan R. 2016. Separation/preconcentration of ultra-trace levels of inorganic Sb and Se from different sample matrices by charge transfer sensitized ion-pairing using ultrasonic-assisted cloud point extraction prior to their speciation and determination by hydride generation AAS. *Talanta* 159: 344-355.
34. Altunay N, Gurkan R. 2016. Simultaneous determination of antimony and boron in beverage and dairy products by flame atomic absorption spectrometry after separation and pre-concentration by cloud-point extraction. *Food Addit Contam Part A Chem Anal Control Expo Risk Assess* 33(2): 271-281.
35. Altunay N, Gurkan R, Yildirim E. 2016. A new ultrasound assisted-cloud point extraction method for the determination of trace levels of tin and antimony in food and beverages by flame atomic absorption spectrometry. *Food Anal Meth* 9(10): 2960-2971.
36. Alvarez-Ayuso E, Otones V, Murciego A, Garcia-Sanchez A. 2013. Evaluation of different amendments to stabilize antimony in mining polluted soils. *Chemosphere* 90(8): 2233-2239.
37. Alvarez-Ayuso E, Otones V, Murciego A, Garcia-Sanchez A, Regina IS. 2012. Antimony, arsenic and lead distribution in soils and plants of an agricultural area impacted by former mining activities. *Sci Total Environ* 439: 35-43.
38. Amato F, Pandolfi M, Moreno T, Furger M, Pey J, Alastuey A, Bukowiecki N, Prevot ASH, Baltensperger U, Querol X. 2011. Sources and variability of inhalable road dust particles in three European cities. *Atmos Environ* 45: 6777-6787.

39. Amer MS, Abdel-Daim MH, Abdel-Tawab GA. 1967. Studies with tryptophan metabolites *in vitro*-II. Effect of tartar emetic on kynurenine metabolism by normal mouse liver. *Biochem Pharmacol* 16(7): 1227-1236.
40. Amer MS, Abdel-Daim MH, Abdel-Tawab GA. 1969. Studies with tryptophan metabolites *in vitro*-III. The effect of schistosomicidal drugs on kynureinase and kynurenine transaminase of normal mouse liver. *Biochem Pharmacol* 18(4): 821-826.
41. Amereih S, Meisel T, Kahr E, Wegscheider W. 2005. Speciation analysis of inorganic antimony in soil using HPLC-ID-ICP-MS. *Anal Bioanal Chem* 383(7-8): 1052-1059.
42. Amereih S, Meisel T, Scholger R, Wegscheider W. 2005. Antimony speciation in soil samples along two Austrian motorways by HPLC-ID-ICP-MS. *J Environ Monit* 7(12): 1200-1206.
43. Amos CI, Xu W, Spitz MR. 1999. Is there a genetic basis for lung cancer susceptibility? *Recent Results Cancer Res* 151: 3-12.
44. Andersen A, Barlow L, Engeland A, Kjaerheim K, Lynge E, Pukkala E. 1999. Work-related cancer in the Nordic countries. *Scand J Work Environ Health* 25 Suppl 2: 1-116.
45. Anderson CG. 2012. The metallurgy of antimony. *Chemie der Erde* 72(S4): 3-8.
46. Andersson L, Wingren G, Axelson O. 1990. Some hygienic observations from the glass industry. *Int Arch Occup Environ Health* 62(3): 249-252.
47. Andra SS, Makris KC, Charisiadis P, Costa CN. 2014. Co-occurrence profiles of trace elements in potable water systems: a case study. *Environ Monit Assess* 186(11): 7307-7320.
48. Andrewes P, Cullen WR, Feldmann J, Koch I, Polishchuk E. 1999. Methylantimony compound formation in the medium of *Scopulariopsis brevicaulis* cultures: (CD3)-C-13-L-methionine as a source of the methyl group. *Appl Organomet Chem* 13(10): 681-687.
49. Andrewes P, Cullen WR, Feldmann J, Koch I, Polishchuk E, Reimer KJ. 1998. The production of methylated organoantimony compounds by *Scopulariopsis brevicaulis*. *Appl Organomet Chem* 12(12): 827-842.
50. Andrewes P, Cullen WR, Polishchuk E. 2000. Antimony biomethylation by *Scopulariopsis brevicaulis*: characterization of intermediates and the methyl donor. *Chemosphere* 41(11): 1717-1725.
51. Andrewes P, Cullen WR, Polishchuk E, Reimer KJ. 2001. Antimony biomethylation by the wood rotting fungus *Phaeolus schweinitzii*. *Appl Organomet Chem* 15(6): 473-480.
52. Andrewes P, Kitchin KT, Wallace K. 2004. Plasmid DNA damage caused by stibine and trimethylstibine. *Toxicol Appl Pharmacol* 194(1): 41-48.
53. Andronikashvili EL, Mosulishvili LM, Belokobil'skiy AI, Kharabadze NE, Shonia NI. 1976. Human leukaemic cells. Determination of trace elements in nucleic acids and histones by neutron-activation analyses. *Biochem J* 157(3): 529-533.
54. Andronikashvili EL, Mosulishvili LM, Belokobil'skiy AI, Kharabadze, N.E., Tevzieva TK, Efremova EY. 1974. Content of some trace elements in sarcoma M-I DNA in dynamics of malignant growth. *Cancer Res* 34: 271-274.
55. Anonymous. 1950. VI. Studies on the excretion and concentration of antimony in blood and other tissues following the injection of trivalent and pentavalent antimonials into experimental animals. *Am J Epidemiol* 51(3): 370-385.
56. Anonymous. 2009. New and updated reference values for antimony, arsenic, and metals (lead, cadmium, nickel, mercury, thallium, and uranium) in urine and blood of children in Germany: Opinion of the Human Biomonitoring Commission of the German Federal Environment Agency. *Bundesgesundheitsblatt -Gesundheitsforschung - Gesundheitsschutz* 52(10): 977-982.
57. Anttila A, Pukkala E, Aitio A, Rantanen T, Karjalainen S. 1998. Update of cancer incidence among workers at a copper/nickel smelter and nickel refinery. *Int Arch Occup Environ Health* 71(4): 245-250.
58. Apostoli P, Catalani S. 2009. [Mechanisms of action for metallic elements and their species classified as R40 by EU]. *G Ital Med Lav Ergon* 31(1): 54-60.
59. Applebaum KM, Malloy EJ, Eisen EA. 2011. Left truncation, susceptibility, and bias in occupational cohort studies. *Epidemiology* 22(4): 599-606.

60. Apte SC, Howard AG. 1986. Determination of dissolved inorganic antimony(V) and antimony(III) species in natural waters by hydride generation atomic absorption spectrometry. *1*(3): 221-225.
61. Apte SC, Howard AG, Morris RJ, McCartney MJ. 1986. Arsenic, antimony and selenium speciation during a spring phytoplankton bloom in a closed experimental ecosystem. *Mar Chem* 20(2): 119-130.
62. Arai F, Yamamura Y, Yoshida M, Kishimoto T. 1994. Blood and urinary levels of metals (Pb, Cr, Cd, Mn, Sb, Co and Cu) in cloisonne workers. *32*(2): 67-78.
63. Arai Y. 2010. Arsenic and Antimony. In *Trace Elements in Soils*. John Wiley and Sons. p. 381-407.
64. Argo J. 2010. Chronic diseases and early exposure to airborne mixtures: Part III. Potential origin of pre-menopausal breast cancers. *J Expo Sci Environ Epidemiol* 20(2): 147-159.
65. Arlauskas A, Baker RS, Bonin AM, Tandon RK, Crisp PT, Ellis J. 1985. Mutagenicity of metal ions in bacteria. *Environ Res* 36(2): 379-388.
66. Armienta MA, Villasenor G, Cruz O, Ceniceros N, Aguayo A, Morton O. 2012. Geochemical processes and mobilization of toxic metals and metalloids in an As-rich base metal waste pile in Zimapán, Central Mexico. *Appl Geochem* 27(11): 2225-2237.
67. Armiento G, Nardi E, Lucci F, de Cassan M, della Ventura G, Santini C, Petrini E, Cremisini C. 2016. Antimony and arsenic distribution in a catchment affected by past mining activities: influence of extreme weather events. *Rend Fis Acc Lincei*: 1-13.
68. Armstrong B, Tremblay C, Theriault G. 1988. Compensating bladder cancer victims employed in aluminum reduction plants. *J Occup Med* 30(10): 771-775.
69. Arnich N, Sirot V, Riviere G, Jean J, Noel L, Guerin T, Leblanc JC. 2012. Dietary exposure to trace elements and health risk assessment in the 2nd French Total Diet Study. *Food Chem Toxicol* 50(7): 2432-2449.
70. Arya SC. 1995. Treatment of Indian kala-azar with pentavalent antimony. *Lancet* 345(8949): 584-584.
71. Asakura K, Satoh H, Chiba M, Okamoto M, Serizawa K, Nakano M, Omae K. 2009. Genotoxicity studies of heavy metals: lead, bismuth, indium, silver and antimony. *J Occup Health* 51(6): 498-512.
72. Asante KA, Agusa T, Biney CA, Agyekum WA, Bello M, Otsuka M, Itai T, Takahashi S, Tanabe S. 2012. Multi-trace element levels and arsenic speciation in urine of e-waste recycling workers from Agbogbloshie, Accra in Ghana. *Sci Total Environ* 424: 63-73.
73. Asaoka S, Takahashi Y, Araki Y, Tanimizu M. 2011. Preconcentration method of antimony using modified thiol cotton fiber for isotopic analyses of antimony in natural samples. *Anal Sci* 27(1): 25-28.
74. Asaoka S, Takahashi Y, Araki Y, Tanimizu M. 2012. Comparison of antimony and arsenic behavior in an Ichinokawa River water-sediment system. *Chem Geo* 334: 1-8.
75. Ash C, Tejnecký V, Sebek O, Nemecek K, Zahourová-Dubová L, Bakardjieva S, Drahota P, Drabek O. 2013. Fractionation and distribution of risk elements in soil profiles at a Czech shooting range. *Plant Soil Environ* 59(3): 121-129.
76. Ashley PM, Graham BP, Tighe MK, Wolfenden BJ. 2007. Antimony and arsenic dispersion in the Macleay River catchment, New South Wales: A study of the environmental geochemical consequences. *Aust J Earth Sci* 54(1): 83-103.
77. Ashry HA, Topaloglu A, Abdelmoati E, Theherani DK, Altmann K. 1988. *Genotoxische Wirkungen von Antimonionen, Bericht Nr. 600016 (Genotoxic effects of antimony ions, Report No. 600016)* (German). Seibersdorf, Austria: Österreichisches Forschungszentrum, unpublished.
78. Asshauer E. 1966. [On the problem of the toxic effect of trivalent antimony preparations]. *Arzneimittelforschung* 16(11): 1546-1549.
79. ATSDR. 1992. *Toxicological Profile for Antimony and Compounds*. Atlanta, GA: Agency for Toxic Substances and Disease Registry. 160 pp.
80. ATSDR. 2017. *Draft Toxicological Profile for Antimony and Compounds*. Atlanta, GA: Agency for Toxic Substances and Disease Registry. 328 pp.
81. Avino P, Capannesi G, Renzi L, Rosada A. 2013. Instrumental neutron activation analysis and statistical approach for determining baseline values of essential and toxic elements in hairs of high school students. *Ecotoxicol Environ Saf* 92: 206-214.

82. Avino P, Capannesi G, Rosada A, Manigrasso M, Sabbioni E. 2013. Multivariate analysis applied to some elements in human fluids and whole bloods of hemodialysis patients determined by INAA. *J Radioanal Nucl Chem* 298(3): 1957-1968.
83. Axelson O. 1980. Arsenic compounds and cancer. *J Toxicol Environ Health* 6(5-6): 1229-1235.
84. Axelson O, Dahlgren E, Jansson CD, Rehnlund SO. 1978. Arsenic exposure and mortality: a case-referent study from a Swedish copper smelter. *Br J Ind Med* 35(1): 8-15.
85. Babushok VI, Deglmann P, Kramer R, Linteris GT. 2017. Influence of antimony-halogen additives on flame propagation. *Combust Sci Technol* 189(2): 290-311.
86. Baceva K, Stafilov T, Matevski V. 2014. Bioaccumulation of heavy metals by endemic *Viola* species from the soil in the vicinity of the As-Sb-Tl mine "Allchar" Republic of Macedonia. *Int J Phytoremediation* 16(4): 347-365.
87. Bach C, Dauchy X, Chagnon MC, Etienne S. 2012. Chemical compounds and toxicological assessments of drinking water stored in polyethylene terephthalate (PET) bottles: A source of controversy reviewed. *Water Res* 46(3): 571-583.
88. Bach C, Dauchy X, Severin I, Munoz JF, Etienne S, Chagnon MC. 2013. Effect of temperature on the release of intentionally and non-intentionally added substances from polyethylene terephthalate (PET) bottles into water: chemical analysis and potential toxicity. *Food Chem* 139(1-4): 672-680.
89. Bacquart T, Frisbie S, Mitchell E, Grigg L, Cole C, Small C, Sarkar B. 2015. Multiple inorganic toxic substances contaminating the groundwater of Myingyan Township, Myanmar: arsenic, manganese, fluoride, iron, and uranium. *Sci Total Environ* 517: 232-245.
90. Baetjer AM. 1973. Dehydration and susceptibility to toxic chemicals. *Arch Environ Health* 26(2): 61-63.
91. Baeza M, Ren J, Krishnamurthy S, Vaughan TC. 2010. Spatial distribution of antimony and arsenic levels in Manadas Creek, an urban tributary of the Rio Grande in Laredo, Texas. *Arch Environ Contam Toxicol* 58(2): 299-314.
92. Bagdon RE, Zbinden G. 1964. Toxicity and tissue distribution of the schistosomicide TWSb (RO 4-1544/6) in rats. *Toxicol Appl Pharmacol* 6: 214-219.
93. Baggetto L, Ganesh P, Sun CN, Meisner RA, Zawodzinski TA, Veith GM. 2013. Intrinsic thermodynamic and kinetic properties of Sb electrodes for Li-ion and Na-ion batteries: Experiment and theory. *J Mat Chem A* 1(27): 7985-7994.
94. Bagherifam S, Lakzian A, Fotovat A, Khorasani R, Komarneni S. 2014. *In situ* stabilization of As and Sb with naturally occurring Mn, Al and Fe oxides in a calcareous soil: bioaccessibility, bioavailability and speciation studies. *J Hazard Mater* 273: 247-252.
95. Bahfenne S, Frost RL. 2010. A review of the vibrational spectroscopic studies of arsenite, antimonite, and antimonate minerals. *Appl Spectrosc Rev* 45(2): 101-129.
96. Baillie AJ, Coombs GH, Dolan TF, Laurie J. 1986. Non-ionic surfactant vesicles, niosomes, as a delivery system for the anti-leishmanial drug, sodium stibogluconate. *J Pharm Pharmacol* 38(7): 502-505.
97. Bailly R, Lauwers R, Buchet JP, Mahieu P, Konings J. 1991. Experimental and human studies on antimony metabolism: their relevance for the biological monitoring of workers exposed to inorganic antimony. *Br J Ind Med* 48(2): 93-97.
98. Baiocco P, Colotti G, Franceschini S, Ilari A. 2009. Molecular basis of antimony treatment in leishmaniasis. *J Med Chem* 52(8): 2603-2612.
99. Balana-Fouce R, Reguera RM, Cubria JC, Ordonez D. 1998. The pharmacology of leishmaniasis. *Gen Pharmacol* 30(4): 435-443.
100. Balazs L, Breunig HJ, Lork E, Rat CI. 2005. Synthesis and structures of stiba choline bromide,  $\text{Me}_3\text{SbCH}_2\text{CH}_2\text{OH}$  Br and  $(\text{Me}_3\text{SbCH}_2\text{COO})(8)(\text{NaBr})(7)(\text{MeOH})(9)(\text{H}_2\text{O})$ , a supramolecular derivative of stiba betaine. *Appl Organomet Chem* 19(12): 1263-1267.
101. Baluj-Santos C, Gonzalez-Portal A. 1992. Application of hydride generation to atomic-absorption spectrometric analysis of wines and beverages - a review. *Talanta* 39(4): 329-339.

102. Bannon DI, Drexler JW, Fent GM, Casteel SW, Hunter PJ, Brattin WJ, Major MA. 2009. Evaluation of small arms range soils for metal contamination and lead bioavailability. *Environ Sci Technol* 43(24): 9071-9076.
103. Barat C, Zhao C, Ouellette M, Tremblay MJ. 2007. HIV-1 replication is stimulated by sodium stibogluconate, the therapeutic mainstay in the treatment of leishmaniasis. *J Infect Dis* 195(2): 236-245.
104. Barber LM, Peterson RKD, Montagne C, Inskeep WP, Schleier JJ. 2009. A Dietary risk assessment for indigenous consumption of natural salt deposits in the Darhad Valley, Northern Mongolia. *Hum Ecol Risk Assess* 15(5): 907-922.
105. Barbieri FL, Gardon J, Ruiz-Castell M, Paco VP, Muckelbauer R, Casiot C, Freydier R, Duprey JL, Chen CM, Muller-Nordhorn J, Keil T. 2016. Toxic trace elements in maternal and cord blood and social determinants in a Bolivian mining city. *Int J Environ Health Res* 26(2): 158-174.
106. Barker AJ, Trainor TP, Douglas TA, Ilgen AG, Majs F, Qiu CR. 2014. Lead and antimony speciation associated with weathered bullet fragments. *Abstr Pap Am Chem Soc* 247: 1.
107. Barrera C, Lopez S, Aguilar L, Mercado L, Bravo M, Quiroz W. 2016. Pentavalent antimony uptake pathway through erythrocyte membranes: molecular and atomic fluorescence approaches. *Anal Bioanal Chem* 408(11): 2937-2944.
108. Barrett-Connor E. 1982. Drugs for the treatment of parasitic infection. *Med Clinics North Am* 66(1): 245-255.
109. Bartoli D, Battista G, Bertoncini S, De Santis M, Giusti S, Orsi D, Pirastu R, Zingoni A, Valiani M. 1998. [A cohort study of art glass workers in the Empoli area]. *Med Lav* 89(5): 424-436.
110. Bartter FC, Cowie DB, Most H, Ness AT, Forbush S. 1947. The fate of radioactive tartar emetic administered to human subjects - I. Blood concentration and excretion following single and multiple intravenous injections. *Am J Trop Med* 27: 403-416.
111. Basinger MA, Jones MM. 1981. Structural requirements for chelate antidotal efficacy in acute antimony(III) intoxication. *Res Commun Chem Pathol Pharmacol* 32(2): 355-363.
112. Basu JM, Mookerjee A, Sen P, Bhaumik S, Sen P, Banerjee S, Naskar K, Choudhuri SK, Saha B, Raha S, Roy S. 2006. Sodium antimony gluconate induces generation of reactive oxygen species and nitric oxide via phosphoinositide 3-kinase and mitogen-activated protein kinase activation in *Leishmania donovani*-infected macrophages. *Antimicrob Agents Chemother* 50(5): 1788-1797.
113. Basu S, Barman P. 1999. Native oxide thin film on gallium antimonide - A kinetic approach. *J Korean Phys Soc* 35: S379-S382.
114. Batista BL, Souza VCD, Da Silva FG, Barbosa F. 2010. Survey of 13 trace elements of toxic and nutritional significance in rice from Brazil and exposure assessment. *Food Addit Contam Part B-Surveill* 3(4): 253-262.
115. Battista G, Bartoli D, Iaia TE, Dini F, Fiumalbi C, Giglioli S, Valiani M. 1996. Art glassware and sinonasal cancer: report of three cases. *Am J Ind Med* 30(1): 31-35.
116. BAUA. 2016. *Justification Document for the Selection of a CoRAP Substance: Diantimony Trioxide*. EC no. 215-175-0. Bundesanstalt für Arbeitsschutz und Arbeitsmedizin. 9 pp.
117. Bazzi A, Nriagu JO, Inhorn MC, Linder AM. 2005. Determination of antimony in human blood with inductively coupled plasma-mass spectrometry. *J Environ Monit* 7(12): 1251-1254.
118. Beauchemin S, Kwong YTJ, Desbarats AJ, MacKinnon T, Percival JB, Parsons MB, Pandya K. 2012. Downstream changes in antimony and arsenic speciation in sediments at a mesothermal gold deposit in British Columbia, Canada. *Appl Geochem* 27(10): 1953-1965.
119. Bech J, Corrales I, Tume P, Barcelo J, Duran P, Roca N, Poschenrieder C. 2012. Accumulation of antimony and other potentially toxic elements in plants around a former antimony mine located in the Ribes Valley (Eastern Pyrenees). *J Geochem Explor* 113: 100-105.
120. Beckmann J, Finke P, Hesse M, Wettig B. 2008. Well-defined stibonic and tellurinic acids. *Angew Chem Int Ed Engl* 47(51): 9982-9984.

121. Belanger PL, Okawa MT. 1986. *Health Hazard Evaluation. San Francisco Costume Shop, San Francisco, California.* HETA 86-236-1725. Cincinnati, OH: National Institute for Occupational Safety and Health. 15 pp.
122. Bellido-Martin A, Gomez-Ariza JL, Smichowsky P, Sanchez-Rodas D. 2009. Speciation of antimony in airborne particulate matter using ultrasound probe fast extraction and analysis by HPLC-HG-AFS. *Anal Chim Acta* 649(2): 191-195.
123. Belloli C, Ceci L, Carli S, Tassi P, Montesissa C, De Natale G, Marcotrigiano G, Ormas P. 1995. Disposition of antimony and aminosidine in dogs after administration separately and together: implications for therapy of leishmaniasis. *Res Vet Sci* 58(2): 123-127.
124. Belloli C, Crescenzo G, Carli S, Zaghini A, Mengozzi G, Bertini S, Ormas P. 1999. Disposition of antimony and aminosidine combination after multiple subcutaneous injections in dogs. *Vet J* 157(3): 315-321.
125. Belova A, Greco SL, Riederer AM, Olsho LE, Corrales MA. 2013. A method to screen U.S. environmental biomonitoring data for race/ethnicity and income-related disparity. *Environ Health* 12: 114.
126. Belzile N, Chen YW. 1999. Analytical procedure for the determination of antimony (III) and total antimony in amorphous iron and manganese oxyhydroxides. *Can J Anal Sci Spectrosc* 44(3): 85-88.
127. Belzile N, Chen YW, Filella M. 2011. Human exposure to antimony: I. Sources and intake. *Crit Rev Environ Science Tech* 41(14): 1309-1373.
128. Belzile N, Chen YW, Wang ZJ. 2001. Oxidation of antimony (III) by amorphous iron and manganese oxyhydroxides. *Chem Geol* 174(4): 379-387.
129. Bencko V, Geist T, Arbetova D, Dharmadikari DM, Svandová E. 1986. Biological monitoring of environmental pollution and human exposure to some trace elements. *J Hyg Epidemiol Microbiol* 30(1): 1-10.
130. Benderli Cihan Y, Sözen S, Öztürk Yıldırım S. 2011. Trace elements and heavy metals in hair of stage III breast cancer patients. *Biol Trace Elem Res* 144(1-3): 360-379.
131. Benedetti M, Iavarone I, Comba P. 2001. Cancer risk associated with residential proximity to industrial sites: a review. *Arch Environ Health* 56(4): 342-349.
132. Benke G, Abramson M, Sim M. 1998. Exposures in the alumina and primary aluminium industry: an historical review. *Ann Occup Hyg* 42(3): 173-189.
133. Bennett WW, Arsic M, Welsh DT, Teasdale PR. 2016. *In situ* speciation of dissolved inorganic antimony in surface waters and sediment porewaters: development of a thiol-based diffusive gradients in thin films technique for Sb(III). *Environ Sci Process Impacts* 18(8): 992-998.
134. Bentley R, Chasteen TG. 2002. Microbial methylation of metalloids: arsenic, antimony, and bismuth. *Microbiol Mol Biol Rev* 66(2): 250-271.
135. Bento DB, de Souza B, Steckert AV, Dias RO, Leffa DD, Moreno SE, Petronilho F, de Andrade VM, Dal-Pizzol F, Romão PR. 2013. Oxidative stress in mice treated with antileishmanial meglumine antimoniate. *Res Vet Sci* 95(3): 1134-1141.
136. Berg JE, Skyberg K. 1998. Antimony. In *The Nordic Expert Group for Criteria Documentation of Health Risks from Chemicals.* vol. 11. Kjellberg A, ed. Solna, Sweden: Arbete och Hälsa, Arbetslivsinstitutet. 43 pp.
137. Berman JD, Fleckenstein L. 1991. Pharmacokinetic Justification of antiprotozoal therapy: A US perspective. *Clin Pharmacokinet* 21(6): 479-493.
138. Berman JD, Gallalee JF, Gallalee JV. 1988. Pharmacokinetics of pentavalent antimony (Pentostam) in hamsters. *Am J Trop Med Hyg* 39(1): 41-45.
139. Berry JP, Galle P. 1990. Subcellular localization of HPA-23 in different rat organs: electron microprobe study. *Exp Mol Pathol* 53(3): 255-264.
140. Bertine KK, Dong Soo L. 1983. Antimony content and speciation in the water column and interstitial waters of Saanich Inlet, In *Trace Metals in Sea Water (Proceedings of a NATO Advanced Research Institute)*, New York, NY, USA Erice, Italy, Plenum Press.21-38.

141. Bessö A, Nyberg F, Pershagen G. 2003. Air pollution and lung cancer mortality in the vicinity of a nonferrous metal smelter in Sweden. *Int J Cancer* 107(3): 448-452.
142. Bettinelli M, Spezia S, Baroni U, Bizzarri G. 1994. GFAAS and FI-HGAAS determination of AS, BI, SB, and SE in steels and nickel-alloys. *Atom Spectrosc* 15(3): 115-121.
143. Beveridge MCM, Stafford E, Coutts R. 1985. Metal concentrations in the commercially exploited fishes of an endorheic saline lake in the tin-silver province of Bolivia. *Aquacul Fish Manag* 16(1): 41-53.
144. Beyersmann D, Hartwig A. 2008. Carcinogenic metal compounds: recent insight into molecular and cellular mechanisms. *Arch Toxicol* 82(8): 493-512.
145. Bhattacharjee H, Mukhopadhyay R, Thiagarajan S, Rosen BP. 2008. Aquaglyceroporins: ancient channels for metalloids. *J Biol* 7(9): 33.
146. Bianciardi P, Brovida C, Valente M, Aresu L, Cavicchioli L, Vischer C, Giroud L, Castagnaro M. 2009. Administration of miltefosine and meglumine antimoniate in healthy dogs: Clinicopathological evaluation of the impact on the kidneys. *Toxicol Pathol* 37(6): 770-775.
147. Bienert GP, Schussler MD, Jahn TP. 2008. Metalloids: essential, beneficial or toxic? Major intrinsic proteins sort it out. *Trends Biochem Sci* 33(1): 20-26.
148. Bings NH. 2005. Plasma time-of-flight mass spectrometry as a detector for short transient signals in elemental analysis. *Anal Bioanal Chem* 382(4): 887-890.
149. Binks K, Doll R, Gillies M, Holroyd C, Jones SR, McGeoghegan D, Scott L, Wakeford R, Walker P. 2005. Mortality experience of male workers at a UK tin smelter. *Occup Med (Lond)* 55(3): 215-226.
150. Björ O, Damber L, Edström C, Nilsson T. 2008. Long-term follow-up study of mortality and the incidence of cancer in a cohort of workers at a primary aluminum smelter in Sweden. *Scand J Work Environ Health* 34(6): 463-470.
151. Blackwood GM, Edinger EN. 2007. Mineralogy and trace element relative solubility patterns of shallow marine sediments affected by submarine tailings disposal and artisanal gold mining, Buyat-Ratototok district, North Sulawesi, Indonesia. *Environ Geol* 52(4): 803-818.
152. Blair A, Stewart P, Lubin J, Forastiere F. 2007. Methodological issues regarding confounding and exposure misclassification in epidemiological studies of occupational exposures. *Am J Ind Med* 50: 199-207.
153. Blejer HP, Wagner W. 1976. Inorganic arsenic--ambient level approach to the control of occupational cancerogenic exposures. *Ann N Y Acad Sci* 271: 179-186.
154. Bloomfield MS, Dow AD, Prebble KA. 1992. The determination of pentavalent antimony in sodium stibogluconate in a pharmaceutical formulation by flow injection analysis. *J Pharm Biomed Anal* 10(10-12): 779-783.
155. Blot WJ, Brown LM, Pottern LM, Fraumeni JF, Jr. 1986. Re: "Lung cancer mortality among men living near an arsenic-emitting smelter". *Am J Epidemiol* 124(1): 154-155.
156. Blot WJ, Brown LM, Pottern LM, Stone BJ, Fraumeni JF, Jr. 1983. Lung cancer among long-term steel workers. *Am J Epidemiol* 117(6): 706-716.
157. Blot WJ, Fraumeni JF, Jr. 1975. Arsenical air pollution and lung cancer. *Lancet* 2(7926): 142-144.
158. Bocca B, Bena A, Pino A, D'Aversa J, Orengia M, Farina E, Salamina G, Procopio E, Chiusolo M, Gandini M, Cadum E, Musmeci L, Alimonti A. 2016. Human biomonitoring of metals in adults living near a waste-to-energy incinerator in ante-operam phase: Focus on reference values and health-based assessments. *Environ Res* 148: 338-350.
159. Bocca B, Forte G, Petrucci F, Senofonte O, Violante N, Alimonti A. 2005. Development of methods for the quantification of essential and toxic elements in human biomonitoring. *Ann 1st Super Sanita* 41(2): 165-170.
160. Bocca B, Pino A, Alimonti A, Forte G. 2014. Toxic metals contained in cosmetics: a status report. *Regul Toxicol Pharmacol* 68(3): 447-467.
161. Boddu VM, Gilmer JA, Hay KJ, Hunt B. 2008. Integrated metal emissions control system (IMECS™) for army small arms deactivation furnaces, In *27th Annual International Conference on Thermal Treatment Technologies 2008*, Montreal, QC.151-159.

162. Boffetta P. 1992. Methodological aspects of the epidemiological association between cadmium and cancer in humans. *IARC Sci Publ*(118): 425-434.
163. Boffetta P. 1993. Carcinogenicity of trace elements with reference to evaluations made by the International Agency for Research on Cancer. *Scand J Work Environ Health* 19 Suppl 1: 67-70.
164. Bogush A, Stegemann JA, Wood I, Roy A. 2015. Element composition and mineralogical characterisation of air pollution control residue from UK energy-from-waste facilities. *Waste Manage* 36: 119-129.
165. Bonafaccia G, Gambelli L, Fabjan N, Kreft I. 2003. Trace elements in flour and bran from common and tartary buckwheat. *Food Chem* 83(1): 1-5.
166. Bonetta S, Gianotti V, Bonetta S, Gosetti F, Oddone M, Gennaro MC, Carraro E. 2009. DNA damage in A549 cells exposed to different extracts of PM2.5 from industrial, urban and highway sites. *Chemosphere* 77(7): 1030-1034.
167. Borborema SE, Osso Jr JA, Andrade Jr HF, Nascimento N. 2013. Biodistribution of meglumine antimoniate in healthy and *Leishmania (Leishmania) infantum* chagasi-infected BALB/c mice. *Mem Inst Oswaldo Cruz* 108(5): 623-630.
168. Borborema SET, de Andrade Jr HF, Osso Jr JA, do Nascimento N. 2007. Pharmacokinetic of antimony in mice with cutaneous leishmaniasis. In *International Nuclear Atlantic Conference - INAC 2007*. Associação Brasileira de Energia Nuclear – Aben. 7 pp.
169. Borborema SET, Junior HFA, Junior JAO, do Nascimento N. 2005. *In vitro* antileishmanial properties of neutron-irradiated meglumine antimoniate. 48(Specil Iss. 2): 63-68.
170. Borgie M, Ledoux F, Verdin A, Cazier F, Greige H, Shirali P, Courcot D, Dagher Z. 2015. Genotoxic and epigenotoxic effects of fine particulate matter from rural and urban sites in Lebanon on human bronchial epithelial cells. *Environ Res* 136: 352-362.
171. Borm P, Cassee FR, Oberdorster G. 2015. Lung particle overload: old school -new insights? *Part Fibre Toxicol* 12: 10.
172. Borm PJ, Schins RP, Albrecht C. 2004. Inhaled particles and lung cancer, part B: paradigms and risk assessment. *Int J Cancer* 110(1): 3-14.
173. Bosch AC, O'Neill B, Sigge GO, Kerwath SE, Hoffman LC. 2016. Heavy metal accumulation and toxicity in smoothhound (*Mustelus mustelus*) shark from Langebaan Lagoon, South Africa. *Food Chem* 190: 871-878.
174. Bosch ME, Sánchez AJR, Rojas FS, Ojeda CB. 2010. Arsenic and antimony speciation analysis in the environment using hyphenated techniques to inductively coupled plasma mass spectrometry: A review. *Int J Environ Waste Manage* 5(1-2): 4-63.
175. Bosch Ojeda C, Rojas FS, Pavon JMC, Martin LT. 2005. Use of 1,5-bis(di-2-pyridyl)methylene thiocarbohydrazide immobilized on silica gel for automated preconcentration and selective determination of antimony(III) by flow-injection electrothermal atomic absorption spectrometry. *Anal Bioanal Chem* 382(2): 513-518.
176. Bosen SF, Scheuing DR. 1976. A rapid microtechnique for the detection of trace metals from gunshot residues. *J Forensic Sc* 21(1): 163-170.
177. Bowen HJM, Page E, Valente I, Wade RJ. 1979. Radio-tracer methods for studying speciation in natural waters. *J Radioanal Chem* 48(1-2): 9-16.
178. Boyd TC, Roy AC. 1929. Observations on the excretion of antimony in the urine. *Indian J Med Res* 17: 94-108.
179. Boysen M, Solberg LA, Torjussen W, Poppe S, Høgetveit AC. 1984. Histological changes, rhinoscopical findings and nickel concentration in plasma and urine in retired nickel workers. *Acta Otolaryngol* 97(1-2): 105-115.
180. Brady JP, Ayoko GA, Martens WN, Goonetilleke A. 2015. Weak acid extractable metals in Bramble Bay, Queensland, Australia: Temporal behaviour, enrichment and source apportionment. *Marine Pollution Bull* 91(1): 380-388.

181. Brahmachari UN, Chaudhury SC, Das J, Sen PB. 1924. Chemotherapy of antimonial compounds in Kala-azar infection-VIII. Quantitative studies in excretion of antimony (tartar emetic and urea stibamine). *Ind J Med Res* 11: 829-838.
182. Brauman SK. 1976. Sb<sub>2</sub>O<sub>3</sub>-halogen fire retardance in polymers - 2. Antimony-halogen substrate interactions. *J Fire Retardant Chem* 3(3): 117-137.
183. Brebu M, Bhaskar T, Muto A, Sakata Y. 2006. Alkaline hydrothermal treatment of brominated high impact polystyrene (HIPS-Br) for bromine and bromine-free plastic recovery. *Chemosphere* 64(6): 1021-1025.
184. Bregoli L, Chiarini F, Gambarelli A, Sighinolfi G, Gatti AM, Santi P, Martelli AM, Cocco L. 2009. Toxicity of antimony trioxide nanoparticles on human hematopoietic progenitor cells and comparison to cell lines. *Toxicology* 262(2): 121-129.
185. Breslow N. 1985. Multivariate cohort analysis. *Natl Cancer Inst Monogr* 67: 149-156.
186. Breslow N, Langholz B. 1987. Nonparametric estimation of relative mortality functions. *J Chronic Dis* 40(Suppl 2): 89s-99s.
187. Brochu C, Wang J, Roy G, Messier N, Wang XY, Saravia NG, Ouellette M. 2003. Antimony uptake systems in the protozoan parasite *Leishmania* and accumulation differences in antimony-resistant parasites. *Antimicrob Agents Chemother* 47(10): 3073-3079.
188. Brown CC, Chu KC. 1983. A new method for the analysis of cohort studies: implications of the multistage theory of carcinogenesis applied to occupational arsenic exposure. *Environ Health Perspect* 50: 293-308.
189. Brown LM, Pottern LM, Blot WJ. 1984. Lung cancer in relation to environmental pollutants emitted from industrial sources. *Environ Res* 34(2): 250-261.
190. Brozek-Mucha Z. 2014. On the prevalence of gunshot residue in selected populations - an empirical study performed with SEM-EDX analysis. *Forensic Sci Int* 237: 46-52.
191. Brozek-Mucha Z, Zadora G, Dane F. 2003. A comparative study of gunshot residue originating from 9 mm Luger ammunition from various producers. *Sci Justice* 43(4): 229-235.
192. Brune D. 1980. Minor and trace inorganic components of toothpastes. *Scand J Dent Res* 88(6): 517-520.
193. Brune D, Gerhardsson L, Nordberg G, Wester PO. 1987. Multielemental assay of autopsy tissues of smeltery and refinery workers pertinent to possible health effects: A survey. *Biol Trace Elem Res* 12(1): 145.
194. Buchet JP, Lison D. 1998. Mortality by cancer in groups of the Belgian population with a moderately increased intake of arsenic. *Int Arch Occup Environ Health* 71(2): 125-130.
195. Buckley JJ, Greaney MJ, Brutchev RL. 2014. Ligand exchange of colloidal CdSe nanocrystals with stibanes derived from Sb<sub>2</sub>S<sub>3</sub> dissolved in a thiol-amine mixture. *Chem Mat* 26(21): 6311-6317.
196. Bulger RE. 1969. Use of potassium pyroantimonate in the localization of sodium ions in rat kidney tissue. *J Cell Biol* 40(1): 79-94.
197. Bullough F, Weiss DJ, Dubbin WE, Coles BJ, Barrott J, SenGupta AK. 2010. Evidence of competitive adsorption of Sb(III) and As(III) on activated alumina. *Ind Eng Chem Res* 49(5): 2521-2524.
198. Burguera JL, Burguera M, Petit De Pena Y, Lugo A, Anez N. 1993. Selective determination of antimony(III) and antimony(V) in serum and urine and of total antimony in skin biopsies of patients with cutaneous leishmaniasis treated with meglumine antimonate. *Trace Elem Med* 10(2): 66-70.
199. Burroughs GE, Horan J. 1981. *Health Hazard Evaluation Report. Becton-Dickinson Company, Columbus, Nebraska.* HE 80-023-804. National Institutes for Occupational Health and Safety. 17 pp.
200. Buschmann J, Canonica S, Sigg L. 2005. Photoinduced oxidation of antimony(III) in the presence of humic acid. *Environ Sci Technol* 39(14): 5335-5341.
201. Buschmann J, Sigg L. 2004. Antimony(III) binding to humic substances: Influence of pH and type of humic acid. *Environ Sci Technol* 38(17): 4535-4541.
202. Cabaña-Muñoz ME, Parmigiani-Izquierdo JM, Bravo-González LA, Kyung HM, Merino JJ. 2015. Increased Zn/glutathione levels and higher superoxide dismutase-1 activity as biomarkers of oxidative

- stress in women with long-term dental amalgam fillings: Correlation between mercury/aluminium levels (in hair) and antioxidant systems in plasma. *PLoS ONE* 10(6): e0126339.
203. Caboche J, Jondreville C, Tack K, Denys S, Rychen G, Feidt C. 2009. Tissue distribution of antimony (Sb) in piglets orally given graded levels of Sb (V). *Toxicol Environ Chem* 91(2): 267-278.
204. Cabon JY. 2002. Influence of experimental parameters on the determination of antimony in seawater by atomic absorption spectrometry using a transversely heated graphite furnace with Zeeman-effect background correction. *Anal Bioanal Chem* 374(7-8): 1282-1289.
205. Cabon JY, Madec CL. 2004. Determination of major antimony species in seawater by continuous flow injection hydride generation atomic absorption spectrometry. *Anal Chim Acta* 504(2): 209-215.
206. Cabral LM, Juliano VN, Dias LR, Dornelas CB, Rodrigues CR, Villardi M, Castro HC, Santos TC. 2008. Speciation of antimony (III) and antimony (V) using hydride generation for meglumine antimoniate pharmaceutical formulations quality control. *Mem Inst Oswaldo Cruz* 103(2): 130-137.
207. Cabredo S, Galban J, Sanz J. 1998. Simultaneous determination of arsenic, antimony, selenium and tin by gas phase molecular absorption spectrometry after two step hydride generation and preconcentration in a cold trap system. *Talanta* 46(4): 631-638.
208. CAEPA. 2009. *Draft Public Health Goal for Antimony in Drinking Water*. California Environmental Protection Agency.
209. CAEPA. 2016. *Draft: Public Health Goal. Antimony in Drinking Water*. California Environmental Protection Agency. 50 pp.
210. Cai Y, Li L, Zhang H. 2015. Kinetic modeling of pH-dependent antimony (V) sorption and transport in iron oxide-coated sand. *Chemosphere* 138: 758-764.
211. Cai Y, Mi Y, Zhang H. 2016. Kinetic modeling of antimony(III) oxidation and sorption in soils. *J Hazard Mater* 316: 102-109.
212. Caldwell KL, Hartel J, Jarrett J, Jones RL. 2005. Inductively coupled plasma mass spectrometry to measure multiple toxic elements in urine in NHANES 1999-2000. *Atom Spectrosc* 26(1): 1-7.
213. Callahan HL, Roberts WL, Rainey PM, Beverley SM. 1994. The PGPA gene of *Leishmania major* mediates antimony (SbIII) resistance by decreasing influx and not by increasing efflux. *Mol Biochem Parasitol* 68(1): 145-149.
214. Calvo Fornieles A, García De Torres A, Vereda Alonso E, Siles Cordero MT, Cano Pavón JM. 2011. Speciation of antimony(III) and antimony(V) in seawater by flow injection solid phase extraction coupled with online hydride generation inductively coupled plasma mass spectrometry. *J Anal At Spectrom* 26(8): 1619-1626.
215. Cameron TP, Rogers-Back AM, Lawlor TE, Harbell JW, Seifried HE, Dunkel VC. 1991. Genotoxicity of multifunctional acrylates in the Salmonella/mammalian-microsome assay and mouse lymphoma TK+/- assay. *Environ Mol Mutagen* 17(4): 264-271.
216. Canepari S, Marconi E, Astolfi ML, Perrino C. 2010. Relevance of Sb(III), Sb(V), and Sb-containing nano-particles in urban atmospheric particulate matter. *Anal Bioanal Chem* 397(6): 2533-2542.
217. Cano-Resendiz O, de la Rosa G, Cruz-Jimenez G, Gardea-Torresdey JL, Robinson BH. 2011. Evaluating the role of vegetation on the transport of contaminants associated with a mine tailing using the Phyto-DSS. *J Hazard Mater* 189(1-2): 472-478.
218. Cantanhêde LF, Almeida LP, Soares REP, Branco PVGC, Pereira SRF. 2015. Soy isoflavones have antimutagenic activity on DNA damage induced by the antileishmanial Glucantime (*Meglumine antimoniate*). *Drug Chem Toxicol* 38(3): 312-317.
219. Cantonati M, Angeli N, Virtanen L, Wojtal AZ, Gabrieli J, Falasco E, Lavoie I, Morin S, Marchetto A, Fortin C, Smirnova S. 2014. *Achnanthidium minutissimum* (Bacillariophyta) valve deformities as indicators of metal enrichment in diverse widely-distributed freshwater habitats. *Sci Total Environ* 475: 201-215.
220. Canuto MH, Siebald HGL, de Lima GM, Silva JBB. 2003. Antimony and chromium determination in Brazilian sugar cane spirit, cachaca, by electrothermal atomic absorption spectrometry using matrix matching calibration and ruthenium as permanent modifier. *J Anal At Spectrom* 18(11): 1404-1406.

221. Cao S, Duan X, Zhao X, Chen Y, Wang B, Sun C, Zheng B, Wei F. 2016. Health risks of children's cumulative and aggregative exposure to metals and metalloids in a typical urban environment in China. *Chemosphere* 147: 404-411.
222. Carbol P, Skålberg M, Skarnemark G. 1995. Cesium and antimony behaviour in water and forest soil after the chernobyl accident. *Radiochim Acta* 69(4): 259-270.
223. Cardozo MC, Cavalcante DD, Silva DLF, Dos Santos WNL, Bezerra MA. 2016. Multivariate optimization of a method for antimony determination by hydride generation atomic fluorescence spectrometry in hair samples of patients undergoing chemotherapy against Leishmaniasis. *An Acad Bras Cienc* 88(3): 1179-1190.
224. Carneado S, Hernandez-Nataren E, Lopez-Sanchez JF, Sahuquillo A. 2015. Migration of antimony from polyethylene terephthalate used in mineral water bottles. *Food Chem* 166: 544-550.
225. Caron F, Mankarios G. 2004. Pre-assessment of the speciation of  $^{60}\text{Co}$ ,  $^{125}\text{Sb}$ ,  $^{137}\text{Cs}$  and  $^{241}\text{Am}$  in a contaminated aquifer. *J Environ Radioact* 77(1): 29-46.
226. Carozza SE, Wrensch M, Miike R, Newman B, Olshan AF, Savitz DA, Yost M, Lee M. 2000. Occupation and adult gliomas. *Am J Epidemiol* 152(9): 838-846.
227. Carta P, Aru G, Cadeddu C, Gigli G, Papi G, Carta F, Nurchis P. 2004. Mortality for pancreatic cancer among aluminium smelter workers in Sardinia, Italy. *G Ital Med Lav Ergon* 26(2): 83-89.
228. Carta P, Aru G, Cadeddu C, Nieddu V, Polizzi M, Nurchis P, Flore C, Salis S, Sanna Randaccio F. 2003. [Mortality from lung cancer among workers of a Sardinian lead smelter [Follow-up: 1972-2001]]. *G Ital Med Lav Ergon* 25(Suppl 3): 17-18.
229. Carvalho PCS, Neiva AMR, Silva M, Antunes I. 2014. Metal and metalloid leaching from tailings into streamwater and sediments in the old Ag-Pb-Zn Terramonte mine, northern Portugal. *Environ Earth Sci* 71(5): 2029-2041.
230. Carvalho PCS, Neiva AMR, Silva M, da Silva EAF. 2014. Geochemical comparison of waters and stream sediments close to abandoned Sb-Au and As-Au mining areas, northern Portugal. *Chem Erde-Geochem* 74(2): 267-283.
231. Carvalho PCS, Neiva AMR, Silva MMVG. 2012. Assessment to the potential mobility and toxicity of metals and metalloids in soils contaminated by old Sb-Au and As-Au mines (NW Portugal). *Environ Earth Sci* 65(4): 1215-1230.
232. Casado M, Anawar HM, Garcia-Sánchez A, Regina IS. 2007. Antimony and arsenic uptake by plants in an abandoned mining area. *Comm Soil Sci Plant Anal* 38(9-10): 1255-1275.
233. Casals JB. 1972. Pharmacokinetic and toxicological studies of antimony dextran glycoside (RL-712). *Br J Pharmacol* 46(2): 281-288.
234. Casas I, De Pablo J, Pérez I, Giménez J, Duro L, Bruno J. 2004. Evidence of uranium and associated trace element mobilization and retention processes at Oklo (Gabon), a naturally radioactive site. *Environ Sci Technol* 38(12): 3310-3315.
235. Casas JM, Crístóbal G, Cifuentes L. 2004. Antimony solubility and speciation in aqueous sulphuric acid solutions at 298 K. *Can J Chem Eng* 82(1): 175-183.
236. Casiot C, Alonso MCB, Boisson J, Donard OFX, Potin-Gautier M. 1998. Simultaneous speciation of arsenic, selenium, antimony and tellurium species in waters and soil extracts by capillary electrophoresis and UV detection. *Analyst* 123(12): 2887-2893.
237. Casiot C, Donard OFX, Potin-Gautier M. 2002. Optimization of the hyphenation between capillary zone electrophoresis and inductively coupled plasma mass spectrometry for the measurement of As-, Sb-, Se- and Te-species, applicable to soil extracts. *Spectrochim Acta Part B At Spectrosc* 57(1): 173-187.
238. Casiot C, Ujevic M, Munoz M, Seidel JL, Elbaz-Poulichet F. 2007. Antimony and arsenic mobility in a creek draining an antimony mine abandoned 85 years ago (upper Orb basin, France). *Appl Geochim* 22(4): 788-798.
239. Castillo JR, Martínez C, Chamorro P, Mir JM. 1987. Speciation of antimony by differential generation of its volatile covalent hydride in aqueous and organic phase. *Mikrochim Acta* 90(1-2): 95-103.

240. Casto BC, Meyers J, DiPaolo JA. 1979. Enhancement of viral transformation for evaluation of the carcinogenic or mutagenic potential of inorganic metal salts. *Cancer Res* 39(1): 193-198.
241. Castro RA, Silva-Barcellos NM, Licio CS, Souza JB, Souza-Testasicca MC, Ferreira FM, Batista MA, Silveira-Lemos D, Moura SL, Frezard F, Rezende SA. 2014. Association of liposome-encapsulated trivalent antimonial with ascorbic acid: an effective and safe strategy in the treatment of experimental visceral leishmaniasis. *PLoS One* 9(8): e104055.
242. Cava-Montesinos P, De La Guardia A, Teutsch C, Cervera ML, De La Guardia M. 2003. Non-chromatographic speciation analysis of arsenic and antimony in milk hydride generation atomic fluorescence spectrometry. *Anal Chim Acta* 493(2): 195-203.
243. Cavallo D, Iavicoli I, Setini A, Marinaccio A, Perniconi B, Carelli G, Iavicoli S. 2002. Genotoxic risk and oxidative DNA damage in workers exposed to antimony trioxide. *Environ Mol Mutagen* 40(3): 184-189.
244. Cawston FG. 1948. Excretion of antimony. *Br Med J* 2(4573): 440.
245. CDC. 1978. *Criteria for a Recommended Standard. Occupational Exposure to Antimony*. Washington, D.C.: U.S. Department of Health, Education, and Welfare, Center for Disease Control. 136 pp.
246. CDC. 2015. *Fourth National Report on Human Exposure to Environmental Chemicals*. Atlanta, GA: Centers for Disease Control and Prevention. 1095 pp. <https://www.cdc.gov/exposurereport/>.
247. Ceriotti G, Amarasinghe D. 2009. A study of antimony complexed to soil-derived humic acids and inorganic antimony species along a Massachusetts highway. *Microchem J* 91(1): 85-93.
248. Chai HM, Gao LJ, Sun XH, Li XF. 2008. Determination of micro antimony by reverse flow injection catalytic kinetic spectrophotometry. *Metallurgical Anal* 28(7): 42-45.
249. Chai Y, Yan S, Wong IL, Chow LM, Sun H. 2005. Complexation of antimony (Sb(V) with guanosine 5'-monophosphate and guanosine 5'-diphospho-D-mannose: formation of both mono- and bis-adducts. *J Inorg Biochem* 99(12): 2257-2263.
250. Chakravarti RN, Sen Gupta PC. 1950. Urinary excretion of antimony after administration of methyl glucamine antimoniate. preliminary observations. *Indian Med Gazette* 85(9): 388-391.
251. Chancerel P, Rotter VS, Ueberschaar M, Marwede M, Nissen NF, Lang KD. 2013. Data availability and the need for research to localize, quantify and recycle critical metals in information technology, telecommunication and consumer equipment. *Waste Manag Res* 31(10 Suppl): 3-16.
252. Chandrappa R, Das DB, Chandrappa R, Das DB. 2014. *Water Quality Issues, Sustainable Water Engineering: Theory and Practice*. Oxford: Blackwell Science Publ. 83-161.
253. Chang S, Zdanowicz VS, Murchelano RA. 1998. Associations between liver lesions in winter flounder (*Pleuronectes americanus*) and sediment chemical contaminants from north-east United States estuaries. *ICES J Mar Sci* 55(5): 954-969.
254. Chang SY, Chiang HT. 2002. Simultaneous determination of selenium and antimony compounds by capillary electrophoresis with indirect fluorescence detection. *Electrophoresis* 23(17): 2913-2917.
255. Chapa-Martínez CA, Hinojosa-Reyes L, Hernández-Ramírez A, Ruiz-Ruiz E, Maya-Treviño L, Guzmán-Mar JL. 2016. An evaluation of the migration of antimony from polyethylene terephthalate (PET) plastic used for bottled drinking water. *Sci Total Environ* 565: 511-518.
256. Chavance M, Dellatolas G, Lellouch J. 1992. Correlated nondifferential misclassifications of disease and exposure: application to a cross-sectional study of the relation between handedness and immune disorders. *Int J Epidemiol* 21(3): 537-546.
257. Chellini E, Fondelli MC, Maurello MT, Sciarra G, Aprea MC, Carreras G. 2015. Pollutants from a plant which burns toxic waste in the Province of Arezzo (Tuscany Region, Central Italy): human biomonitoring pilot study to evaluate the possible type of environmental exposure. *Epidemiol Prev* 39(1): 28-35.
258. Chen B, Krachler M, Shotyk W. 2003. Determination of antimony in plant and peat samples by hydride generation-atomic fluorescence spectrometry (HG-AFS). *J Anal At Spectrom* 18(10): 1256-1262.
259. Chen H, Peng HO, Yen YF. 1965. Effect of acute potassium antimony tartrate intoxication on cardiac hemodynamics and myocardial metabolism in dogs. *Acta Physiol Sinica* 28(3): 276-285.

260. Chen L, Ramsey J, Brueck S. 2008. *Health Hazard Evaluation. FUNKe Fired Arts (formerly known as Annie's Mud Pie Shop), Cincinnati, Ohio.* HETA 2007-0127-3068. Cincinnati, OH: National Institute for Occupational Safety and Health. 40 pp.
261. Chen R, Wei L, Chen RL. 1995. Lung cancer mortality update and prevalence of smoking among copper miners and smelters. *Scand J Work Environ Health* 21(6): 513-516.
262. Chen RT, Shen ML, Hua Z, Yan QY, Xu B. 1981. [Metabolism of antitumor agent [<sup>14</sup>C] antimony nitrilotriacetic acid in mice (author's transl)]. *Zhongguo Yao Li Xue Bao* 2(3): 211-214.
263. Chen SZ, Li JF, Yan JT, Lu DB, He YY. 2016. Speciation and determination of inorganic antimony by solidified floating organic drop microextraction and ETV-ICP-MS. *Atom Spectrosc* 37(6): 211-217.
264. Chen YW, Belzile N. 2010. High performance liquid chromatography coupled to atomic fluorescence spectrometry for the speciation of the hydride and chemical vapour-forming elements As, Se, Sb and Hg: a critical review. *Anal Chim Acta* 671(1-2): 9-26.
265. Chen YW, Deng TL, Filella M, Belzile N. 2003. Distribution and early diagenesis of antimony species in sediments and porewaters of freshwater lakes. *Environ Sci Technol* 37(6): 1163-1168.
266. Chen Z, Zhang Y, Zheng D, Chen W, Song W, Liu K, Huang Z. 2014. A study on determination of trace antimony in urine by sequential injection atomic fluorescence spectrometry. *Zhonghua Lao Dong Wei Sheng Zhi Ye Bing Za Zhi* 32(10): 777-779.
267. Chertok RJ, Lake S. 1971. Availability in the peccary pig of radionuclides in nuclear debris from the plowshare excavation buggy. *Health Phys* 20(3): 313-316.
268. Cheung Chung SW, Kwong KP, Yau JC, Wong WW. 2008. Dietary exposure to antimony, lead and mercury of secondary school students in Hong Kong. *Food Addit Contam Part A Chem Anal Control Expo Risk Assess* 25(7): 831-840.
269. Chevrier J, Picciotto S, Eisen EA. 2012. A comparison of standard methods with g-estimation of accelerated failure-time models to address the healthy-worker survivor effect: application in a cohort of autoworkers exposed to metalworking fluids. *Epidemiology* 23(2): 212-219.
270. Choe SY, Kim SJ, Kim HG, Lee JH, Choi Y, Lee H, Kim Y. 2003. Evaluation of estrogenicity of major heavy metals. *Sci Total Environ* 312(1-3): 15-21.
271. Chomistekova Z, Culkova E, Bellova R, Melichercikova D, Durdík J, Beinrohr E, Rievaj M, Tomcik P. 2016. Methods and procedures for the determination of antimony as an environmentally important analyte. *Chemicke Listy* 110(10): 671-677.
272. Choudhury K, Zander D, Kube M, Reinhardt R, Clos J. 2008. Identification of a *Leishmania infantum* gene mediating resistance to miltefosine and Sb-III. *Int J Parasit* 38(12): 1411-1423.
273. Choudhury RP, Garg AN. 2007. Variation in essential, trace and toxic elemental contents in *Murraya koenigii* - A spice and medicinal herb from different Indian states. *Food Chem* 104(4): 1454-1463.
274. Choudhury RP, Kumar A, Garg AN. 2006. Analysis of Indian mint (*Mentha spicata*) for essential, trace and toxic elements and its antioxidant behaviour. *J Pharm Biomed Anal* 41(3): 825-832.
275. Choudhury RP, Reddy AVR, Garg AN. 2007. Availability of essential elements in nutrient supplements used as antidiabetic herbal formulations. *Biol Trace Elem Res* 120(1-3): 148-162.
276. Christian TJ, Yokelson RJ, Cárdenas B, Molina LT, Engling G, Hsu SC. 2010. Trace gas and particle emissions from domestic and industrial biofuel use and garbage burning in central Mexico. *Atmos Chem Phys* 10(2): 565-584.
277. Chulay JD, Fleckenstein L, Smith DH. 1988. Pharmacokinetics of antimony during treatment of visceral leishmaniasis with sodium stibogluconate or meglumine antimoniate. *Trans Royal Soc Trop Med Hygiene* 82(1): 69-72.
278. Chwastowska J, Zmijewska W, Sterlińska E. 1995. Determination of antimony(III, V) in natural waters by separation and preconcentration on a thionalide loaded resin followed by neutron activation analysis. *J Radioanal Nuclear Chem Art* 196(1): 3-9.
279. Cidu R, Biddau R, Dore E. 2015. Determination of traces of Sb(III) using ASV in Sb-rich water samples affected by mining. *Anal Chim Acta* 854: 34-39.
280. Ciglenečki I, Helz GR. 2003. Voltammetric behavior of MoS<sub>4</sub><sup>2-</sup> and SbS<sub>4</sub><sup>3-</sup> as possible components of "dissolved sulfide" in oxic natural waters. *Electroanalysis* 15(2): 145-150.

281. Clausen J, Korte N. 2009. The distribution of metals in soils and pore water at three US military training facilities. *Soil Sediment Contam* 18(5): 546-563.
282. Clemente R, Hartley W, Riby P, Dickinson NM, Lepp NW. 2010. Trace element mobility in a contaminated soil two years after field-amendment with a greenwaste compost mulch. *Environ Pollut* 158(5): 1644-1651.
283. Cocco P, Carta P, Flore C, Congia P, Manca MB, Saba G, Salis S. 1996. Mortality of lead smelter workers with the glucose-6-phosphate dehydrogenase-deficient phenotype. *Cancer Epidemiol Biomarkers Prev* 5(3): 223-225.
284. Coelho DR, De-Carvalho RR, Rocha RCC, Saint'Pierre TD, Paumgartten FJR. 2014. Effects of *in utero* and lactational exposure to Sb-V on rat neurobehavioral development and fertility. *Reprod Toxicol* 50: 98-107.
285. Coelho DR, De-Oliveira ACAX, Parente TEM, Leal BS, Das Chagas LF, Oliveira TN, Saint'Pierre TD, Paumgartten FJR. 2017. *In vivo* and *in vitro* effects of pentavalent antimony on mouse liver cytochrome P450s. *Human Exp Toxicol* 36(1): 33-41.
286. Coelho DR, Miranda ES, Saint'Pierre TD, Paumgartten FJ. 2014. Tissue distribution of residual antimony in rats treated with multiple doses of meglumine antimoniate. *Mem Inst Oswaldo Cruz* 109(4): 420-427.
287. Colak EH, Yomralioglu T, Nisanci R, Yildirim V, Duran C. 2015. Geostatistical analysis of the relationship between heavy metals in drinking water and cancer incidence in residential areas in the Black Sea region of Turkey. *J Environ Health* 77(6): 86-93.
288. Collins M, Carter KC, Baillie AJ, O'Grady J. 1993. The distribution of free and non-ionic vesicular sodium stibogluconate in the dog. *J Drug Target* 1(2): 133-142.
289. Colotti G, Ilari A, Boffi A, Morea V. 2013. Metals and metal derivatives in medicine. *Mini-Rev Med Chem* 13(2): 211-221.
290. Cooper RG, Harrison AP. 2009. The exposure to and health effects of antimony. *Indian J Occup Environ Med* 13(1): 3-10.
291. Cooper WC. 1976. Cancer mortality patterns in the lead industry. *Ann N Y Acad Sci* 271: 250-259.
292. Cooper WC, Gaffey WR. 1975. Mortality of lead workers. *J Occup Med* 17(2): 100-107.
293. Cooper WC, Wong O, Kheifets L. 1985. Mortality among employees of lead battery plants and lead-producing plants, 1947-1980. *Scand J Work Environ Health* 11(5): 331-345.
294. Corbin M, Richiardi L, Vermeulen R, Kromhout H, Merletti F, Peters S, Simonato L, Steenland K, Pearce N, Maule M. 2012. Hierarchical regression for multiple comparisons in a case-control study of occupational risks for lung cancer. *PLoS One* 7(6): e38944.
295. Corneanu M, Corneanu G, Jurescu N, Toptan C. 2010. Evaluation of the genotoxicity of water bottled in pet recipients. *Environ Eng Manag J* 9(11): 1531-1537.
296. Cornelis G, Van Gerven T, Vandecasteele C. 2006. Antimony leaching from uncarbonated and carbonated MSWI bottom ash. *J Hazard Mater* 137(3): 1284-1292.
297. Cornelis G, Van Gerven T, Vandecasteele C. 2012. Antimony leaching from MSWI bottom ash: Modelling of the effect of pH and carbonation. *Waste Manage* 32(2): 278-286.
298. Costas-Mora I, Romero V, Lavilla I, Bendicho C. 2013. Solid-state chemiluminescence assay for ultrasensitive detection of antimony using on-vial immobilization of CdSe quantum dots combined with liquid-liquid-liquid microextraction. *Anal Chim Acta* 788: 114-121.
299. Costello RJ, Landrigan PJ. 1980. *Health Hazard Evaluation. Globe Union Battery Plant, Bennington, Vermont.* HE 78-98-710. Cincinnati, OH: National Institute for Occupational Safety and Health. 59 pp.
300. Courtin-Nomade A, Rakotoarisoa O, Bril H, Grybos M, Forestier L, Foucher F, Kunz M. 2012. Weathering of Sb-rich mining and smelting residues: Insight in solid speciation and soil bacteria toxicity. *Chem Erde - Geochem* 72(SUPPL.4): 29-39.
301. Couture RM, Charlet L, Markelova E, Made B, Parsons CT. 2015. On-off mobilization of contaminants in soils during redox oscillations. *Environ Sci Technol* 49(5): 3015-3023.

302. Covic A, Gusbeth-Tatomir P. 2009. Trace elements in end-stage renal disease unfamiliar territory to be revealed. *BMC Nephrol* 10(1).
303. Craig PJ, Forster SA, Jenkins RO, Lawson G, Miller D, Ostah N. 2001. Use of mass spectroscopic techniques to elucidate the nature of the products of the oxidation of trimethylstibine in air. *Appl Organomet Chem* 15(6): 527-532.
304. Craig PJ, Forster SN, Jenkins RO, Miller D. 1999. An analytical method for the detection of methylantimony species in environmental matrices: methylantimony levels in some UK plant material. *Analyst* 124(8): 1243-1248.
305. Craig PJ, Sergeeva T, Jenkins RO. 2001. Determination of inorganic Sb(V) and methylantimony species by HPLC with hydride generation-atomic fluorescence spectrometric detection. *Mikrochimica Acta* 137(3-4): 221-227.
306. Cruz A, Rainey PM, Herwaldt BL, Stagni G, Palacios R, Trujillo R, Saravia NG. 2007. Pharmacokinetics of antimony in children treated for leishmaniasis with meglumine antimoniate. *J Infect Dis* 195(4): 602-608.
307. Cullen A, Kiberd B, Devaney D, Gillan J, Kelehan P, Matthews TG, Mayne P, Murphy N, O'Regan M, Shannon W, Thornton L. 2000. Concentrations of antimony in infants dying from SIDS and infants dying from other causes. *Arch Dis Child* 82(3): 244-247.
308. Cullen A, Kiberd B, Matthews T, Mayne P, Delves HT, O'Regan M. 1998. Antimony in blood and urine of infants. *51(3)*: 238-240.
309. Cullen MR, Checkoway H, Alexander BH. 1996. Investigation of a cluster of pituitary adenomas in workers in the aluminum industry. *Occup Environ Med* 53(11): 782-786.
310. Cullen WR, Dodd M, Nwata BU, Reimer DA, Reimer KJ. 1989. Compounds of arsenic, antimony, and tin in mollusc shells. *Appl Organomet Chem* 3(4): 351-353.
311. Cutter GA. 1991. Dissolved arsenic and antimony in the Black Sea. *Deep-Sea Res Part A* 38(Suppl. 2A): S825-S843.
312. Cutter GA. 1992. Kinetic controls on metalloid speciation in seawater. *Mar Chem* 40(1-2): 65-80.
313. Cutter GA, Cutter LS. 1995. Behavior of dissolved antimony, arsenic, and selenium in the Atlantic Ocean. *Mar Chem* 49(4): 295-306.
314. Cutter GA, Cutter LS. 1998. Metalloids in the high latitude North Atlantic Ocean: Sources and internal cycling. *Mar Chem* 61(1-2): 25-36.
315. Cutter GA, Cutter LS. 2006. Biogeochemistry of arsenic and antimony in the North Pacific Ocean. *Geochim Geophys Geosyst* 7(5).
316. Cutter GA, Cutter LS, Featherstone AM, Lohrenz SE. 2001. Antimony and arsenic biogeochemistry in the western Atlantic Ocean. *Deep-Sea Res Part II-Top Stud Oceanogr* 48(13): 2895-2915.
317. Cutter LS, Cutter GA, Sandiegomcglove MLC. 1991. Simultaneous determination of inorganic arsenic and antimony species in natural-waters using selective hydride generation with gas-chromatography photoionization detection. *Anal Chem* 63(11): 1138-1142.
318. Da Justa Neves DB, Caldas ED, Sampaio RNR. 2009. Antimony in plasma and skin of patients with cutaneous leishmaniasis - Relationship with side effects after treatment with meglumine antimoniate. *Trop Med Int Health* 14(12): 1515-1522.
319. Dadfarnia S, Shabani AMH, Abadi MNA. 2013. Solidified floating organic drop microextraction-electrothermal atomic absorption spectrometry for ultra trace determination of antimony species in tea, basil and water samples. *J Iran Chem Soc* 10(2): 289-296.
320. Dahlgren LG, Sandström AI. 1994. Norm systems in transition. Changes in health-related values among male smelters at an industrial plant in northern Sweden. *Scand J Soc Med* 22(1): 58-67.
321. Dai S, Zeng R, Sun Y. 2006. Enrichment of arsenic, antimony, mercury, and thallium in a Late Permian anthracite from Xingren, Guizhou, Southwest China. *Int J Coal Geol* 66(3): 217-226.
322. Damber LA, Larsson LG. 1987. Occupation and male lung cancer: a case-control study in northern Sweden. *Br J Ind Med* 44(7): 446-453.

323. Darbre PD. 2006. Metalloestrogens: an emerging class of inorganic xenoestrogens with potential to add to the oestrogenic burden of the human breast. *J Appl Toxicol* 26(3): 191-197.
324. Das AK, de la Guardia M, Cervera ML. 2001. Literature survey of on-line elemental speciation in aqueous solutions. *Talanta* 55(1): 1-28.
325. Daus B, Hansen HR. 2016. Analysis of antimony species-lessons learnt from more than two decades of environmental research. *Environ Chem* 13(6): 913-918.
326. Daus B, Wennrich R. 2014. Investigation on stability and preservation of antimonite in iron rich water samples. *Anal Chim Acta* 847: 44-48.
327. Davidson RN. 1998. Practical guide for the treatment of leishmaniasis. *Drugs* 56(6): 1009-1018.
328. Davies TAL. 1973. *The Health of Workers Engaged in Antimony Oxide Manufacture*. London: Department of Employment, Employment Medical Advisory Service.
329. Dawson M, Doble P, Beavis A, Li LX, Soper R, Scolyer RA, Uren RF, Thompson JF. 2003. Antimony by ICP-MS as a marker for sentinel lymph nodes in melanoma patients. *Analyst* 128(3): 217-219.
330. De Boeck M, Kirsch-Volders M, Lison D. 2003. Cobalt and antimony: genotoxicity and carcinogenicity. *Mutat Res* 533(1-2): 135-152.
331. De Boeck M, Kirsch-Volders M, Lison D. 2004. Erratum: Cobalt and antimony: Genotoxicity and carcinogenicity (Mutation Research-Fundamental and Molecular Mechanisms of Mutagenesis (2003) 533 (135-152) DOI: 10.1016/j.mrfmmm.2003.07.012). *Mutat Res Fundam Mol Mech Mutagen* 548(1-2): 127-128.
332. De Figueiredo EC, Luccas PO, Zuzzi Arruda MA. 2006. Determination of Sb(III) and total Sb in antileishmanial drugs by spectrophotometric flow-injection hydride generation. *Anal Lett* 39(3): 543-554.
333. De Gregori I, Fuentes E, Olivares D, Pinochet H. 2004. Extractable copper, arsenic and antimony by EDTA solution from agricultural Chilean soils and its transfer to alfalfa plants (*Medicago sativa L.*). *J Environ Monit* 6(1): 38-47.
334. De Gregori I, Quiroz W, Pinochet H, Pannier F, Potin-Gautier M. 2005. Simultaneous speciation analysis of Sb(III), Sb(V) and (CH<sub>3</sub>)<sub>3</sub>SbCl<sub>2</sub> by high performance liquid chromatography-hydride generation-atomic fluorescence spectrometry detection (HPLC-HG-AFS): application to antimony speciation in sea water. *J Chromatogr A* 1091(1-2): 94-101.
335. De Gregori I, Quiroz W, Pinochet H, Pannier F, Potin-Gautier M. 2007. Speciation analysis of antimony in marine biota by HPLC-(UV)-HG-AFS: Extraction procedures and stability of antimony species. *Talanta* 73(3): 458-465.
336. de Jesus A, Dessuy MB, Huber CS, Zmozinski AV, Duarte AT, Vale MGR, Andrade JB. 2016. Determination of antimony in pet containers by direct analysis of solid samples using graphite furnace atomic absorption spectrometry and leaching studies. *Microchem J* 124: 222-227.
337. De Jesus Hernandez Silva M, Luengas E, Sharma M, Camacho AN, Vázquez J, Castillo LR, Sharma P, Gutierrez R. 2013. Antioxidant properties of organostibines against lipid peroxidation in homogenized rat brain. *Asian J Chem* 25(14): 7941-7944.
338. de la Calle Guntiñas MB, Madrid Y, Cámara C. 1992. Speciation of antimony by atomic absorption spectrometry. Applicability to selective determination of Sb(III) and Sb(V) in liquid samples and of bioavailable antimony in sediments and soil samples. *Mikrochim Acta* 109(1-4): 149-155.
339. De La Calle-Guntinas MB, Adams FC. 1997. Selective determination of Sb(III) by gas chromatography quartz furnace atomic absorption spectrometry after derivatization with triphenylmagnesium bromide. *J Chromatogr A* 764(1): 169-175.
340. De La Calle-Guntinas MB, Madrid Y, Camara C. 1991. Determination of total available antimony in marine-sediments by slurry formation hydride generation atomic-absorption spectrometry - applicability to the selective determination of antimony(III) and antimony(V). *Analyst* 116(10): 1029-1032.
341. De la Calle-Guntinas MB, Madrid Y, Camara C. 1992. Stability study of total antimony, SB(III) and SB(V) at the trace level. *Fresenius J Anal Chem* 344(1-2): 27-29.

342. De La Calle-Guntinas MB, Madrid Y, Camara C. 1992. Speciation of Sb(III) and Sb(V) by pH-control using 3 inorganic acids (hydrochloric, phosphoric and sulfuric). *Fresenius J Anal Chem* 343(7): 597-599.
343. De La Calle-Guntinas MB, Madrid Y, Cámera C. 1993. Fructose-6-phosphate kinase immobilized on controlled-pore glass as a substrate for selective separation of antimony(III). *J Anal Atomic Spectrom* 8(5): 745-748.
344. de la Calle-Guntinas MB, Madrid Y, Cámera C. 1995. Antimony speciation in water. In *Quality Assurance for Environmental Analysis*. vol. 17. Quevauviller, Maier, Griepink, eds.: Elsevier Science B.V. pp. 263-283.
345. de la Haba C, Morros A, Martínez P, Palacio JR. 2016. LPS-induced macrophage activation and plasma membrane fluidity changes are inhibited under oxidative stress. *J Membr Biol* 249(6): 789-800.
346. De Oliveira FB, Schettini DA, Ferreira CS, Rates B, Rocha OGF, Frézard F, Demicheli C. 2006. Kinetics of antimony(V) reduction by L-cysteine. Pharmacological implications and application to the determination of antimony in pentavalent antimonial drugs. *J Brazil Chem Soc* 17(8): 1642-1650.
347. de Perio MA, Durgam S. 2009. *Evaluation of Antimony and Mercury Exposure in Fire Fighters. Health Hazard Evaluation Report*. Boca Raton Fire Rescue Services, Boca Raton, Florida. HETA 2009-0025 and HETA 2009-0076-3085. Cincinnati, OH: National Institute for Occupational Safety and Health. 28 pp.
348. De Perio MA, Durgam S, Caldwell KL, Eisenberg J. 2010. A health hazard evaluation of antimony exposure in fire fighters. *J Occup Environ Med* 52(1): 81-84.
349. de Ricciardi LV, Vicuna-Fernandez N, de Pena YP, Lopez S, Scorza JV, Scorza-Dager JV, Villegas E, Perez B. 2008. Pharmacokinetic disposition of antimony species in dogs after a dose of meglumine antimonate (Glucantime (R)). *Bol Malar Salud Ambient* 48(1): 27-33.
350. Deb MK, Agnihotri PK, Thakur M, Mishra RK. 1999. Chemical speciation and determination of antimony with N,N'-diphenylbenzamidine and brilliant green in an acidic non-ionic micellar media. *J Indian Chem Soc* 76(3): 145-147.
351. Demicheli C, Frézard F. 2005. Pentavalent antimonials: From chemistry to the design of new drugs. *Drug Design Rev Online* 2(3): 243-249.
352. Demicheli C, Frezard F, Ferreira CD. 2010. *Pentavalent antimonials: Chemistry, biochemistry and therapeutic perspectives*, Biometals: Molecular Structures, Binding Properties and Applications. Hauppauge: Nova Science Publishers, Inc. 163-180.
353. Demmel U, Höck A, Kasperek K, Feinendegen LE. 1982. Trace element concentration in the human pineal body activation analysis of cobalt, iron, rubidium, selenium, zinc, antimony and cesium. *Sci Total Environ* 24(2): 135-146.
354. Deng TL, Chen YW, Belzile N. 2001. Antimony speciation at ultra trace levels using hydride generation atomic fluorescence spectrometry and 8-hydroxyquinoline as an efficient masking agent. *Anal Chim Acta* 432(2): 293-302.
355. Denys S, Caboche J, Tack K, Rychen G, Wragg J, Cave M, Jondreville C, Feidt C. 2012. In vivo validation of the unified BARGE method to assess the bioaccessibility of arsenic, antimony, cadmium, and lead in soils. *Environ Sci Technol* 46(11): 6252-6260.
356. Denys S, Tack K, Caboche J, Delalain P. 2008. Bioaccessibility, solid phase distribution, and speciation of Sb in soils and in digestive fluids. *Chemosphere* 74(5): 711-716.
357. Dezateux C, Delves HT, Stocks J, Wade A, Pilgrim L, Costeloe K. 1997. Urinary antimony in infancy. *Arch Dis Childhood* 76(5): 432-436.
358. DHHS. 1988. *Occupational Safety and Health Guideline for Antimony and its Compounds (as Sb)*. U.S. Department of Health and Human Services. 6 pp.
359. Diamant BZ. 1981. The control of the heavy metals health hazard in the reclamation of wastewater sludge as agricultural fertilizer. *J Royal Soc Promo Health* 101(4): 127-131.
360. Diaz-Bone RA, Raabe M, Awißus S, Keuter B, Menzel B, Küppers K, Widmann R, Hirner AV. 2011. Investigation of biomethylation of arsenic and tellurium during composting. *J Hazard Mater* 189(3): 653-659.

361. Diaz-Bone RA, Van de Wiele TR. 2009. Biovolatilization of metal(loid)s by intestinal microorganisms in the simulator of the human intestinal microbial ecosystem. *Environ Sci Technol* 43(14): 5249-5256.
362. Diaz-Perez M, Aboal-Somoza M, Bermejo-Barrera P, Bermejo-Barrera A. 2008. Preliminary results of a quick, simple method of detecting antimony in water samples. *Cent Eur J Chem* 6(4): 520-525.
363. Díaz-Pérez M, Aboal-Somoza M, Bermejo-Barrera P, Bermejo-Barrera A. 2011. Direct speciation analysis of Sb(III) and Sb(V) based on their different sensitivities for GFAAS. *Spectrosc Lett* 44(1): 17-21.
364. Dickerson AS, Benson AF, Buckley B, Chan EAW. 2017. Concentrations of individual fine particulate matter components in the USA around July 4th. *Air Qual Atmos Health* 10: 1-10.
365. Dieter M. 1992. NTP Report on the Toxicity Studies of Antimony Potassium Tartrate (CAS No. 28300-74-5) in F344/N Rats And B6C3F1 Mice (Drinking Water and Intraperitoneal Injection Studies). *Toxic Rep Ser* 11: 1-d2.
366. Dieter MP, Jameson CW, Elwell MR, Lodge JW, Hejtmancik M, Grumbein SL, Ryan M, Peters AC. 1991. Comparative toxicity and tissue distribution of antimony potassium tartrate in rats and mice dosed by drinking water or intraperitoneal injection. *J Toxicol Environ Health* 34(1): 51-82.
367. Diez S, Bayona JM. 2006. Trace element determination by combining solid-phase microextraction hyphenated to elemental and molecular detection techniques. *J Chromatogr Sci* 44(7): 458-471.
368. Dijkstra JJ, Meeussen JCL, Comans RNJ. 2009. Evaluation of a generic multisurface sorption model for inorganic soil contaminants. *Environ Sci Technol* 43(16): 6196-6201.
369. Dittrich K, Franz T, Wennrich R. 1995. Simultaneous determination of hydride forming elements by furnace atomic nonthermal excitation spectrometry (FANES). *Spectroc Acta Pt B-Atom Spectr* 50(13): 1655-1667.
370. Divanovic S, Trompette A, Ashworth JI, Rao MB, Karp CL. 2011. Therapeutic enhancement of protective immunity during experimental leishmaniasis. *PLoS Negl Trop Dis* 5(9): e1316.
371. Djuric D. 1963. [Antimony metabolism]. *Prac Lek* 15: 329-334.
372. Djuric D, Thomas RG, Lie R. 1962. *The Distribution and Excretion of Antimony-124 Chloride in the Rat Following Inhalation*. UR-608. Rochester, NY: University of Rochester. 54 pp.
373. Djuric D, Thomas RG, Lie R. 1962. The distribution and excretion of trivalent antimony in the rat following inhalation. *Int Arch Gewerbeopathol Gewerbehyg* 19: 529-545.
374. Dobrowolski R, Mierzwa J. 1993. Investigation of activator (Mn, Sb) speciation in phosphors for fluorescent lamps. *Mater Chem Phys* 34(3-4): 270-273.
375. Dodd M, Grundy SL, Reimer KJ, Cullen WR. 1992. Methylated antimony(V) compounds: Synthesis, hydride generation properties and implications for aquatic speciation. *Appl Organomet Chem* 6(2): 207-211.
376. Doenhoff MJ, Bain J. 1978. The immune-dependence of schistosomicidal chemotherapy: relative lack of efficacy of an antimonial in *Schistosoma mansoni*-infected mice deprived of their T-cells and the demonstration of drug-antisera synergy. *Clin Exp Immunol* 33: 232-238.
377. Doi K. 1978. [An experimental study on the biologic effects of electric arc welding fumes containing antimony (author's transl)]. *Sangyo Igaku* 20(1): 9-23.
378. Doll R. 1985. Relevance of epidemiology to policies for the prevention of cancer. *Hum Toxicol* 4(1): 81-96.
379. Dongarra G, Manno E, Sabatino G, Varrica D. 2009. Geochemical characteristics of waters in mineralised area of Peloritani Mountains (Sicily, Italy). *Appl Geochem* 24(5): 900-914.
380. Dongarrà G, Manno E, Varrica D, Lombardo M, Vultaggio M. 2010. Study on ambient concentrations of PM10, PM10-2.5, PM2.5 and gaseous pollutants. Trace elements and chemical speciation of atmospheric particulates. *Atmos Environ* 44(39): 5244-5257.
381. Donovan BA. 1994. *Health Hazard Evaluation*. Kessler Studios, Loveland, Ohio. HETA 92-0029-2392. Cincinnati, OH: National Institute for Occupational Safety and Health. 15 pp.
382. Dopp E, Hartmann LM, Florea AM, Rettenmeier AW, Hirner AV. 2004. Environmental distribution, analysis, and toxicity of organometal(loid) compounds. *Crit Rev Toxicol* 34(3): 301-333.

383. Dopp E, Hartmann LM, Florea AM, von Recklinghausen U, Rabieh S, Shokouhi B, Hirner AV, Rettenmeier AW. 2006. Trimethylantimony dichloride causes genotoxic effects in Chinese hamster ovary cells after forced uptake. *Toxicol Vitro* 20(6): 1060-1065.
384. Dorjee P, Amarasinghe D, Xing B. 2014. Antimony adsorption by zero-valent iron nanoparticles (nZVI): Ion chromatography-inductively coupled plasma mass spectrometry (IC-ICP-MS) study. *Microchem J* 116: 15-23.
385. dos Santos Depoi F, Pozebon D. 2012. The use of cloud point extraction and hydride generation for improving the SB and SE limits of detection in ICP OES. *J Braz Chem Soc* 23(12): 2211-2221.
386. dos Santos VCG, Grassi MT, Abate G. 2015. Speciation of antimony(III) and antimony(V) in bottled water by hydride generation-inductively coupled plasma optical emission spectrometry. *Anal Lett* 48(18): 2921-2935.
387. Drahota P, Novakova B, Matousek T, Mihaljevic M, Rohovec J, Filippi M. 2013. Diel variation of arsenic, molybdenum and antimony in a stream draining natural As geochemical anomaly. *Appl Geochem* 31: 84-93.
388. Duan LQ, Song JM, Li XG, Yuan HM. 2010. The behaviors and sources of dissolved arsenic and antimony in Bohai Bay. *Cont Shelf Res* 30(14): 1522-1534.
389. Duester L, Diaz-Bone RA, Kosters J, Hirner AV. 2005. Methylated arsenic, antimony and tin species in soils. *J Environ Monit* 7(12): 1186-1193.
390. Duester L, van der Geest HG, Moelleken S, Hirner AV, Kueppers K. 2011. Comparative phytotoxicity of methylated and inorganic arsenic- and antimony species to *Lemna minor*, *Wolffia arrhiza* and *Selenastrum capricornutum*. *Microchem J* 97(1): 30-37.
391. Duester L, Vink JP, Hirner AV. 2008. Methylantimony and -arsenic species in sediment pore water tested with the sediment or fauna incubation experiment. *Environ Sci Technol* 42(16): 5866-5871.
392. Dufresne A, Loosereewanich P, Armstrong B, Thériault G, Bégin R. 1996. Inorganic particles in the lungs of five aluminum smelter workers with pleuro-pulmonary cancer. *Am Ind Hyg Assoc J* 57(4): 370-375.
393. Duller PR, Gallagher MJ, Hall AJ, Russell MJ. 1997. Glendinning deposit - An example of turbidite-hosted arsenic-antimony-gold mineralization in the Southern Uplands, Scotland. *Trans Inst Min Metall Sect B Appl Earth Sci* 106(May-Aug): B119-B134.
394. Duran M, Kara Y, Akyildiz GK, Ozdemir A. 2007. Antimony and heavy metals accumulation in some macroinvertebrates in the Yesilirmak River (N Turkey) near the Sb-mining area. *Bull Environ Contam Toxicol* 78(5): 395-399.
395. Dzamitika SA, Falcão CAB, De Oliveira FB, Marbeuf C, Garnier-Suillerot A, Demicheli C, Rossi-Bergmann B, Frézard F. 2006. Role of residual Sb(III) in meglumine antimoniate cytotoxicity and MRP1-mediated resistance. *Chemico-Biol Interact* 160(3): 217-224.
396. Ebert J, Bahadir M. 2003. Formation of PBDD/F from flame-retarded plastic materials under thermal stress. *Environ Int* 29(6): 711-716.
397. ECHA. 2009. *Background Document to the Opinion of the Committee for Risk Assessment on a Proposal for Harmonised Classification and Labelling of Diantimony Trioxide*. European Chemicals Agency. 17 pp.
398. Edel J, Marafante E, Sabbioni E, Manzo L. 1983. Metabolic behaviour of inorganic forms of antimony in the rat, In *International Conference - Heavy Metals in the Environment*, Heidelberg, W Germany. pp. 574-577.
399. Edelman P, Osterloh J, Pirkle J, Caudill SP, Grainger J, Jones R, Blount B, Calafat A, Turner W, Feldman D, Baron S, Bernard B, Lushniak BD, Kelly K, Prezant D. 2003. Biomonitoring of chemical exposure among New York City firefighters responding to the World Trade Center Fire and collapse. *Environ Health Perspect* 111(16): 1906-1911.
400. Eftekhari M, Chamsaz M, Arbab-Zavar MH, Eftekhari A. 2015. Vortex-assisted surfactant-enhanced emulsification microextraction based on solidification of floating organic drop followed by electrothermal atomic absorption spectrometry for speciation of antimony (Iotalatalota, V). *Environ Monit Assess* 187(1): 4129.

401. El Fadili K, Imbeault M, Messier N, Roy G, Gourbal B, Bergeron M, Tremblay MJ, Legare D, Ouellette M. 2008. Modulation of gene expression in human macrophages treated with the anti-*Leishmania* pentavalent antimonial drug sodium stibogluconate. *Antimicrob Agents Chemother* 52(2): 526-533.
402. El Nahas S, Temtamy SA, de Hondt HA. 1982. Cytogenetic effect of two antimonial antibilharzial drugs: tartar emetic and bilharcid. *Environ Mutagen* 4(1): 83-91.
403. El Shanawany S, Foda N, Hashad DI, Salama N, Sobh Z. 2017. The potential DNA toxic changes among workers exposed to antimony trioxide. *Environ Sci Pollut Res Int* 24(13): 12455-12461.
404. El-Shahawi MS, Bashammakh AS, Al-Sibaai AA, Bahaffi SO, Al-Gohani EH. 2011. Chemical speciation of antimony(III and V) in water by adsorptive cathodic stripping voltammetry using the 4-(2-thiazolylazo) - resorcinol. *Electroanalysis* 23(3): 747-754.
405. El-Sharjawy AAM, Amin AS. 2016. Use of cloud-point preconcentration for spectrophotometric determination of trace amounts of antimony in biological and environmental samples. *Anal Biochem* 492: 1-7.
406. Ellegaard L, Cunningham A, Edwards S, Grand N, Nevalainen T, Prescott M, Schuurman T, Steering Group of the RP. 2010. Welfare of the minipig with special reference to use in regulatory toxicology studies. *J Pharmacol Toxicol Methods* 62(3): 167-183.
407. Elliott BM, Mackay JM, Clay P, Ashby J. 1998. An assessment of the genetic toxicology of antimony trioxide. *Mutat Res* 415(1-2): 109-117.
408. Ellwood MJ, Maher WA. 2002. Arsenic and antimony species in surface transects and depth profiles across a frontal zone: The Chatham Rise, New Zealand. *Deep-Sea Res Part I-Oceanogr Res Pap* 49(11): 1971-1981.
409. Ellwood MJ, Maher WA. 2002. An automated hydride generation-cryogenic trapping-ICP-MS system for measuring inorganic and methylated Ge, Sb and As species in marine and fresh waters. *J Anal At Spectrom* 17(3): 197-203.
410. Elshafie AI, Ahlin E, Mathsson L, ElGhazali G, Ronnelid J. 2007. Circulating immune complexes (IC) and IC-induced levels of GM-CSF are increased in sudanese patients with acute visceral *Leishmania donovani* infection undergoing sodium stibogluconate treatment: implications for disease pathogenesis. *J Immunol* 178(8): 5383-5389.
411. Emons H. 2001. Challenges from speciation analysis for the development of biological reference materials. *Fresenius J Anal Chem* 370(2-3): 115-119.
412. Endo G, Kuroda K, Okamoto A, Yoo YS, Horiguchi S. 1991. Genotoxicity of Be, Ga, Sb and As compounds. *Mutat Res* 252: 84-85.
413. Engel A, Lamm SH. 2008. Arsenic exposure and childhood cancer--a systematic review of the literature. *J Environ Health* 71(3): 12-16.
414. Englyst V, Lundström NG, Gerhardsson L, Rylander L, Nordberg G. 2001. Lung cancer risks among lead smelter workers also exposed to arsenic. *Sci Total Environ* 273(1-3): 77-82.
415. Enterline PE, Day R, Marsh GM. 1995. Cancers related to exposure to arsenic at a copper smelter. *Occup Environ Med* 52(1): 28-32.
416. Enterline PE, Henderson VL, Marsh GM. 1987. Exposure to arsenic and respiratory cancer. A reanalysis. *Am J Epidemiol* 125(6): 929-938.
417. Enterline PE, Marsh GM. 1980. Mortality studies of smelter workers. *Am J Ind Med* 1(3-4): 251-259.
418. Enterline PE, Marsh GM. 1982. Cancer among workers exposed to arsenic and other substances in a copper smelter. *Am J Epidemiol* 116(6): 895-911.
419. Enterline PE, Marsh GM. 1982. Mortality among workers in a nickel refinery and alloy manufacturing plant in West Virginia. *J Natl Cancer Inst* 68(6): 925-933.
420. Enterline PE, Marsh GM, Esmen NA, Henderson VL, Callahan CM, Paik M. 1987. Some effects of cigarette smoking, arsenic, and SO<sub>2</sub> on mortality among US copper smelter workers. *J Occup Med* 29(10): 831-838.
421. EPA. 1985. *Health and Environmental Effects Profile for Antimony Oxides*. EPA/600/X-85/271. Cincinnati, OH: U.S. Environmental Protection Agency. 134 pp.

422. EPA. 1995. *Integrated Risk Information System (IRIS): Antimony trioxide*. U.S. Environmental Protection Agency. 22 pp.
423. EPA. 2012. *Chemical Data Reporting*. [https://java.epa.gov/oppt\\_chemical\\_search/](https://java.epa.gov/oppt_chemical_search/) and search for antimony. Accessed on 3/28/16.
424. EPA. 2014. *TSCA Work Plan Chemical Risk Assessment. Antimony Trioxide*. EPA Document # 740-Z1-4001. U.S. Environmental Protection Agency. 87 pp.
425. EPA. 2017. *ChemView*. U.S. Environmental Protection Agency. <https://java.epa.gov/chemview> and search by CAS number. Accessed on 2/22/17.
426. Erdem A, Eroglu AE. 2005. Speciation and preconcentration of inorganic antimony in waters by Duolite GT-73 microcolumn and determination by segmented flow injection-hydride generation atomic absorption spectrometry (SFI-HGAAS). *Talanta* 68(1): 86-92.
427. Erden S, Durmus Z, Kilic E. 2011. Simultaneous determination of antimony and lead in gunshot residue by cathodic adsorptive stripping voltammetric methods. *Electroanalysis* 23(8): 1967-1974.
428. Erraguntla NK, Sielken RL, Jr., Valdez-Flores C, Grant RL. 2012. An updated inhalation unit risk factor for arsenic and inorganic arsenic compounds based on a combined analysis of epidemiology studies. *Regul Toxicol Pharmacol* 64(2): 329-341.
429. Esswein EJ, Boudreau Y, Sollberger R. 2004. *Health Hazard Evaluation. PCC Schlosser, Redmond, Oregon*. HETA 2003-0171-2925. Cincinnati, OH: National Institute for Occupational Safety and Health. 20 pp.
430. Ettler V, Mihaljevič M, Matura M, Skalová M, Šebek O, Bezdička P. 2008. Temporal variation of trace elements in waters polluted by municipal solid waste landfill leachate. *Bull Environ Contam Toxicol* 80(3): 274-279.
431. Ettler V, Mihaljevic M, Sebek O. 2010. Antimony and arsenic leaching from secondary lead smelter air-pollution-control residues. *Waste Manage Res* 28(7): 587-595.
432. Ettler V, Mihaljevic M, Sebek O, Nechutny Z. 2007. Antimony availability in highly polluted soils and sediments - a comparison of single extractions. *Chemosphere* 68(3): 455-463.
433. Ettler V, Mihaljevič M, Šebek O, Valigurová R, Klementová M. 2012. Differences in antimony and arsenic releases from lead smelter fly ash in soils. *Chem Erde - Geochem* 72(Suppl 4): 15-22.
434. Ettler V, Tejnecky V, Mihaljevic M, Sebek O, Zuna M, Vanek A. 2010. Antimony mobility in lead smelter-polluted soils. *Geoderma* 155(3-4): 409-418.
435. EU. 2008. *European Union Risk Assessment Report. Diantimony Trioxide*. Luxembourg: European Communities. 556 pp.
436. Ewers LM, Page EH, Mortimer V. 2002. *Health Hazard Evaluation. Glass Masters Neon, Savannah, Georgia*. HETA 2001-0081-2877. Cincinnati, OH: National Institute for Occupational Safety and Health. 23 pp.
437. Fajcikova K, Cveckova V, Stewart A, Rapant S. 2014. Health risk estimates for groundwater and soil contamination in the Slovak Republic: a convenient tool for identification and mapping of risk areas. *Environ Geochem Health* 36(5): 973-986.
438. Fan HT, Liu AJ, Jiang B, Wang QJ, Li T, Huang CC. 2016. Sampling of dissolved inorganic Sb-III by mercapto-functionalized silica-based diffusive gradients in thin-film technique. *RSC Advances* 6(4): 2624-2631.
439. Fan HT, Sun W, Jiang B, Wang QJ, Li DW, Huang CC, Wang KJ, Zhang ZG, Li WX. 2016. Adsorption of antimony(III) from aqueous solution by mercapto-functionalized silica-supported organic-inorganic hybrid sorbent: Mechanism insights. *Chem Eng J* 286: 128-138.
440. Fan HT, Sun Y, Tang Q, Li WL, Sun T. 2014. Selective adsorption of antimony(III) from aqueous solution by ion-imprinted organic-inorganic hybrid sorbent: Kinetics, isotherms and thermodynamics. *J Taiwan Inst Chem Eng* 45(5): 2640-2648.
441. Fan JX, Wang YJ, Cui XD, Zhou DM. 2013. Sorption isotherms and kinetics of Sb(V) on several Chinese soils with different physicochemical properties. *J Soils Sediments* 13(2): 344-353.
442. Fan JX, Wang YJ, Fan TT, Dang F, Zhou DM. 2016. Effect of aqueous Fe(II) on Sb(V) sorption on soil and goethite. *Chemosphere* 147: 44-51.

443. Fan K, Borden E, Yi T. 2009. Interferon-gamma is induced in human peripheral blood immune cells *in vitro* by sodium stibogluconate/interleukin-2 and mediates its antitumor activity *in vivo*. *J Interferon Cytokine Res* 29(8): 451-460.
444. Fan Z. 2005. Speciation analysis of antimony (III) and antimony (V) by flame atomic absorption spectrometry after separation/preconcentration with cloud point extraction. *Microchim Acta* 152(1-2): 29-33.
445. Fan ZF. 2007. Determination of antimony(III) and total antimony by single-drop microextraction combined with electrothermal atomic absorption spectrometry. *Analytica Chimica Acta* 585(2): 300-304.
446. Fang HF, Zhang J, Zhou S, Dai W, Li CY, Du DY, Shen XY. 2015. Submonolayer deposition on glassy carbon electrode for anodic stripping voltammetry: An ultra sensitive method for antimony in tap water. *Sens Actuator B-Chem* 210: 113-119.
447. Fang L, Wang L, Li J, Gao Q. 2015. Speciation of antimony in leaching solution in contact with plastic by novel liquid-liquid microextraction and graphite furnace atomic absorption spectrometry. *Anal Lett* 48(12): 1954-1964.
448. Fang ZQ, Cheung RY, Wong MH. 2003. Heavy metals in oysters, mussels and clams collected from coastal sites along the Pearl River Delta, South China. *J Environ Sci (China)* 15(1): 9-24.
449. Farah IO, Nguyen PX, Arslan Z, Ayensu W, Cameron JA. 2010. Significance of differential metal loads in normal versus cancerous cadaver tissues. *Biomed Sci Instrument* 46.
450. Farkašovská I, Závadská M, Žemberová M. 1999. Determination and speciation of antimony in environmental samples by AAS techniques. *Chem Listy* 93(3): 177-180.
451. Fawcett SE, Gordon RA, Jamieson HE. 2009. Optimizing experimental design, overcoming challenges, and gaining valuable information from the Sb K-edge XANES region. *Amer Miner* 94(10): 1377-1387.
452. Fawcett SE, Jamieson HE. 2011. The distinction between ore processing and post-depositional transformation on the speciation of arsenic and antimony in mine waste and sediment. *Chem Geol* 283(3-4): 109-118.
453. Fawcett SE, Jamieson HE, Nordstrom DK, McCleskey RB. 2015. Arsenic and antimony geochemistry of mine wastes, associated waters and sediments at the Giant Mine, Yellowknife, Northwest Territories, Canada. *Appl Geochem* 62: 3-17.
454. Fazelirad H, Taher MA. 2014. Preconcentration of ultra-trace amounts of iron and antimony using ion pair solid phase extraction with modified multi-walled carbon nanotubes. *Microchimica Acta* 181(5-6): 655-662.
455. Fedotov PS, Savonina EY, Spivakov BY, Wennrich R. 2012. Possibilities for the harmonization of methods of the dynamic fractionation of elements in soils and bottom sediments. *J Anal Chem* 67(10): 851-861.
456. Feldmann J. 2002. Volatilization of metals from a landfill site: Generation and immobilization of volatile species of tin, antimony, bismuth, mercury, arsenic, and tellurium on a municipal waste deposit in Delta, British Columbia. In *Biogeochemistry of Environmentally Important Trace Elements*. vol. 835, ACS Symposium Series. Cai, Braids, eds. Washington, D.C.: American Chemical Society. pp. 128-140.
457. Feldmann J, Grumping R, Hirner AV. 1994. Determination of volatile metal and metalloid compounds in gases from domestic waste deposits with GC ICP-MS. *Fresenius J Anal Chem* 350(4-5): 228-234.
458. Feldmann J, Koch I, Cullen WR. 1998. Complementary use of capillary gas chromatography-mass spectrometry (ion trap) and gas chromatography-inductively coupled plasma mass spectrometry for the speciation of volatile antimony, tin and bismuth compounds in landfill and fermentation gases. *Analyst* 123(5): 815-820.
459. Feldmann J, Naëls L, Haas K. 2001. Cryotrapping of CO<sub>2</sub>-rich atmospheres for the analysis of volatile metal compounds using capillary GC-ICP-MS. *J Anal At Spectrom* 16(9): 1040-1043.
460. Felicetti SA, Thomas RG, McClellann RO. 1974. Metabolism of two valence states of inhaled antimony in hamsters. *Am Ind Hygiene Assoc J* 35(5): 292-300.

461. Felicetti SW, Thomas RG, McClellan RO. 1974. Retention of inhaled antimony-124 in the beagle dog as a function of temperature of aerosol formation. *Health Physics* 26(6): 525-531.
462. Feng R, Wei C, Tu S, Ding Y, Wang R, Guo J. 2013. The uptake and detoxification of antimony by plants: A review. *Environ Exp Bot* 96: 28-34.
463. Feng W, Cui XQ, Liu B, Liu CY, Xiao Y, Lu W, Guo H, He MA, Zhang XM, Yuan J, Chen WH, Wu TC. 2015. Association of urinary metal profiles with altered glucose levels and diabetes risk: A population-based study in China. *Plos One* 10(4): 18.
464. Feng W, He X, Chen M, Deng S, Qiu G, Li X, Liu C, Li J, Deng Q, Huang S, Wang T, Dai X, Yang B, Yuan J, He M, Zhang X, Chen W, Kan H, Wu T. 2015. Urinary metals and heart rate variability: A cross-sectional study of urban adults in Wuhan, China. *Environ Health Perspect* 123(3): 217-222.
465. Feng W, He XS, Yu YQ, Li-Gu Y, Zhang XM, Yuan J, Chen WH, Wu TC. 2016. [Association between 23 urinary metals and mean platelet volume among a community-dwelling population in Wuhan, China]. *Zhonghua Yu Fang Yi Xue Za Zhi* 50(8): 689-697.
466. Feng W, Huang X, Zhang C, Liu C, Cui X, Zhou Y, Sun H, Qiu G, Guo H, He M, Zhang X, Yuan J, Chen W, Wu T. 2015. The dose-response association of urinary metals with altered pulmonary function and risks of restrictive and obstructive lung diseases: A population-based study in China. *BMJ Open* 5(5).
467. Feng YL. 2002. Speciation of tin, arsenic and antimony species by using hydride generation and reaction kinetics coupled with ICP-AES and ICP-MS. *Bunseki Kagaku* 51(5): 331-332.
468. Feng YL, Narasaki H, Chen HY, Tian LC. 1999. Speciation of antimony(III) and antimony(V) using hydride generation inductively coupled plasma atomic emission spectrometry combined with the rate of pre-reduction of antimony. *Anal Chim Acta* 386(3): 297-304.
469. Feng YL, Narasaki H, Tian LC, Chen HY. 2000. Speciation of Sb (III) and Sb(V) by hydride generation high-resolution ICP-MS combined with prereduction of Sb(V) with L-cysteine. *At Spectrosc* 21(1): 30-36.
470. Fernandes FR, Ferreira WA, Campos MA, Ramos GS, Kato KC, Almeida GG, Corrêa Jr JD, Melo MN, Demicheli C, Frézard F. 2013. Amphiphilic antimony(V) complexes for oral treatment of visceral leishmaniasis. *Antimicrob Agents Chemother* 57(9): 4229-4236.
471. Fernandes Jr VJ, Fernandes NS, Fonseca VM, Araujo AS, Silva DR. 2002. Kinetic evaluation of decabromodiphenyl oxide as a flame retardant for unsaturated polyester. *Thermochimica Acta* 388(1-2): 283-288.
472. Fernandes VJ, Araujo AS, Fonseca VM, Fernandes NS, Silva DR. 2002. Thermogravimetric evaluation of polyester/sisal flame retarded composite. *Thermochimica Acta* 392: 71-77.
473. Ferrarello CN, Fernandez de la Campa MR, Sariego Muniz C, Sanz-Medel A. 2000. Metal distribution patterns in the mussel *Mytilus edulis* cytosols using size-exclusion chromatography and double focusing ICP-MS detection. *Analyst* 125(12): 2223-2229.
474. Ferreccio C, González C, Solari J, Noder C. 1996. [Bronchopulmonary cancer in workers exposed to arsenic: a case control study]. *Rev Med Chil* 124(1): 119-123.
475. Ferreira Cdos S, Martins PS, Demicheli C, Brochu C, Ouellette M, Frézard F. 2003. Thiol-induced reduction of antimony(V) into antimony(III): a comparative study with trypanothione, cysteinyl-glycine, cysteine and glutathione. *Biometals* 16(3): 441-446.
476. Ferreira SLC, dos Santos WNL, dos Santos IF, Junior MMS, Silva LOB, Barbosa UA, de Santana FA, Queiroz AFDS. 2014. Strategies of sample preparation for speciation analysis of inorganic antimony using hydride generation atomic spectrometry. *Microchem J* 114: 22-31.
477. Ferreira SLC, MacEdo SM, Dos Santos DC, De Jesus RM, Dos Santos WNL, Queiroz AFDS, De Andrade JB. 2011. Speciation analysis of inorganic antimony in airborne particulate matter employing slurry sampling and HG QT AAS. *J Anal At Spectrom* 26(9): 1887-1891.
478. Ferreira WA, Islam A, Andrade AP, Fernandes FR, Frezard F, Demicheli C. 2014. Mixed antimony(V) complexes with different sugars to modulate the oral bioavailability of pentavalent antimonial drugs. *Molecules* 19(5): 5478-5489.

479. Filella M. 2010. Alkyl derivatives of antimony in the environment. In *Organometallics in Environment and Toxicology*. Metal Ions in Life Sciences, vol. 7. Sigel A, Sigel H, Sigel RKO, eds. Cambridge: Royal Soc Chemistry. pp. 267-301.
480. Filella M. 2011. Antimony interactions with heterogeneous complexants in waters, sediments and soils: A review of data obtained in bulk samples. *Earth Sci Rev* 107(3-4): 325-341.
481. Filella M. 2013. Food for thought: A critical overview of current practical and conceptual challenges in trace element analysis in natural waters. *Water* 5(3): 1152-1171.
482. Filella M, Belzile N, Chen Y-W. 2013. Human exposure to antimony. III. Contents in some human excreted biofluids (urine, milk, saliva). *Crit Rev Environ Sci Technol* 43: 162-214.
483. Filella M, Belzile N, Chen YW. 2002. Antimony in the environment: A review focused on natural waters II. Relevant solution chemistry. *Earth Sci Rev* 59(1-4): 265-285.
484. Filella M, Belzile N, Chen YW. 2002. Antimony in the environment: A review focused on natural waters I. Occurrence. *Earth Sci Rev* 57(1-2): 125-176.
485. Filella M, Belzile N, Chen YW. 2012. Human exposure to antimony. II. Contents in some human tissues often used in biomonitoring (hair, nails, teeth). *Crit Rev Environ Sci Technol* 42: 1058-1115.
486. Filella M, Belzile N, Chen YW. 2013. Human exposure to antimony. IV. Contents in human blood. *Crit Rev Environ Sci Technol* 43(19): 2071-2105.
487. Filella M, Belzile N, Chen YW, Elleouet C, May PM, Mavrocordatos D, Nirel P, Porquet A, Quentel F, Silver S. 2003. Antimony in aquatic systems. *J Phys IV* 107: 475-478.
488. Filella M, Belzile N, Lett MC. 2007. Antimony in the environment: A review focused on natural waters. III. Microbiota relevant interactions. *Earth Sci Rev* 80: 195-217.
489. Filella M, May PM. 2003. Computer simulation of the low-molecular-weight inorganic species distribution of antimony(III) and antimony(V) in natural waters. *Geochim Cosmochim Acta* 67(21): 4013-4031.
490. Filella M, May PM. 2005. Critical appraisal of available thermodynamic data for the complexation of antimony(III) and antimony(V) by low molecular mass organic ligands. *J Environ Monit* 7(12): 1226-1237.
491. Filella M, Williams PA. 2010. Antimony biomethylation in culture media revisited in the light of solubility and chemical speciation considerations. *Environ Toxicol* 25(5): 431-439.
492. Filella M, Williams PA. 2012. Antimony interactions with heterogeneous complexants in waters, sediments and soils: A review of binding data for homologous compounds. *Chem Erde - Geochem* 72: 49-65.
493. Filella M, Williams PA, Belzile N. 2009. Antimony in the environment: Knowns and unknowns. *Environ Chem* 6(2): 95-105.
494. Fjallborg B, Dave G. 2004. Toxicity of Sb and Cu in sewage sludge to terrestrial plants (lettuce, oat, radish), and of sludge elutriate to aquatic organisms (*Daphnia* and *Lemna*) and its interaction. *Water Air Soil Pollut* 155(1-4): 3-20.
495. Flessel CP. 1977. Metals as mutagens. *Adv Exp Med Biol* 91: 117-128.
496. Flores EMD, dos Santos EP, Barin JS, Zanella R, Dressler VL, Bittencourt CF. 2002. Determination of antimony(III) and total antimony by hydride generation atomic absorption spectrometry in samples of injectable drugs used for leishmaniasis treatment. *J Anal At Spectrom* 17(8): 819-823.
497. Flores EMD, Paula FR, da Silva FEB, de Moraes DP, Paniz JNG, dos Santos EP, Dressler VL, Bittencourt CF. 2003. Selective determination of Sb(III) in drugs by flow injection hydride generation AAS. *Atom Spectrosc* 24(1): 15-21.
498. Flynn HC, Meharg AA, Bowyer PK, Paton GI. 2003. Antimony bioavailability in mine soils. *Environ Pollut* 124(1): 93-100.
499. Foata J, Quilichini Y, Torres J, Pereira E, Spella MM, Mattei J, Marchand B. 2009. Comparison of arsenic and antimony contents in tissues and organs of brown trout caught from the river Presa polluted by ancient mining practices and from the river Bravona in Corsica (France): a survey study. *Arch Environ Contam Toxicol* 57(3): 581-589.

500. Fontanella MC, Beone GM. 2016. Determination of Sb(III) and Sb(V) by HPLC-Online isotopic dilution-ICP MS. *MethodsX* 3: 102-109.
501. Fornieles AC, de Torres AG, Alonso EIV, Pavon JMC. 2013. Determination of antimony, bismuth and tin in natural waters by flow injection solid phase extraction coupled with online hydride generation inductively coupled plasma mass spectrometry. *J Anal At Spectrom* 28(3): 364-372.
502. Forns J, Fort M, Casas M, Cáceres A, Guxens M, Gascon M, Garcia-Esteban R, Julvez J, Grimalt JO, Sunyer J. 2014. Exposure to metals during pregnancy and neuropsychological development at the age of 4 years. *NeuroToxicology* 40: 16-22.
503. Fort M, Cosin-Tomas M, Grimalt JO, Querol X, Casas M, Sunyer J. 2014. Assessment of exposure to trace metals in a cohort of pregnant women from an urban center by urine analysis in the first and third trimesters of pregnancy. *Environ Sci Pollut Res* 21(15): 9234-9241.
504. Fort M, Grimalt JO, Querol X, Casas M, Sunyer J. 2016. Evaluation of atmospheric inputs as possible sources of antimony in pregnant women from urban areas. *Sci Total Environ* 544: 391-399.
505. Forte G, Alimonti A, Pino A, Stanzione P, Brescianini S, Brusa L, Sancesario G, Violante N, Bocca B. 2005. Metals and oxidative stress in patients with Parkinson's disease. *Ann Ist Super Sanita* 41(2): 189-195.
506. Foster S, Maher W, Krikowa F, Telford K, Ellwood M. 2005. Observations on the measurement of total antimony and antimony species in algae, plant and animal tissues. *J Environ Monit* 7(12): 1214-1219.
507. Foucault Y, Lévêque T, Xiong T, Schreck E, Austruy A, Shahid M, Dumat C. 2013. Green manure plants for remediation of soils polluted by metals and metalloids: Ecotoxicity and human bioavailability assessment. *Chemosphere* 93(7): 1430-1435.
508. Fowler BA, Yamauchi H, Conner EA, Akkerman M. 1993. Cancer risks for humans from exposure to the semiconductor metals. *Scand J Work Environ Health* 19: 101-103.
509. Franco MA, Barbosa AC, Rath S, Dorea JG. 1995. Antimony oxidation states in antileishmanial drugs. *Am J Trop Med Hyg* 52(5): 435-437.
510. Franco R, Sánchez-Olea R, Reyes-Reyes EM, Panayiotidis MI. 2009. Environmental toxicity, oxidative stress and apoptosis: Ménage à Trois. *Mutat Res Genet Toxicol Environ Mutagen* 674(1-2): 3-22.
511. Franková H, Čmielová L, Klimko T, Lacková E, András P. 2012. Comparative study of Cu, As and Sb toxicity between dump-fields of abandoned Cu-deposits L'ubietová and Spania Dolina(Central Slovakia). *Carpath J Earth Environ Sci* 7(4): 79-88.
512. Freitas MC, Almeida SM, Pacheco AMG, Dionísio I, Repolho C, Caseiro A, Pio CA, Alves C. 2009. Characterisation of the seasonal exposure to air pollutants for a respiratory epidemiological study. *J Radioanal Nucl Chem* 281(2): 219-223.
513. Freschi GPG, Freschi CD, Gomes Neto JA. 2008. Evaluation of different rhodium modifiers and coatings on the simultaneous determination of As, Bi, Pb, Sb, Se and of Co, Cr, Cu, Fe, Mn in milk by electrothermal atomic absorption spectrometry. *Microchimica Acta* 161(1-2): 129-135.
514. Frezard F, Demicheli C, Ferreira CS, Costa MA. 2001. Glutathione-induced conversion of pentavalent antimony to trivalent antimony in meglumine antimoniate. *Antimicrob Agents Chemother* 45(3): 913-916.
515. Frézard F, Demicheli C, Kato KC, Reis PG, Lizarazo-Jaimes EH. 2013. Chemistry of antimony-based drugs in biological systems and studies of their mechanism of action. *Rev Inorgan Chem* 33(1): 1-12.
516. Frézard F, Demicheli C, Ribeiro RR. 2009. Pentavalent antimonials: New perspectives for old drugs. *Molecules* 14(7): 2317-2336.
517. Frezard F, Martins PS, Bahia AP, Le Moyec L, de Melo AL, Pimenta AM, Salerno M, da Silva JB, Demicheli C. 2008. Enhanced oral delivery of antimony from meglumine antimoniate/beta-cyclodextrin nanoassemblies. *Int J Pharm* 347(1-2): 102-108.
518. Frezard F, Silva H, Pimenta AM, Farrell N, Demicheli C. 2012. Greater binding affinity of trivalent antimony to a CCCH zinc finger domain compared to a CCHC domain of kinetoplastid proteins. *Metallomics* 4(5): 433-440.

519. Friedrich K, Vieira FA, Porrozzi R, Marchevsky RS, Miekeley N, Grimaldi G, Jr., Paumgartten FJ. 2012. Disposition of antimony in rhesus monkeys infected with *Leishmania braziliensis* and treated with meglumine antimoniate. *J Toxicol Environ Health A* 75(2): 63-75.
520. Friesen MC, Benke G, Del Monaco A, Dennekamp M, Fritschi L, de Klerk N, Hoving JL, MacFarlane E, Sim MR. 2009. Relationship between cardiopulmonary mortality and cancer risk and quantitative exposure to polycyclic aromatic hydrocarbons, fluorides, and dust in two prebake aluminum smelters. *Cancer Causes Control* 20(6): 905-916.
521. Fritschi L, Hoving JL, Sim MR, Del Monaco A, MacFarlane E, McKenzie D, Benke G, de Klerk N. 2008. All cause mortality and incidence of cancer in workers in bauxite mines and alumina refineries. *Int J Cancer* 123(4): 882-887.
522. Frizzarin RM, Portugal LA, Estela JM, Rocha FRP, Cerdá V. 2016. On-line lab-in-syringe cloud point extraction for the spectrophotometric determination of antimony. *Talanta* 148: 694-699.
523. Frohne T, Rinklebe J, Diaz-Bone RA. 2014. Contamination of floodplain soils along the Wupper River, Germany, with As, Co, Cu, Ni, Sb, and Zn and the impact of pre-definite redox variations on the mobility of these elements. *Soil Sediment Contam* 23(7): 779-799.
524. Frohne T, Rinklebe J, Diaz-Bone RA, Du Laing G. 2011. Controlled variation of redox conditions in a floodplain soil: Impact on metal mobilization and biomethylation of arsenic and antimony. *Geoderma* 160(3-4): 414-424.
525. Frost F, Harter L, Milham S, Royce R, Smith AH, Hartley J, Enterline P. 1987. Lung cancer among women residing close to an arsenic emitting copper smelter. *Arch Environ Health* 42(3): 148-152.
526. Fu Q, Colmenares Rausseo LC, Martinez U, Dahl PI, Garcia Lastra JM, Vullum PE, Svenum IH, Vegge T. 2015. Effect of Sb segregation on conductance and catalytic activity at Pt/Sb-doped SnO<sub>2</sub> interface: a synergetic computational and experimental study. *ACS Appl Mater Interfaces* 7(50): 27782-27795.
527. Fu Z, Wu F, Mo C, Liu B, Zhu J, Deng Q, Liao H, Zhang Y. 2011. Bioaccumulation of antimony, arsenic, and mercury in the vicinities of a large antimony mine, China. *Microchem J* 97(1): 12-19.
528. Fu ZP, Zhang GP, Li HX, Chen JJ, Liu FJ, Wu Q. 2016. Influence of reducing conditions on the release of antimony and arsenic from a tailings sediment. *J Soils Sediments* 16(10): 2471-2481.
529. Fu ZY, Wu FC, Amarasirivardena D, Mo CL, Liu BJ, Zhu J, Deng QJ, Liao HD. 2010. Antimony, arsenic and mercury in the aquatic environment and fish in a large antimony mining area in Hunan, China. *Sci Total Environ* 408(16): 3403-3410.
530. Fuentes E, Pinochet H, De Gregori I, Potin-Gautier M. 2003. Redox speciation analysis of antimony in soil extracts by hydride generation atomic fluorescence spectrometry. *Spectrochim Acta Part B At Spectrosc* 58(7): 1279-1289.
531. Fuentes E, Pinochet H, Potin-Gautier M, De Graegori I. 2004. Fractionation and redox speciation of antimony in agricultural soils by hydride generation-atomic fluorescence spectrometry and stability of Sb(III) and Sb(V) during extraction with different extractant solutions. *J AOAC Int* 87(1): 60-67.
532. Fujiwara F, Rebagliati RJ, Marrero J, Gómez D, Smichowski P. 2011. Antimony as a traffic-related element in size-fractionated road dust samples collected in Buenos Aires. *Microchem J* 97(1): 62-67.
533. Fuzailov I. 1964. [Metabolism of antimony in children with visceral leishmaniasis treated with solusurmin. II]. *Med Parazitol (Mosk)* 33: 438-443.
534. Fuzailov IM. 1992. The role of the sweat glands in excreting antimony from the body in people living in the biogeochemical provinces of the Fergana Valley. *Meditina Truda i Promyshlennaya Ekologiya*(5): 13-15.
535. Fuzailov Iu M. 1982. [Antimony content of the thyroid of man and animals undergoing visceral leishmaniasis treatment with the organic compound of antimony, stibogluconate sodium]. *Med Parazitol (Mosk)* 51(1): 62-65.
536. Gabrielli P, Cozzi G, Torcini S, Cescon P, Barbante C. 2008. Trace elements in winter snow of the Dolomites (Italy): a statistical study of natural and anthropogenic contributions. *Chemosphere* 72(10): 1504-1509.

537. Gadhari NS, Sanghavi BJ, Srivastava AK. 2011. Potentiometric stripping analysis of antimony based on carbon paste electrode modified with hexathia crown ether and rice husk. *Analytica Chimica Acta* 703(1): 31-40.
538. Gaertner RR, Thériault GP. 2002. Risk of bladder cancer in foundry workers: a meta-analysis. *Occup Environ Med* 59(10): 655-663.
539. Gal J, Hursthouse A, Cuthbert S. 2007. Bioavailability of arsenic and antimony in soils from an abandoned mining area, Glendinning (SW Scotland). *J Environ Sci Health Part A-Toxic/Hazard Subst Environ Eng* 42(9): 1263-1274.
540. Gál J, Hursthouse AS, Cuthbert SJ. 2006. Chemical availability of arsenic and antimony in industrial soils. *Environ Chem Lett* 3(4): 149-153.
541. Gallignani M, Brunetto MD, Ovalles F. 2009. Flow analysis-hydride generation-gas phase derivative molecular absorption spectrophotometric determination of antimony in antileishmanial drugs. *Química Nova* 32(2): 337-U392.
542. Gandois L, Tipping E, Dumat C, Probst A. 2010. Canopy influence on trace metal atmospheric inputs on forest ecosystems: Speciation in throughfall. *Atmos Environ* 44(6): 824-833.
543. Gao J, Tian H, Cheng K, Lu L, Wang Y, Wu Y, Zhu C, Liu K, Zhou J, Liu X, Chen J, Hao J. 2014. Seasonal and spatial variation of trace elements in multi-size airborne particulate matters of Beijing, China: Mass concentration, enrichment characteristics, source apportionment, chemical speciation and bioavailability. *Atmos Environ* 99: 257-265.
544. Gao L, Gao B, Zhou H, Xu D, Wang Q, Yin S. 2016. Assessing the remobilization of Antimony in sediments by DGT: A case study in a tributary of the Three Gorges Reservoir. *Environ Pollut* 214: 600-607.
545. Gao Y, He WP, Shi Z, Tong L, Xiang F. 2015. Discussion on action mechanisms of antimony(V) removal by enhanced coagulation with polymeric ferric sulphate. *Zhongguo Huanjing Kexue* 35(11): 3346-3351.
546. Gao Y, Sturgeon RE, Mester Z, Hon XD, Zheng CB, Yang L. 2015. Direct determination of trace antimony in natural waters by photochemical vapor generation ICPMS: Method optimization and comparison of quantitation strategies. *Anal Chem* 87(15): 7996-8004.
547. Gao Y, Yang N, Yan XM, Hang W, Xing JC, Zheng JX, Zhu EY, Huang BL. 2012. Early diagnosis of urinary lithiasis via elementary profile of serum samples. *Anal Methods* 4(3): 693-698.
548. Garboś S, Bulska E, Hulanicki A, Shcherbinina NI, Sedykh EM. 1997. Preconcentration of inorganic species of antimony by sorption on Polyorgs 31 followed by atomic absorption spectrometry detection. *Anal Chim Acta* 342(2-3): 167-174.
549. Garboś S, Rzepecka M, Bulska E, Hulanicki A. 1999. Microcolumn sorption of antimony(III) chelate for antimony speciation studies. *Spectrochim Acta Part B At Spectrosc* 54(5): 873-881.
550. Garboś SX, Bulska E, Hulanicki A, Fijalek Z, Soltyk K. 2000. Determination of total antimony and antimony(V) by inductively coupled plasma mass spectrometry after selective separation of antimony(III) by solvent extraction with N-benzoyl-N-phenylhydroxylamine. *Spectrochim Acta Part B At Spectrosc* 55(7): 795-802.
551. Garcia AM, Rodriguez MC, Uria JE, Sanz-Medel A. 1995. Sb(III) and Sb(V) separation and analytical speciation by a continuous tandem on-line separation device in connection with inductively coupled plasma atomic emission spectrometry. *Anal Bioanal Chem* 353(2): 128-132.
552. Garg AN, Weginwar RG, Chutke NL. 1993. Radiochemical neutron activation analysis of Fe, Co, Zn, Sb and Se in biomedical and environmental samples. *Sci Total Environ* 139-140: 421-430.
553. Garg SP, Singh IS, Sharma RC. 2003. Long term lung retention studies of <sup>125</sup>Sb aerosols in humans. *Health Phys* 84(4): 457-468.
554. Gates PN, Harrop HA, Pridham JB, Smethurst B. 1997. Can microorganisms convert antimony trioxide or potassium antimonyl tartrate to methylated stibines? *Sci Total Environ* 205(2-3): 215-221.
555. Gaweda E. 2003. [Chemical hazards induced by heavy metals refining processes]. *Med Pr* 54(6): 543-548.

556. Ge JY, Zhang JG. 2015. Heavy metal contamination and accumulation in soil and plant species from the Xinqiao Copper Deposit, Anhui Province, China. *Anal Lett* 48(3): 541-552.
557. Ge Z, Wei C. 2013. Simultaneous analysis of SbIII, SbV and TMSb by high performance liquid chromatography-inductively coupled plasma-mass spectrometry detection: application to antimony speciation in soil samples. *J Chromatogr Sci* 51(5): 391-399.
558. Gebel T. 1997. Arsenic and antimony: Comparative approach on mechanistic toxicology. *Chem-Biol Interact* 107(3): 131-144.
559. Gebel T. 1998. Suppression of arsenic-induced chromosome mutagenicity by antimony. *Mutat Res* 412(3): 213-218.
560. Gebel T. 1998. *Umwelthygiene des Elements Antimon (Antimony as element in the context of environmental hygiene) (German)*. Georg-August-Universität, Göttingen: Habilitationsschrift FB Medizin (dissertation).
561. Gebel T. 1999. Environmental medicine and toxicology of the metalloid antimony. *Umweltmed Forsch Prax* 4(5): 259-267.
562. Gebel T. 1999. Metalle/Antimon (Metals/Antimony) (German). In *Handbuch Umweltmedizin*. Wichmann HE, Schlipk ter H-W, Igraff G, eds. Landsberg: Ecomed Medizin.
563. Gebel T. 2000. Confounding variables in the environmental toxicology of arsenic. *Toxicology* 144(1-3): 155-162.
564. Gebel T, Behmke C, Dunkelberg H. 1998. Influence of exposure to mercury, arsenic and antimony on body burden--a biomonitoring study. *Zentralblatt für Hygiene und Umweltmedizin* 201(1): 103-120.
565. Gebel T, Birkenkamp P, Luthin S, Dunkelberg H. 1998. Arsenic(III), but not antimony(III), induces DNA-protein crosslinks. *Anticancer Res* 18(6a): 4253-4257.
566. Gebel T, Christensen S, Dunkelberg H. 1997. Comparative and environmental genotoxicity of antimony and arsenic. *Anticancer Res* 17(4a): 2603-2607.
567. Gebel T, Claussen K, Dunkelberg H. 1998. Human biomonitoring of antimony. *Int Arch Occup Environ Health* 71(3): 221-224.
568. Gebel T, Kevekordes S, Schaefer J, von Platen H, Dunkelberg H. 1996. Assessment of a possible genotoxic environmental risk in sheep bred on grounds with strongly elevated contents of mercury, arsenic and antimony. *Mutat Res* 368(3-4): 267-274.
569. Gebel T, Suchenwirth RHR, Behmke C, Pleßow A, Claußen K, Schulze E, Dunkelberg H. 1998. Human biomonitoring study of persons geogenically exposed to elevated levels of mercury, arsenic and antimony in the soil. *Gesundheitswesen* 60(10): 580-585.
570. Gebel TW. 2001. Unanswered questions in arsenic toxicology. *J Environ Pathol Toxicol Oncol* 20(4): 299-309.
571. Gebel TW, Suchenwirth RHR, Bolten C, Dunkelberg HH. 1998. Human biomonitoring of arsenic and antimony in case of an elevated geogenic exposure. *Environ Health Perspect* 106(1): 33-39.
572. Gellhorn A, Rose HM, Culbertson JT. 1947. The plasma antimony concentration and the urinary antimony excretion in man during therapy with organic antimony compounds. *J Trop Med Hygiene* 50(2): 27-31.
573. Gellhorn A, Tupikova NA, Van Dyke HB. 1946. The tissue-distribution and excretion of four organic antimonials after single or repeated administration to normal hamsters. *J Pharmacol Exp Ther* 87: 169-180.
574. Gellhorn A, Van Dyke HB. 1946. The tissue distribution and the excretion of antimony after administration of tervalent and quinquevalent antimonials. *Fed Proc* 5(1 Pt 2): 178.
575. Genuis SJ, Birkholz D, Rodushkin I, Beeson S. 2011. Blood, urine, and sweat (BUS) study: Monitoring and elimination of bioaccumulated toxic elements. *Arch Environ Contam Toxicol* 61(2): 344-357.
576. Georgiadou SP, Makaritsis KP, Dalekos GN. 2015. Leishmaniasis revisited: Current aspects on epidemiology, diagnosis and treatment. *J Transl Int Med* 3(2): 43-50.

577. Gerber GB, Maes J, Eykens B. 1982. Transfer of antimony and arsenic to the developing organism. *Arch Toxicol* 49(2): 159-168.
578. Gerhardsson L, Brune D, Nordberg GF, Wall S, Wester PO. 1988. Occupation-related cancer in a Nordic copper smeltery. *Arctic Med Res* 47 Suppl 1: 628-631.
579. Gerhardsson L, Brune D, Nordberg GF, Wester PO. 1986. Distribution of cadmium, lead and zinc in lung, liver and kidney in long-term exposed smelter workers. *Sci Total Environ* 50: 65-85.
580. Gerhardsson L, Brune D, Nordberg GF, Wester PO. 1986. Selenium and other trace elements in lung tissue in smelter workers relationship to the occurrence of lung cancer. *Acta Pharmacol Toxicol (Copenh)* 59(Suppl 7): 256-259.
581. Gerhardsson L, Brune D, Nordberg GF, Wester PO. 1988. Multielemental assay of tissues of deceased smelter workers and controls. *Sci Total Environ* 74(C): 97-110.
582. Gerhardsson L, Brune D, Nordberg IG, Wester PO. 1985. Protective effect of selenium on lung cancer in smelter workers. *Br J Ind Med* 42(9): 617-626.
583. Gerhardsson L, Hagmar L, Rylander L, Skerfving S. 1995. Mortality and cancer incidence among secondary lead smelter workers. *Occup Environ Med* 52(10): 667-672.
584. Gerhardsson L, Lundström NG, Nordberg G, Wall S. 1986. Mortality and lead exposure: a retrospective cohort study of Swedish smelter workers. *Br J Ind Med* 43(10): 707-712.
585. Gerhardsson L, Nordberg GF. 1993. Lung cancer in smelter workers--interactions of metals as indicated by tissue levels. *Scand J Work Environ Health* 19 Suppl 1: 90-94.
586. Ghassemzadeh F, Yousefzadeh H, Arbab-Zavar MH. 2008. Removing arsenic and antimony by Phragmites australis: Rhizofiltration technology. *J Appl Sci* 8(9): 1668-1675.
587. Ghosh M, Roy K, Roy S. 2013. Immunomodulatory effects of antileishmanial drugs. *J Antimicrob Chemother* 68(12): 2834-2838.
588. Ghosh R, Koerting C, Suib SL, Best MH, Berlin AJ. 2005. Effect of a metal alloy fuel catalyst on bacterial growth. *Langmuir* 21(23): 10655-10661.
589. Gibbs GW. 1985. Mortality of aluminum reduction plant workers, 1950 through 1977. *J Occup Med* 27(10): 761-770.
590. Gibbs GW, Armstrong B, Sevigny M. 2007. Mortality and cancer experience of Quebec aluminum reduction plant workers. Part 2: mortality of three cohorts hired on or before January 1, 1951. *J Occup Environ Med* 49(10): 1105-1123.
591. Gibbs GW, Horowitz I. 1979. Lung cancer mortality in aluminum reduction plant workers. *J Occup Med* 21(5): 347-353.
592. Gibbs GW, Labrèche F, Busque MA, Duguay P. 2014. Mortality and cancer incidence in aluminum smelter workers: a 5-year update. *J Occup Environ Med* 56(7): 739-764.
593. Gibbs GW, Sevigny M. 2007. Mortality and cancer experience of Quebec aluminum reduction plant workers. Part 3: monitoring the mortality of workers first employed after January 1, 1950. *J Occup Environ Med* 49(11): 1269-1287.
594. Gibbs GW, Sevigny M. 2007. Mortality and cancer experience of Quebec aluminum reduction plant workers, part 4: cancer incidence. *J Occup Environ Med* 49(12): 1351-1366.
595. Gil-Garcia C, Tagami K, Uchida S, Rigol A, Vidal M. 2009. New best estimates for radionuclide solid-liquid distribution coefficients in soils. Part 3: miscellany of radionuclides (Cd, Co, Ni, Zn, I, Se, Sb, Pu, Am, and others). *J Environ Radioact* 100(9): 704-715.
596. Grgis GR, Scott P, Schulert AR, Browne HG. 1965. Acute tolerance of mice to tartar emetic. *Toxicol Appl Pharmacol* 7(5): 727-731.
597. Givelet N, Le Roux G, Cheburkin A, Chen B, Frank J, Goodsite ME, Kempfer H, Krachler M, Noernberg T, Rausch N, Rheinberger S, Roos-Barracough F, Sapkota A, Scholz C, Shotyk W. 2004. Suggested protocol for collecting, handling and preparing peat cores and peat samples for physical, chemical, mineralogical and isotopic analyses. *J Environ Monit* 6(5): 481-492.
598. Gladkova OL, Panarin AY, Khodasevich IA, Terekhov SN. 2012. Surface-enhanced Raman spectra of a complex of antimony with phenylfluorone and their interpretation. *Opt Spectrosc* 112(4): 489-496.

599. Glória PMC. 2005. Antimony pentachloride. *Synlett*(9): 1486-1487.
600. Godfrey SM, McAuliffe CA, Mackie AG, Pritchard RG. 1998. Coordination chemistry and solution chemistry. In *Chemistry of Arsenic, Antimony and Bismuth*. Norman NC, ed. London, UK: Blackie Academic and Professional. p. 159-205.
601. Godoy MLDP, Godoy JM, Artaxo P. 2005. Aerosol source apportionment around a large coal fired power plant - Thermoelectric Complex Jorge Lacerda, Santa Catarina, Brazil. *Atmos Environ* 39(29): 5307-5324.
602. Goix S, Lévêque T, Xiong TT, Schreck E, Baeza-Squiban A, Geret F, Uzu G, Austruy A, Dumat C. 2014. Environmental and health impacts of fine and ultrafine metallic particles: Assessment of threat scores. *Environ Res* 133: 185-194.
603. Gómez Ariza JL, Morales E, Sánchez-Rodas D, Giráldez I. 2000. Stability of chemical species in environmental matrices. *TrAC Trends Anal Chem* 19(2-3): 200-209.
604. Gomez DR, Gine MF, Bellato ACS, Smichowski P. 2005. Antimony: a traffic-related element in the atmosphere of Buenos Aires, Argentina. *J Environ Monit* 7(12): 1162-1168.
605. Gomez Gonzalez MJ, Dominguez Renedo O, Arcos Martinez MJ. 2007. Speciation of antimony by adsorptive stripping voltammetry using pyrogallol. *Talanta* 71(2): 691-698.
606. Gonzales FA, Jones RR, Deardorff J, Windham GC, Hiatt RA, Kushi LH. 2016. Neighborhood deprivation, race/ethnicity, and urinary metal concentrations among young girls in California. *Environ Int* 91: 29-39.
607. Gonzalez MJ, Renedo OD, Martinez MJ. 2005. Simultaneous determination of antimony(III) and antimony(V) by UV-vis spectroscopy and partial least squares method (PLS). *Talanta* 68(1): 67-71.
608. González MJG, Renedo OD, Martínez MJA. 2006. Speciation of antimony by adsorptive stripping voltammetry using pyrogallol red. *Electroanalysis* 18(12): 1159-1166.
609. Gonzalez-Alvarez ME, Aboal-Somoza M, Bermejo-Barrera P. 2012. Preliminary findings on the antimony levels of Quiroga River water in the vicinity of a long-abandoned stibnite mine. *Water Environ Res* 84(2): 150-154.
610. Goodarzi V, Monemian SA, Angaji MT, Motahari S. 2008. Improvement of thermal and fire properties of polypropylene. *J Appl Poly Sci* 110(5): 2971-2979.
611. Goodwin LG, Page JE. 1943. A study of the excretion of organic antimonials using a polarographic procedure. *Biochem J* 37: 198-209.
612. Gounou C, Varraut G, Amedzro K, Gasperi J, Moilleron R, Garnaud S, Chebbo G. 2011. Research of trace metals as markers of entry pathways in combined sewers. *Water Sci Technol* 63(4): 633-640.
613. Grahn E, Karlsson S, Karlsson U, Duker A. 2006. Historical pollution of seldom monitored trace elements in Sweden - Part B: Sediment analysis of silver, antimony, thallium and indium. *J Environ Monit* 8(7): 732-744.
614. Grandjean P, Andersen O, Nielsen GD. 1988. Carcinogenicity of occupational nickel exposures: an evaluation of the epidemiological evidence. *Am J Ind Med* 13(2): 193-209.
615. Grause G, Ishibashi J, Kameda T, Bhaskar T, Yoshioka T. 2010. Kinetic studies of the decomposition of flame retardant containing high-impact polystyrene. *Polymer Degrad Stab* 95(6): 1129-1137.
616. Greaves WW, Rom WN, Lyon JL, Varley G, Wright DD, Chiu G. 1981. Relationship between lung cancer and distance of residence from nonferrous smelter stack effluent. *Am J Ind Med* 2(1): 15-23.
617. Greenberg MI, Vearrier D. 2015. Metal fume fever and polymer fume fever. *Clin Toxicol* 53(4): 195-203.
618. Gregus Z, Gyurasics A, Koszorus L. 1998. Interactions between selenium and group Va-metalloids (arsenic, antimony and bismuth) in the biliary excretion. *Environ Toxicol Pharmacol* 5(2): 89-99.
619. Griggs CS, Martin WA, Larson SL, O'Connor G, Fabian G, Zynda G, Mackie D. 2011. The effect of phosphate application on the mobility of antimony in firing range soils. *Sci Total Environ* 409(12): 2397-2403.
620. Grigor'ev YO, Treshchina SA, Pushkarev VV, Voinov VN. 1983. Additional extraction of antimony from spent sulfide-alkali electrolyte. *Tsvetnye Metally*(11): 20-23.

621. Grimes DJ, Ficklin WH, Meier AL, McHugh JB. 1995. Anomalous gold, antimony, arsenic, and tungsten in-ground water and alluvium around disseminated gold deposits along the Getchell Trend, Humboldt County, Nevada. *J Geochem Explor* 52(3): 351-371.
622. Grimsrud TK, Berge SR, Resmann F, Norseth T, Andersen A. 2000. Assessment of historical exposures in a nickel refinery in Norway. *Scand J Work Environ Health* 26(4): 338-345.
623. Groenenberg JE, Dijkstra JJ, Bonten LTC, De Vries W, Comans RNJ. 2012. Evaluation of the performance and limitations of empirical partition-relations and process based multisurface models to predict trace element solubility in soils. *Environ Pollut* 166: 98-107.
624. Gross P, Brown JH, Westrick ML, Srsic RP, Butler NL, Hatch TF. 1955. Toxicologic study of calcium halophosphate phosphors and antimony trioxide. I. Acute and chronic toxicity and some pharmacologic aspects. *AMA Arch Ind Health* 11(6): 473-478.
625. Gross P, Westrick ML, Brown JH, Srsic RP, Schrenk HH, Hatch TF. 1955. Toxicologic study of calcium halophosphate phosphors and antimony trioxide. II. Pulmonary studies. *AMA Arch Ind Health* 11(6): 479-486.
626. Grosskopf C, Schwerdtle T, Mullenders LH, Hartwig A. 2010. Antimony impairs nucleotide excision repair: XPA and XPE as potential molecular targets. *Chem Res Toxicol* 23(7): 1175-1183.
627. Groth DH, Stettler LE, Burg JR, Busey WM, Grant GC, Wong L. 1986. Carcinogenic effects of antimony trioxide and antimony ore concentrate in rats. *J Toxicol Environ Health* 18(4): 607-626.
628. Grund SB, Hanusch K, Breunig HJ, Wolf HU. 2011. Antimony and antimony compounds. In *Ullman's Encyclopedia of Industrial Chemistry*. vol. 4. Weinheim: Wiley-VCH Verlag GmbH & Co. p. 12-41.
629. Gruter UM, Kresimon J, Hirner AV. 2000. A new HG/LT-GC/ICP-MS multi-element speciation technique for real samples in different matrices. *Fresenius J Anal Chem* 368(1): 67-72.
630. Guerin T, Astruc M, Batel A, Borsier M. 1997. Multielemental speciation of As, Se, Sb and Te by HPLC-ICP-MS. *Talanta* 44(12): 2201-2208.
631. Guidotti TL, McNamara J, Moses MS. 2008. The interpretation of trace element analysis in body fluids. *Ind J Med Res* 128(4): 524-532.
632. Guildford AL, Poletti T, Osbourne LH, Di Cerbo A, Gatti AM, Santin M. 2009. Nanoparticles of a different source induce different patterns of activation in key biochemical and cellular components of the host response. *J R Soc Interface* 6(41): 1213-1221.
633. Gulyas H, Labedzka M, Gercken G. 1990. Depression of alveolar macrophage hydrogen peroxide and superoxide anion release by mineral dusts: correlation with antimony, lead, and arsenic contents. *Environ Res* 51(2): 218-229.
634. Guna RN, Vyas JM, Ramkishan A, Agrawal YK. 2012. Metal ion sensors for trace determination of metals in drugs and pharmaceuticals. *Rev Anal Chem* 31(3-4): 193-199.
635. Guney M, Zagury GJ. 2012. Heavy metals in toys and low-cost jewelry: Critical review of U.S. and Canadian legislations and recommendations for testing. *Environ Sci Technol* 46(8): 4265-4274.
636. Guney M, Zagury GJ. 2013. Contamination by ten harmful elements in toys and children's jewelry bought on the North American market. *Environ Sci Technol* 47(11): 5921-5930.
637. Guney M, Zagury GJ. 2014. Bioaccessibility of As, Cd, Cu, Ni, Pb, and Sb in toys and low-cost jewelry. *Environ Sci Technol* 48(2): 1238-1246.
638. Gunter BJ. 1987. *Health Hazard Evaluation. Silver Deer Spectrum, Boulder, Colorado*. HETA 86-070-1774. Cincinnati, OH: National Institute for Occupational Safety and Health. 7 pp.
639. Gunter BJ, Hatch L. 1976. *Health Hazard Evaluation. A & S Tribal Industries, Poplar, Montana*. Report No. 75-135-328. Cincinnati, OH: National Institute for Occupational Safety and Health. 12 pp.
640. Gunter BJ, Klincewicz S, Daniels WJ. 1989. *Health Hazard Evaluation. Boeing Aircraft, Seattle, Washington*. HETA 88-294-1974. Cincinnati, OH: National Institute for Occupational Safety and Health. 37 pp.
641. Gunter BJ, Thoburn T. 1986. *Health Hazard Evaluation. TAC Radiator, Minot, North Dakota*. HETA 86-087-1686. Cincinnati, OH: National Institute for Occupational Safety and Health. 11 pp.

642. Guo GY, Xu SY, Deng CS. 2004. [Potassium antimonyl tartrate induces apoptosis in human gastric carcinoma cells]. *World Chin J Dig* 12(3): 520-522.
643. Guo J, Su L, Zhao X, Xu Z, Chen G. 2016. Relationships between urinary antimony levels and both mortalities and prevalence of cancers and heart diseases in general US population, NHANES 1999-2010. *Sci Total Environ* 571: 452-460.
644. Guo SY, Feng B, Zhang HF. 2011. Simultaneous determination of trace arsenic and antimony in fomes officinalis ames with hydride generation atomic fluorescence spectrometry. *J Fluoresc* 21(3): 1281-1284.
645. Guo XJ, Wu ZJ, He MC. 2009. Removal of antimony(V) and antimony(III) from drinking water by coagulation-flocculation-sedimentation (CFS). *Water Research* 43(17): 4327-4335.
646. Guo XM, Li SP, Huang BL. 2004. Design and performance of a novel electrolytic cell with micro-channel electrodes for electrochemical hydride generation atomic fluorescence spectrometry - Preliminary report. *Can J Anal Sci Spectrosc* 49(6): 327-333.
647. Gürleyük H, Van Fleet-Stalder V, Chasteen T, G. 1997. Confirmation of the biomethylation of antimony compounds. *Appl Organomet Chem* 11: 471-483.
648. Gurnani N, Sharma A, Talukder G. 1992a. Cytotoxic effects of antimony trichloride on mice *in vivo*. *Cytobios* 70(281): 131-136.
649. Gurnani N, Sharma A, Talukder G. 1992b. Comparison of the clastogenic effects of antimony trioxide on mice *in vivo* following acute and chronic exposure. *Biometals* 5(1): 47-50.
650. Gurnani N, Sharma A, Talukder G. 1993. Comparison of clastogenic effects of antimony and bismuth as trioxides on mice *in vivo*. *Biol Trace Elem Res* 37(2-3): 281-292.
651. Gushchina LV, Borovikov AA, Shebanin AP. 2000. Formation of antimony (III) complexes in alkali sulfide solutions at high temperatures: An experimental Raman spectroscopic study. *Geochem Int* 38(5): 510-513.
652. Guy A, Jones P, Hill SJ. 1998. Identification and chromatographic separation of antimony species with α-hydroxy acids. *Analyst* 123(7): 1513-1518.
653. Guzman-Rivero M, Verduguez-Orellana A, Montano K, Cloetens L, Rojas E, Akesson B, Sejas E. 2015. The immune response in patients with cutaneous leishmaniasis and the influence of zinc supplementation. *Biomed Pharmacother* 69: 56-62.
654. Gyurasic A, Koszorus L, Varga F, Gregus Z. 1992. Increased biliary excretion of glutathione is generated by the glutathione-dependent hepatobiliary transport of antimony and bismuth. *Biochem Pharmacol* 44(7): 1275-1281.
655. Gyurasic Á, Varga F, Gregus Z. 1992. Biliary excretion of arsenic, antimony and bismuth: the role of glutathione. *Pharmacol Res* 25(Suppl. 2): 339-340.
656. Haas K, Feldmann J. 2000. Sampling of trace volatile metal(loid) compounds in ambient air using polymer bags: A convenient method. *Analytical Chemistry* 72(17): 4205-4211.
657. Haas K, Feldmann J, Wennrich R, Stark HJ. 2001. Species-specific isotope-ratio measurements of volatile tin and antimony compounds using capillary GC-ICP-time-of-flight MS. *Fresenius J Anal Chem* 370(5): 587-596.
658. Haber M, Bordow SB, Gilbert J, Madafiglio J, Kavallaris M, Marshall GM, Mechettner EB, Fruehauf JP, Tee L, Cohn SL, Salwen H, Schmidt ML, Norris MD. 1999. Altered expression of the MYCN oncogene modulates MRP gene expression and response to cytotoxic drugs in neuroblastoma cells. *Oncogene* 18(17): 2777-2782.
659. Hachez C, Chaumont F. 2010. Aquaporins: A family of highly regulated multifunctional channels. In *MIPs and Their Role in the Exchange of Metalloids*. Jahn TP, Bienert GP, eds.: Landes Bioscience and Springer Science+Business Media. p. 1-17.
660. Hadjikakou SK, Antoniadis CD, Hadjiliadis N, Kubicki M, Binolis J, Karkabounas S, Charalabopoulos K. 2005. Synthesis and characterization of new water stable antimony(III) complex with pyrimidine-2-thione and *in vitro* biological study. *Inorg Chim Acta* 358(10): 2861-2866.

661. Haenschke F, Kessler E, Ihring A, Bunte KD, Herbst C, Mohaupt M, Fichna T, Hagedorn D, Meyer HG. 2014. Membrane based thermoelectric sensor array for space debris detection. In *Sensors and Systems for Space Applications VII*. vol. 9085. Pham KD, ed. Baltimore, MD: SPIE.
662. Hagarova I, Bujdos M, Matus P. 2011. Evaluation of electrothermal atomic absorption spectrometry for trace determination of antimony in different environmental samples using chemical modification. *Fresenius Environ Bull* 20(10A): 2710-2715.
663. Hagarová I, Bujdoš M, Matúš P, Čanecká L. 2012. The use of two extraction procedures in combination with electrothermal AAS for speciation of inorganic antimony in natural waters. *Chem Listy* 106(2): 136-142.
664. Hagarová I, Kubová J. 2008. Speciation of antimony in waters using separation coupled with atomic spectrometry. *Chem Listy* 102(9): 782-790.
665. Hagarová I, Kubová J, Matúš P, Bujdoš M. 2008. Speciation of inorganic antimony in natural waters by electrothermal atomic absorption spectrometry after selective separation and preconcentration of antimony(III) with cloud point extraction. *Acta Chim Slov* 55(3): 528-534.
666. Hagarova I, Matus P, Bujdos M, Kubova J. 2012. Analytical application of nano-sized titanium dioxide for the determination of trace inorganic antimony in natural waters. *Acta Chimica Slovenica* 59(1): 102-108.
667. Haines TA, May TW, Finlayson RT, Mierzykowski SE. 2003. Factors affecting food chain transfer of mercury in the vicinity of the Nyanza site, Sudbury River, Massachusetts. *Environ Monit Assess* 86(3): 211-232.
668. Hall WJ, Bhaskar T, Merpati NM, Muto A, Sakata Y, Williams PT. 2007. Pyrolysis of waste electrical and electronic equipment: effect of antimony trioxide on the pyrolysis of styrenic polymers. *Environ Technol* 28(9): 1045-1054.
669. Hamad SH, Schauer JJ, Shafer MM, Abed Al-Raheem E, Satar H. 2012. The distribution between the dissolved and the particulate forms of 49 metals across the Tigris River, Baghdad, Iraq. *Sci World J* 2012.
670. Hamamura N, Fukushima K, Itai T. 2013. Identification of antimony- and arsenic-oxidizing bacteria associated with antimony mine tailing. *Microbes Environ* 28(2): 257-263.
671. Hamilton EI. 2000. Environmental variables in a holistic evaluation of land contaminated by historic mine wastes: a study of multi-element mine wastes in West Devon, England using arsenic as an element of potential concern to human health. *Sci Total Environ* 249(1-3): 171-221.
672. Hammel W, Debus R, Steubing L. 2000. Mobility of antimony in soil and its availability to plants. *Chemosphere* 41(11): 1791-1798.
673. Hamzah A, Beh CW, Sarmani SB, Liow JY, Abugassa I. 2004. Studies on elemental analysis of Chinese traditional herbs by neutron activation technique and their mutagenic effect. *J Radioanal Nucl Chem* 259(3): 499-503.
674. Hanna J, Waterman D, Isasa M, Elsasser S, Shi Y, Gygi S, Finley D. 2014. Cuz1/Ynl155w, a zinc-dependent ubiquitin-binding protein, protects cells from metalloid-induced proteotoxicity. *J Biol Chem* 289(3): 1876-1885.
675. Hannigan TJ, McDermott SD, Greaney CM, O'Shaughnessy J, O'Brien CM. 2015. Evaluation of gunshot residue (GSR) evidence: Surveys of prevalence of GSR on clothing and frequency of residue types. *Forensic Sci Int* 257: 177-181.
676. Hansen C, Hansen EW, Hansen HR, Gammelgaard B, Sturup S. 2011. Reduction of Sb(V) in a human macrophage cell line measured by HPLC-ICP-MS. *Biol Trace Elem Res* 144(1-3): 234-243.
677. Hansen C, Schmidt B, Larsen EH, Gammelgaard B, Sturup S, Hansen HR. 2011. Quantitative HPLC-ICP-MS analysis of antimony redox speciation in complex sample matrices: new insights into the Sb-chemistry causing poor chromatographic recoveries. *Analyst* 136(5): 996-1002.
678. Hansen HR, Pergantis SA. 2006. Detection of antimony species in citrus juices and drinking water stored in PET containers. *J Anal At Spectrom* 21(8): 731-733.
679. Hansen HR, Pergantis SA. 2006. Investigating the formation of an Sb(V)-citrate complex by HPLC-ICP-MS and HPLC-ES-MS(/MS). *J Anal At Spectrom* 21(11): 1240-1248.

680. Hansen HR, Pergantis SA. 2006. Mass spectrometric identification and characterization of antimony complexes with ribose-containing biomolecules and an RNA oligomer. *Anal Bioanal Chem* 385(5): 821-833.
681. Hansen HR, Pergantis SA. 2007. Identification of Sb(V) complexes in biological and food matrixes and their stibine formation efficiency during hydride generation with ICPMS detection. *Anal Chem* 79(14): 5304-5311.
682. Hansen HR, Pergantis SA. 2008. Analytical techniques and methods used for antimony speciation analysis in biological matrices. *J Anal At Spectrom* 23(10): 1328-1340.
683. Hantson P, Leonard ED, Crutzen-Fayt MC, Leonard A, Vandercam B, Delaere B, Mahieu P. 1996. Cytogenetic observations after meglumine antimoniate therapy for visceral leishmaniasis. *Pharmacotherapy* 16(5): 869-871.
684. Hantson P, Luyasu S, Haufroid V, Lambert M. 2000. Antimony excretion in a patient with renal impairment during meglumine antimoniate therapy. *Pharmacotherapy* 20(9 l): 1141-1143.
685. Hanzlik PJ. 1923. Experimental plumbism in pigeons from the administration of metallic lead. *Arch Exp Path Pharm* 97(1): 183-201.
686. Hanzlik PJ, Presho E. 1923. Therapeutic efficiency of various agents for chronic poisoning by metallic lead in pigeons. *J Pharmacol Exp Therapeutics* 21(2): 131-143.
687. Harding AH, Darnton A, Wegerdt J, McElvenny D. 2009. Mortality among British asbestos workers undergoing regular medical examinations (1971-2005). *Occup Environ Med* 66(7): 487-495.
688. Hartmann LM, Craig PJ, Jenkins RO. 2003. Influence of arsenic on antimony methylation by the aerobic yeast *Cryptococcus humicolus*. *Arch Microbiol* 180(5): 347-352.
689. Hartmann PE, Levine K, Hartman Z, Berger H. 1971. Hycanthone: A frameshift mutagen. *Science* 172: 1058-1060.
690. Hasanin THA, Yamamoto T, Okamoto Y, Ishizaka S, Fujiwara T. 2016. A flow method for chemiluminescence determination of antimony(III) and antimony(V) using a rhodamine B-cetyltrimethylammonium chloride reversed micelle system following on-line extraction. *Anal Sci* 32(2): 245-250.
691. Hasgekar N, Beck JP, Dunkelberg H, Hirsch-Ernst KI, Gebel TW. 2006. Influence of antimonite, selenite, and mercury on the toxicity of arsenite in primary rat hepatocytes. *Biol Trace Elem Res* 111(1-3): 167-183.
692. Hashemi M, Daryanavard SM, Abdolhosseini S. 2013. Application of ultrasound-assisted emulsification microextraction for spectrophotometric determination of trace amounts of antimony(V) in drinking water samples using rhodamine B. *Analytical Methods* 5(23): 6848-6854.
693. Hashemzaei M, Pourahmad J, Safaeinejad F, Tabrizian K, Akbari F, Bagheri G, Hosseini MJ, Shahraki J. 2015. Antimony induces oxidative stress and cell death in normal hepatocytes. *Toxicol Environ Chem* 97(2): 256-265.
694. Hayes RB. 1997. The carcinogenicity of metals in humans. *Cancer Causes Control* 8(3): 371-385.
695. He M. 2007. Distribution and phytoavailability of antimony at an antimony mining and smelting area, Hunan, China. *Environ Geochem Health* 29(3): 209-219.
696. He M, Wan H. 2004. Distribution, speciation, toxicity and bioavailability of antimony in the environment. *Progr Chem* 16(1): 131-135.
697. Health Canada. 1999. *Guidelines for Canadian Drinking Water Quality. Guideline Technical Document: Antimony*. Health Canada. 10 pp.
698. Healy MG, Fenton O, Forrestal PJ, Danaher M, Brennan RB, Morrison L. 2016. Metal concentrations in lime stabilised, thermally dried and anaerobically digested sewage sludges. *Waste Manag* 48: 404-408.
699. Hebeisen M, Baitsch L, Presotto D, Baumgaertner P, Romero P, Michielin O, Speiser DE, Rufer N. 2013. SHP-1 phosphatase activity counteracts increased T cell receptor affinity. *J Clin Invest* 123(3): 1044-1056.
700. Heier LS, Lien IB, Strømseng AE, Ljønes M, Rosseland BO, Tollesen KE, Salbu B. 2009. Speciation of lead, copper, zinc and antimony in water draining a shooting range--time dependant metal

- accumulation and biomarker responses in brown trout (*Salmo trutta* L.). *Sci Total Environ* 407(13): 4047-4055.
701. Heier LS, Meland S, Ljones M, Salbu B, Stromseng AE. 2010. Short-term temporal variations in speciation of Pb, Cu, Zn and Sb in a shooting range runoff stream. *Sci Total Environ* 408(11): 2409-2417.
  702. Heitland P, Köster HD. 2006. Biomonitoring of 30 trace elements in urine of children and adults by ICP-MS. *Clin Chimica Acta* 365(1-2): 310-318.
  703. Hellack B, Quass U, Nickel C, Wick G, Schins RPF, Kuhlbusch TAJ. 2015. Oxidative potential of particulate matter at a German motorway. *Environ Sci Process Impacts* 17(4): 868-875.
  704. Helz GR, Valerio MS, Capps NE. 2002. Antimony speciation in alkaline sulfide solutions: role of zerovalent sulfur. *Environ Sci Technol* 36(5): 943-948.
  705. Hennemeyer M, Walther F, Kerstan S, Schürzinger K, Gigler AM, Stark RW. 2008. Cell proliferation assays on plasma activated SU-8. *Microelectron Eng* 85(5-6): 1298-1301.
  706. Herath I, Vithanage M, Bundschuh J. 2017. Antimony as a global dilemma: Geochemistry, mobility, fate and transport. *Environ Pollut* 223: 545-559.
  707. Herbst KA, Rose G, Hanusch K. 1985. Antimony and antimony compounds. In *Ullman's Encyclopedia of Industrial Chemistry*. vol. A3. Gerhartz W, Yamamoto YS, Campbell FT, Pfefferkorn R, Rounsville JF, eds. Weinheim, Germany: VCH Verlagsgesellschaft mbH. p. 55-76.
  708. Hernandez-Mena L, Murillo-Tovar M, Ramirez-Muniz M, Colunga-Urbina E, de la Garza-Rodriguez I, Saldarriaga-Norena H. 2011. Enrichment Factor and profiles of elemental composition of PM 2.5 in the city of Guadalajara, Mexico. *Bull Environ Contam Toxicol* 87(5): 545-549.
  709. Hernández-Nataren E, Sahuquillo A, Rubio R, López-Sánchez JF. 2011. Solid-phase extraction (SPE) assays to ascertain the mechanisms of retention of antimony species in several stationary phases. *Microchem J* 97(1): 74-77.
  710. Herve M, Sinoussi-Barre F, Chermann JC, Herve G, Jasmin C. 1983. Correlation between structure of polyoxotungstates and their inhibitory activity on polymerases. *Biochem Biophys Res Commun* 116(1): 222-229.
  711. Hervin RL, Ruhe RL, Kramkowski RS, Shama SK, Ligo RN. 1972. *Health Hazard Evaluation. Raybestos-Manhattan, Inc., Crawfordsville, Indiana.* Report No. 71-21. Cincinnati, OH: National Institute for Occupational Safety and Health. 18 pp.
  712. Hext PM, Pinto PJ, Rimmel BA. 1999. Subchronic feeding study of antimony trioxide in rats. *J Appl Toxicol* 19(3): 205-209.
  713. Heyerdahl SL, Rozenberg J, Jamtgaard L, Rishi V, Varticovski L, Akah K, Scudiero D, Shoemaker RH, Karpova TS, Day RN, McNally JG, Vinson C. 2010. The arylstibonic acid compound NSC13746 disrupts B-ZIP binding to DNA in living cells. *Eur J Cell Biol* 89(7): 564-573.
  714. Hill AB. 1965. The environment and disease: Association or causation? *Proc R Soc Med* 58: 295-300.
  715. Hiller E, Jurkovič L, Šutriepka M. 2010. Metals in the surface sediments of selected water reservoirs, Slovakia. *Bull Environ Contam Toxicol* 84(5): 635-640.
  716. Hiller E, Petrak M, Toth R, Lalinska-Volekova B, Jurkovic L, Kuerova G, Radkova A, Sotnik P, Vozar J. 2013. Geochemical and mineralogical characterization of a neutral, low-sulfide/high-carbonate tailings impoundment, Markusovce, eastern Slovakia. *Environ Sci Pollut Res* 20(11): 7627-7642.
  717. Hinwood AL, Stasinska A, Callan AC, Heyworth J, Ramalingam M, Boyce M, McCafferty P, Odland JØ. 2015. Maternal exposure to alkali, alkali earth, transition and other metals: Concentrations and predictors of exposure. *Environ Pollut* 204: 256-263.
  718. Hioki A. 2008. A coulometric analysis method and an ion-exclusion chromatographic method for the determination of antimony(V) in large excess of antimony(III). *Anal Sci* 24(9): 1099-1103.
  719. Hirano K, Hagiwara T, Ohta Y, Matsumoto H, Kada T. 1982. rec-Assay with spores of *Bacillus subtilis* with and without metabolic activation. *Mutat Res* 97(5): 339-347.
  720. Hirano S, Tadano M, Kobayashi Y, Udagawa O, Kato A. 2015. Solubility shift and SUMOylation of promyelocytic leukemia (PML) protein in response to arsenic(III) and fate of the SUMOylated PML. *Toxicol Appl Pharmacol* 287(3): 191-201.

721. Hirayama M, Iijima S, Iwashita M, Akiyama S, Takaku Y, Yamazaki M, Omori T, Yumoto S, Shimamura T. 2011. Aging effects of major and trace elements in rat bones and their mutual correlations. *J Trace Elem Med Biol* 25(2): 73-84.
722. Hirner AV, Gruter UM, Kresimon J. 2000. Metal(lloid)organic compounds in contaminated soil. *Fresenius J Anal Chem* 368(2-3): 263-267.
723. Hirner AV, Rettenmeier AW. 2010. Methylated metal(lloid) species in humans. *Met Ions Life Sci* 7: 465-521.
724. Hock A, Demmel U, Schicha H, Kasperek K, Feinendegen LE. 1975. Trace element concentration in human brain. Activation analysis of cobalt, iron, rubidium, selenium, zinc, chromium, silver, cesium, antimony and scandium. *Brain* 98(1): 49-64.
725. Hockmann K, Lenz M, Tandy S, Nachtegaal M, Janousch M, Schulin R. 2014. Release of antimony from contaminated soil induced by redox changes. *J Hazard Mater* 275: 215-221.
726. Hockmann K, Tandy S, Lenz M, Reiser R, Conesa HM, Keller M, Studer B, Schulin R. 2015. Antimony retention and release from drained and waterlogged shooting range soil under field conditions. *Chemosphere* 134: 536-543.
727. Hockmann K, Tandy S, Lenz M, Schulin R. 2014. Antimony leaching from contaminated soil under manganese- and iron-reducing conditions: Column experiments. *Environ Chem* 11(6): 624-631.
728. Hoet P, Jacquerye C, Deumer G, Lison D, Haufroid V. 2013. Reference values and upper reference limits for 26 trace elements in the urine of adults living in Belgium. *Clin Chem Lab Med* 51(4): 839-849.
729. Hong KS, Nam DH, Lim SJ, Sohn D, Kim TH, Kwon H. 2015. Electrochemically synthesized Sb/Sb<sub>2</sub>O<sub>3</sub> composites as high-capacity anode materials utilizing a reversible conversion reaction for Na-ion batteries. *ACS Appl Mater Interfaces* 7(31): 17264-17271.
730. Hopf NB, Carreón T, Talaska G. 2009. Biological markers of carcinogenic exposure in the aluminum smelter industry--a systematic review. *J Occup Environ Hyg* 6(9): 562-581.
731. Hou HB. 2002. Determination of antimony and the differential determination of antimony(III) and antimony(V) by ICP-AES and high-resolution ICP-MS with a hydride generation technique. *Bunseki Kagaku* 51(5): 329-330.
732. Hou HB, Narasaki H. 1999. Differential determination of antimony(III) and antimony(V) in river water by hydride-generation inductively coupled plasma mass spectrometry. *Anal Sci* 15(9): 911-914.
733. Howe A, Fung LH, Lalor G, Rattray R, Vutchkov M. 2005. Elemental composition of Jamaican foods 1: a survey of five food crop categories. *Environ Geochem Health* 27(1): 19-30.
734. Howlader N, Noone AM, Krapcho M, Miller D, Bishop K, Kosary CL, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA. 2017. *SEER Cancer Statistics Review, 1975-2014*. National Cancer Institute, Bethesda, MD. [https://seer.cancer.gov/csr/1975\\_2014/](https://seer.cancer.gov/csr/1975_2014/), based on November 2016 SEER data submission, posted to the SEER web site, April 2017.
735. HSDB. 2013. *Hazardous Substances Data Bank: Antimony Trioxide*. National Library of Medicine. Updated on 3/8/13. <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB> and search on CAS number or compound name. Accessed on 5/19/17.
736. Hu X, Guo X, He M, Li S. 2016. pH-dependent release characteristics of antimony and arsenic from typical antimony-bearing ores. *J Environ Sci (China)* 44: 171-179.
737. Hu X, He M, Kong L. 2015. Photopromoted oxidative dissolution of stibnite. *Appl Geochem* 61: 53-61.
738. Hu X, Kong L, He M. 2014. Kinetics and mechanism of photopromoted oxidative dissolution of antimony trioxide. *Environ Sci Technol* 48(24): 14266-14272.
739. Huang C, Hu B, Jiang Z. 2007. Simultaneous speciation of inorganic arsenic and antimony in natural waters by dimercaptosuccinic acid modified mesoporous titanium dioxide micro-column on-line separation and inductively coupled plasma optical emission spectrometry determination. *Spectrochim Acta Part B At Spectrosc* 62(5): 454-460.
740. Huang H, Shu SC, Shih JH, Kuo CJ, Chiu ID. 1998. Antimony trichloride induces DNA damage and apoptosis in mammalian cells. *Toxicology* 129(2-3): 113-123.

741. Huang XR, Zhang WJ, Han SH, Yin YQ, Xu GY, Wang XQ. 1997. Spectrophotometric determination of Sb(III) in Sb(II)/Sb(V) binary mixtures using sodium dodecylsulfate nonylphenoxy polyethoxyethanol mixed micellar media. *Talanta* 45(1): 127-135.
742. Hulliger L, Pohler O, Straumann F. 1967. [Einfluß einiger reiner Metalle und Legierungen auf das Wachstum von Kaninchenfibrozyten in Gewebekulturen]. *Z Ges Exp Med* 144(2): 145-156.
743. Huvinen M, Pukkala E. 2013. Cancer incidence among Finnish ferrochromium and stainless steel production workers in 1967-2011: a cohort study. *BMJ Open* 3(11): e003819.
744. Hwang DR, Lin RK, Leu GZ, Lin TY, Lien TW, Yu MC, Yeh CT, Hsu JT. 2005. Inhibition of hepatitis C virus replication by antimonial compounds. *Antimicrob Agents Chemother* 49(10): 4197-4202.
745. IAA. 2016. *Basic List of Identified Uses*. International Antimony Association. Updated on 7/28/16. [http://www.antimony.com/en/detail\\_exposure-scenarios\\_30.aspx](http://www.antimony.com/en/detail_exposure-scenarios_30.aspx) and click on "basic list of identified uses".
746. IARC. 1989. Antimony Trioxide and Antimony Trisulfide. In *Some Organic Solvents, Resin Monomers and Related Compounds, Pigments and Occupational Exposures in Paint Manufacture and Painting*. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol. 47. Lyon, France: International Agency for Research on Cancer. pp. 291-305.
747. IARC. 1999. Tris(2,3-dibromopropyl) phosphate. In *Re-evaluation of Some Organic Chemicals, Hydrazine and Hydrogen Peroxide*. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol. 71. Lyon, France: International Agency for Research on Cancer. pp. 905-921.
748. IARC. 2000. 2,3-Dibromopropan-1-ol. In *Some Industrial Chemicals*. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol. 77. Lyon, France: International Agency for Research on Cancer. pp. 439-453.
749. IARC. 2012. Helicobacter pylori. In *Biological Agents*. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol. 100b. Lyon, France: International Agency for Research on Cancer. pp. 385-435.
750. IARC. 2017. *List of classifications by cancer sites with sufficient or limited evidence in humans, Volumes 1 to 119*. International Agency for Research on Cancer. Updated 4/13/17. <http://monographs.iarc.fr/ENG/Classification/Table4.pdf>. Accessed on 5/15/17.
751. Iavicoli I, Caroli S, Alimonti A, Petrucci F, Carelli G. 2002. Biomonitoring of a worker population exposed to low antimony trioxide levels. *J Trace Elem Med Biol* 16(1): 33-39.
752. Iavicoli S, Cavallo D, Setini A, Perniconi B, Carelli G, Iavicoli I. 2001. DNA damage in workers exposed to antimony. *Toxicology* 164(1-3): 104-104.
753. ICRP. 1981. Metabolic data for antimony. *Ann ICRP* 6(42403): 46-49.
754. Iijima A, Sato K, Ikeda T, Sato H, Kozawa K, Furuta N. 2010. Concentration distributions of dissolved Sb(III) and Sb(V) species in size-classified inhalable airborne particulate matter. *J Anal At Spectrom* 25(3): 356-363.
755. Ikehata H, Hirayama N, Imura H. 2016. Effect of polyhydric phenols on the phase separation of an aqueous nonionic surfactant solution and the cloud-point extraction of antimony(V). *Bunseki Kagaku* 65(2): 65-70.
756. Ilgen AG, Foster AL, Trainor TP. 2012. Role of structural Fe in nontronite NAu-1 and dissolved Fe(II) in redox transformations of arsenic and antimony. *Geochim Cosmochim Acta* 94: 128-145.
757. Ilgen AG, Majs F, Barker AJ, Douglas TA, Trainor TP. 2014. Oxidation and mobilization of metallic antimony in aqueous systems with simulated groundwater. *Geochim Cosmochim Acta* 132: 16-30.
758. Ilgen AG, Newville M, Trainor TP. 2008. Controls on antimony and arsenic speciation via sorption and redox chemistry at the clay mineral - water interface. *Geochim Cosmochim Acta* 72(12): A407-A407.
759. Inaba J, Nishimura Y, Ichikawa R. 1983. Metabolism of antimony-125 in the rat. *J Radiat Res* 24(1): 31-31.
760. Inaba J, Nishimura Y, Ichikawa R. 1984. Metabolism of antimony-125 in the rat. *Health Phys* 46(6): 1325-1326.
761. IPCS. 2017. *Antimony trisulphide*. International Programme on Chemical Safety. <http://www.inchem.org/documents/ukpids/ukpids/ukpid39.htm>. Accessed on 4/13/17.

762. Islam A, Rodrigues BL, Marzano IM, Perreira-Maia EC, Ditz D, Paz Lopes MT, Ishfaq M, Frézard F, Demichelis C. 2016. Cytotoxicity and apoptotic activity of novel organobismuth(V) and organoantimony(V) complexes in different cancer cell lines. *Eur J Med Chem* 109: 254-267.
763. Islam MN, Nguyen XP, Jung HY, Park JH. 2016. Chemical speciation and quantitative evaluation of heavy metal pollution hazards in two army shooting range backstop soils. *Bull Environ Contam Toxicol* 96(2): 179-185.
764. Ivask A, Titma T, Visnapuu M, Vija H, Käkinen A, Sihtmae M, Pokhrel S, Madler L, Heinlaan M, Kisand V, Shimmo R, Kahru A. 2015. Toxicity of 11 metal oxide nanoparticles to three mammalian cell types *in vitro*. *Curr Top Med Chem* 15(18): 1914-1929.
765. Jablonska-Czapla M. 2015. Antimony, arsenic and chromium speciation studies in Biala Przemsza River (Upper Silesia, Poland) water by HPLC-ICP-MS. *Int J Environ Res Public Health* 12(5): 4739-4757.
766. Jablonska-Czapla M. 2015. Arsenic, antimony, chromium, and thallium speciation in water and sediment samples with the LC-ICP-MS technique. *Int J Anal Chem* 2015: 171478.
767. Jablonska-Czapla M, Szopa S, Grygoc K, Lyko A, Michalski R. 2014. Development and validation of HPLC-ICP-MS method for the determination inorganic Cr, As and Sb speciation forms and its application for Plawniowice reservoir (Poland) water and bottom sediments variability study. *Talanta* 120: 475-483.
768. Jablonska-Czapla M, Szopa S, Zerzucha P, Lyko A, Michalski R. 2015. Chemometric and environmental assessment of arsenic, antimony, and chromium speciation form occurrence in a water reservoir subjected to thermal anthropopressure. *Environ Sci Pollut Res Int* 22(20): 15731-15744.
769. Jain RB. 2013. Effect of pregnancy on the levels of urinary metals for females aged 17-39 years old: Data from national health and nutrition examination survey 2003-2010. *J Toxicol Environ Health A* 76(2): 86-97.
770. Jamali Hajiani N, Ghaderian SM, Karimi N, Schat H. 2015. A comparative study of antimony accumulation in plants growing in two mining areas in Iran, Moghanlo, and Patyar. *Environ Sci Pollut Res Int* 22(21): 16542-16553.
771. Jamieson DJ, Terrell ML, Aguocha NN, Small CM, Cameron LL, Marcus M. 2011. Dietary exposure to brominated flame retardants and abnormal Pap test results. *J Womens Health (Larchmt)* 20(9): 1269-1278.
772. Jantunen MJ, Reponen A, Mustonen R, Itkonen A, Kauranen P. 1992. Behavior of Chernobyl fallout radionuclides in peat combustion. *Health Phys* 62(3): 245-249.
773. Jaser MA, el-Yazigi A, Croft SL. 1995. Pharmacokinetics of antimony in patients treated with sodium stibogluconate for cutaneous leishmaniasis. *Pharm Res* 12(1): 113-116.
774. Jayasumana C, Gunatilake S, Siribaddana S. 2015. Simultaneous exposure to multiple heavy metals and glyphosate may contribute to Sri Lankan agricultural nephropathy. *BMC Nephrology* 16(1).
775. Jeanne M, Lallemand-Breitenbach V, Ferhi O, Koken M, Le Bras M, Duffort S, Peres L, Berthier C, Soilihi H, Raught B, de The H. 2010. PML/RARA oxidation and arsenic binding initiate the antileukemia response of As<sub>2</sub>O<sub>3</sub>. *Cancer Cell* 18(1): 88-98.
776. Ji H, He M, Zhao C. 2003. Research advances of the analytical methods in antimony speciation. *Fenxi Huaxue* 31(11): 1393-1398.
777. Ji J, Granstrom C, Hemminki K. 2005. Occupational risk factors for kidney cancer: a cohort study in Sweden. *World J Urol* 23(4): 271-278.
778. Jia N, Sun L, He X, You K, Zhou X, Long N. 2012. Distributions and impact factors of antimony in topsoils and moss in Ny-Alesund, Arctic. *Environ Pollut* 171: 72-77.
779. Jiang J, Yin H, Wang F, Han Z, Wang F, Cheng S, Hong M. 2013. Novel tetranuclear triarylantimony(V) complexes with (+/-)-mandelic acid ligands: synthesis, characterization, *in vitro* cytotoxicity and DNA binding properties. *Dalton Trans* 42(24): 8563-8566.
780. Jiang X, An Z, Lu C, Chen Y, Du E, Qi S, Yang K, Zhang Z, Xu Y. 2016. The protective role of Nrf2-Gadd45b against antimony-induced oxidative stress and apoptosis in HEK293 cells. *Toxicol Lett* 256: 11-18.

781. Jiang X, Wen S, Xiang G. 2010. Cloud point extraction combined with electrothermal atomic absorption spectrometry for the speciation of antimony(III) and antimony(V) in food packaging materials. *J Hazard Mater* 175(1-3): 146-150.
782. Jöckel KH, Ahrens W, Wichmann HE, Becher H, Bolm-Audorff U, Jahn I, Molik B, Greiser E, Timm J. 1992. Occupational and environmental hazards associated with lung cancer. *Int J Epidemiol* 21(2): 202-213.
783. Johnson KC, Pan S, Fry R, Mao Y. 2003. Residential proximity to industrial plants and non-Hodgkin lymphoma. *Epidemiology* 14(6): 687-693.
784. Johnson MD, Lorenz BB. 2015. Antimony Remediation Using Ferrate(VI). *Sep Sci Technol* 50(11): 1611-1615.
785. Jones DP. 2008. Radical-free biology of oxidative stress. *Am J Physiol Cell Physiol* 295(4): C849-868.
786. Jones RD. 1994. Survey of antimony workers: mortality 1961-1992. *Occup Environ Med* 51(11): 772-776.
787. Jones SR, Atkin P, Holroyd C, Lutman E, Batlle JV, Wakeford R, Walker P. 2007. Lung cancer mortality at a UK tin smelter. *Occup Med (Lond)* 57(4): 238-245.
788. Julander A, Lundgren L, Skare L, Grander M, Palm B, Vahter M, Liden C. 2014. Formal recycling of e-waste leads to increased exposure to toxic metals: an occupational exposure study from Sweden. *Environ Int* 73: 243-251.
789. Kada T. 1976. Rec assay with cold incubation with and without metabolic reactivation *in vitro* [proceedings]. *Mutat Res* 38(5): 340.
790. Kada T. 1981. Environmental mutagens, desmutagens & antimutagens. *Indian J Biochem Biophys* 18(4).
791. Kamada T, Yamamoto Y. 1977. Selective determination of antimony(III) and antimony(V) with ammonium pyrrolidinedithiocarbamate, sodium diethyldithiocarbamate and dithizone by atomic-absorption spectrometry with a carbon-tube atomizer. *Talanta* 24(5): 330-333.
792. Kanematsu K, Kada T. 1978. Mutagenicity of metal compounds. *Mutat Res* 53(2): 207-208.
793. Kanematsu N, Hara M, Kada T. 1980. Rec assay and mutagenicity studies on metal compounds. *Mutat Res* 77(2): 109-116.
794. Kanematsu N, Kada T. 1978. Mutagenicity of metal compounds. *Mutat Res* 54(2): 215-216.
795. Kanisawa M, Schroeder HA. 1969. Life term studies on the effect of trace elements on spontaneous tumors in mice and rats. *Cancer Res* 29(4): 892-895.
796. Kantin R. 1983. Chemical speciation of antimony in marine algae. *Limnol Oceanogr* 28(1): 165-168.
797. Kappen P, Ferrando-Miguel G, Reichman SM, Innes L, Welter E, Pigram PJ. 2017. Antimony leaching and chemical species analyses in an industrial solid waste: Surface and bulk speciation using ToF-SIMS and XANES. *J Hazard Mater* 329: 131-140.
798. Karjalainen S, Kerttula R, Pukkala E. 1992. Cancer risk among workers at a copper/nickel smelter and nickel refinery in Finland. *Int Arch Occup Environ Health* 63(8): 547-551.
799. Kashiwabara T, Mitsunobu S, Das A, Itai T, Tanimizu M, Takahashi Y. 2008. Oxidation states of antimony and arsenic in marine ferromanganese oxides related to their fractionation in oxic marine environment. *Chem Lett* 37(7): 756-757.
800. Kasperek K, Iyengar GV, Kiem J, Borberg H, Feinendegen LE. 1979. Elemental composition of platelets. Part III. Determination of Ag, Au, Cd, Co, Cr, Cs, Mo, Rb, Sb, and Se in normal human platelets by neutron activation analysis. *Clin Chem* 25(5): 711-715.
801. Kato KC, Morais-Teixeira E, Reis PG, Silva-Barcellos NM, Salaün P, Campos PP, Corrêa-Junior JD, Rabello A, Demicheli C, Frézard F. 2014. Hepatotoxicity of pentavalent antimonial drug: Possible role of residual SB(3) and protective effect of ascorbic acid. *Antimicrob Agents Chemother* 58(1): 481-488.
802. Kawata K, Yokoo H, Shimazaki R, Okabe S. 2007. Classification of heavy-metal toxicity by human DNA microarray analysis. *Environ Sci Technol* 41(10): 3769-3774.

803. Kazmierczyk H, Czupkiewicz U, Bozym B. 1980. [Leukoplakia of the oral mucosa in workers of the Julia Flint Glassworks in Szklarska Poreba]. *Czas Stomatol* 33(10): 871-878.
804. Kennedy JH. 1966. Analysis of diseased and normal lung tissue for trace antimony content by neutron activation analysis. *Am J Med Sci* 251(1): 37-39.
805. Kenney RT, Sacks DL, Gam AA, Murray HW, Sundar S. 1998. Splenic cytokine responses in Indian kala-azar before and after treatment. *J Infect Dis* 177(3): 815-818.
806. Kentner M, Leinemann M, Schaller KH, Weltle D, Lehnert G. 1995. External and internal antimony exposure in starter battery production. *Int Arch Occup Environ Health* 67(2): 119-123.
807. Kerger BD, Butler WJ, Paustenbach DJ, Zhang J, Li S. 2009. Cancer mortality in chinese populations surrounding an alloy plant with chromium smelting operations. *J Toxicol Environ Health A* 72(5): 329-344.
808. Keshavarzi B, Moore F, Najmeddin A, Rahmani F. 2012. The role of selenium and selected trace elements in the etiology of esophageal cancer in high risk Golestan province of Iran. *Sci Total Environ* 433: 89-97.
809. Khafagy EZ, el-Hawary MF. 1974. Effect of bilharcid and tartar-emetic on DNA, RNA and protein synthesis in *Escherichia coli* B. *Biochem Pharmacol* 23(10): 1451-1455.
810. Khafagy EZ, El-Hawary MF. 1978. Mechanism of action of bilharcid and tartar-emetic. *Zentralbl Bakteriol Naturwiss* 133(4): 320-340.
811. Kim HA, Heo Y, Oh SY, Lee KJ, Lawrence DA. 1999. Altered serum cytokine and immunoglobulin levels in the workers exposed to antimony. *Hum Exp Toxicol* 18(10): 607-613.
812. Kim HS, Kim YJ, Seo YR. 2015. An overview of carcinogenic heavy metal: Molecular toxicity mechanism and prevention. *J Cancer Prev* 20(4): 232-240.
813. Kim KH, Ishizaki N, Iguchi E, Funaba M, Matsui T. 2011. Effect of magnesium deficiency on various mineral concentrations in rat liver. *Biol Trace Elem Res* 144(1-3): 865-871.
814. Kim YH, Wyrzykowska-Ceradini B, Touati A, Krantz QT, Dye JA, Linak WP, Gullett B, Gilmour MI. 2015. Characterization of size-fractionated airborne particles inside an electronic waste recycling facility and acute toxicity testing in mice. *Environ Sci Technol* 49(19): 11543-11550.
815. Kirkland D, Whitwell J, Deyo J, Serex T. 2007. Failure of antimony trioxide to induce micronuclei or chromosomal aberrations in rat bone-marrow after sub-chronic oral dosing. *Mutat Res* 627(2): 119-128.
816. Kirkland D, Whitwell J, Deyo J, Serex T. 2007. Failure of antimony trioxide to induce micronuclei or chromosomal aberrations in rat bone marrow after sub-chronic oral dosing. *Environ Mol Mutagen* 48(7): 621-621.
817. Klucík I, Beno M, Trnovec T, Minarik F. 1964. Metabolism of SB124-labelled antimony oxide in rats. *Pracovní lékařství* 16: 53-56.
818. Klucík I, Beno M, Trnovec T, Zboril V. 1963. [Metabolism of SB124-labelled antimony acid]. *Prac Lek* 15: 323-329.
819. Klucík I, Kemka R. 1960. [Excretion of antimony in antimony mill workers]. *Prac Lek* 12: 133-138.
820. Knasmüller S, Gottmann E, Steinkellner H, Fomin A, Pickl C, Paschke A, Göd R, Kundt M. 1998. Detection of genotoxic effects of heavy metal contaminated soils with plant bioassays. *Mutat Res* 420(1-3): 37-48.
821. Kobayashi A, Ogra Y. 2009. Metabolism of tellurium, antimony and germanium simultaneously administered to rats. *J Toxicol Sci* 34(3): 295-303.
822. Koch B, Maser E, Hartwig A. 2017. Low concentrations of antimony impair DNA damage signaling and the repair of radiation-induced DSB in HeLa S3 cells. *Arch Toxicol.*
823. Koch I, Wang L, Feldmann J, Andrewes P, Reimer KJ, Cullen WR. 2000. Antimony species in environmental samples. *Int J Environ Anal Chem* 77(2): 111-131.
824. Kocyigit A, Gur S, Gurel MS, Bulut V, Ulukanligil M. 2002. Antimonial therapy induces circulating proinflammatory cytokines in patients with cutaneous leishmaniasis. *Infect Immun* 70(12): 6589-6591.

825. Konczalik JR. 2002. [Combined exposure to lead and cadmium in selected groups of people in Upper Silesia]. *Wiad Lek* 55 Suppl 1: 249-255.
826. Konstantopoulos WM, Ewald MB, Pratt DS. 2012. Case 22-2012: A 34-year-old man with intractable vomiting after ingestion of an unknown substance antimony poisoning due to ingestion of tartar emetic (antimony potassium tartrate). *N Engl J Med* 367(3): 259-268.
827. Korfali SI, Sabra R, Jurdj M, Taleb RI. 2013. Assessment of toxic metals and phthalates in children's toys and clays. *Arch Environ Contam Toxicol* 65(3): 368-381.
828. Kotsopoulos J, Sukiennicki G, Muszynska M, Gackowski D, Kaklewski K, Durda K, Jaworska K, Huzarski T, Gronwald J, Byrski T, Ashuryk O, Debniak T, Toloczko-Grabarek A, Stawicka M, Godlewski D, Olinski R, Jakubowska A, Narod SA, Lubinski J. 2012. Plasma micronutrients, trace elements, and breast cancer in BRCA1 mutation carriers: an exploratory study. *Cancer Causes Control* 23(7): 1065-1074.
829. Kouris T, Papadopoulou C, Kalias GD, Bairaktari-Kouri E, Theodossiadis G. 1989. Study of the trace element content in human cataractous lenses by instrumental neutron activation analysis. *J Radioanal Nuclear Chem Articles* 130(1): 121-128.
830. Kovacic P, Somanathan R. 2010. Unifying mechanism for metals in toxicity, carcinogenicity and therapeutic action: Integrated approach involving electron transfer, oxidative stress, antioxidants, cell signaling and receptors. *J Recept Signal Transduction* 30(2): 51-60.
831. Krachler M, Emons H. 2000. Potential of high performance liquid chromatography coupled to flow injection hydride generation atomic absorption spectrometry for the speciation of inorganic and organic antimony compounds. *J Anal At Spectrom* 15(3): 281-285.
832. Krachler M, Emons H. 2001. Urinary antimony speciation by HPLC-ICP-MS. *J Anal At Spectrom* 16(1): 20-25.
833. Krachler M, Emons H. 2001. Speciation analysis of antimony by high-performance liquid chromatography inductively coupled plasma mass spectrometry using ultrasonic nebulization. *Anal Chim Acta* 429(1): 125-133.
834. Krachler M, Emons H, Zheng J. 2001. Speciation of antimony for the 21st century: Promises and pitfalls. *TrAC Trends Anal Chem* 20(2): 79-90.
835. Krachler M, Rossipal E, Micetic-Turk D. 1999. Trace element transfer from the mother to the newborn -investigations on triplets of colostrum, maternal and umbilical cord sera. *Eur J Clin Nutr* 53(6): 486-494.
836. Kramer LB. 1950. Antimony concentration in the thyroid gland and its effect upon metabolic rate and serum cholesterol level. *Bull Johns Hopkins Hosp* 86(3): 179-181.
837. Kresimon J, Gruter UM, Hirner AV. 2001. HG/LT-GC/ICP-MS coupling for identification of metal(loid) species in human urine after fish consumption. *Fresenius J Anal Chem* 371(5): 586-590.
838. Kristensen P. 1992. Bias from nondifferential but dependent misclassification of exposure and outcome. *Epidemiology* 3(3): 210-215.
839. Kronoveter KJ. 1978. *Hazard Evaluation and Technical Assistance*. McDaniel Art Studio, Cincinnati, OH. Report No. TA 77-68. Cincinnati, OH: National Institutes of Occupational Safety and Health. 11 pp.
840. Krysiak-Baltyn K, Toppari J, Skakkebaek NE, Jensen TS, Virtanen HE, Schramm KW, Shen H, Vartiainen T, Kiviranta H, Taboureau O, Brunak S, Main KM. 2010. Country-specific chemical signatures of persistent environmental compounds in breast milk. *Int J Androl* 33(2): 270-278.
841. Kudo Y, Aizawa Y. 2011. Cytotoxicity and solubility evaluation of two types of whiskers by cell magnetometry. *Environ Health Prev Med* 16(5): 327-334.
842. Kudriavtsev IY. 2011. [The organization of oncological medical care in Navoi region of the Republic of Uzbekistan]. *Probl Sotsialnoi Gig Zdravookhranenniia Istor Med*(1): 48-51.
843. Kudryavtsev I. 2011. [The principles of oncologic medical care provided to workers of mining and smelting complex in city of Navoi]. *Probl Sotsialnoi Gig Zdravookhranenniia Istor Med*(3): 41-44.

844. Kumar R, Bumb RA, Salotra P. 2010. Evaluation of localized and systemic immune responses in cutaneous leishmaniasis caused by *Leishmania tropica*: interleukin-8, monocyte chemotactic protein-1 and nitric oxide are major regulatory factors. *Immunology* 130(2): 193-201.
845. Kuratsune M, Tokudome S, Shirakusa T, Yoshida M, Tokumitsu Y. 1974. Occupational lung cancer among copper smelters. *Int J Cancer* 13(4): 552-558.
846. Kuroda K, Endo G, Okamoto A, Yoo YS, Horiguchi S. 1991. Genotoxicity of beryllium, gallium and antimony in short-term assays. *Mutat Res* 264(4): 163-170.
847. Labedzka M, Gulyas H, Schmidt N, Gercken G. 1989. Toxicity of metallic ions and oxides to rabbit alveolar macrophages. *Environ Res* 48(2): 255-274.
848. Lach K, Steer B, Gorbunov B, Micka V, Muir RB. 2015. Evaluation of exposure to airborne heavy metals at gun shooting ranges. *Ann Occup Hyg* 59(3): 307-323.
849. Laity JH, Lee BM, Wright PE. 2001. Zinc finger proteins: new insights into structural and functional diversity. *Curr Opin Struct Biol* 11(1): 39-46.
850. Lakhal-Naouar I, Slike BM, Aronson NE, Marovich MA. 2015. The immunology of a healing response in cutaneous leishmaniasis treated with localized heat or systemic antimonial therapy. *PLoS Negl Trop Dis* 9(10): e0004178.
851. Lamm SH, Parkinson M, Anderson M, Taylor W. 1992. Determinants of lung cancer risk among cadmium-exposed workers. *Ann Epidemiol* 2(3): 195-211.
852. Lantzsch H, Gebel T. 1997. Genotoxicity of selected metal compounds in the SOS chromotest. *Mutat Res* 389(2-3): 191-197.
853. Lanza JS, Fernandes FR, Correa-Junior JD, Vilela JM, Magalhaes-Paniago R, Ferreira LA, Andrade MS, Demicheli C, Melo MN, Frezard F. 2016. Polarity-sensitive nanocarrier for oral delivery of Sb(V) and treatment of cutaneous leishmaniasis. *Int J Nanomedicine* 11: 2305-2318.
854. Lapin LN. 1956. Micromethod in determination of antimony in blood and urine in visceral leishmaniasis during solusurmin therapy. *Voprosy Meditsinskoj Khimii* 2(4): 309-315.
855. Lauwers LF, Roelants A, Rosseel PM, Heyndrickx B, Baute L. 1990. Oral antimony intoxications in man. *Crit Care Med* 18(3): 324-326.
856. Lavoué J, Gérin M, Côté J, Lapointe R. 2007. Mortality and cancer experience of Quebec aluminum reduction plant workers. Part I: The reduction plants and coal tar pitch volatile (CTPV) exposure assessment. *J Occup Environ Med* 49(9): 997-1008.
857. Leclerc A, Goldberg M, Goldberg P, Deloumeaux J, Fuhrer R. 1987. Geographical distribution of respiratory cancer in New Caledonia. *Arch Environ Health* 42(5): 315-320.
858. Lecureur V, Lagadic-Gossmann D, Fardel O. 2002. Potassium antimonyl tartrate induces reactive oxygen species-related apoptosis in human myeloid leukemic HL60 cells. *Int J Oncol* 20(5): 1071-1076.
859. Lee BB. 2004. Lymphedema-angiodysplasia syndrome: A prodigal form of lymphatic malformation. *Phlebology* 19(47): 324-332.
860. Lee SA. 1984. *Health Hazard Evaluation. Dale Electronics, Yankton, South Dakota*. HETA 84-023-1462. Cincinnati, OH: National Institute for Occupational Safety and Health. 17 pp.
861. Lee-Feldstein A. 1983. Arsenic and respiratory cancer in humans: follow-up of copper smelter employees in Montana. *J Natl Cancer Inst* 70(4): 601-610.
862. Lee-Feldstein A. 1986. Cumulative exposure to arsenic and its relationship to respiratory cancer among copper smelter employees. *J Occup Med* 28(4): 296-302.
863. Lee-Feldstein A. 1989. A comparison of several measures of exposure to arsenic. Matched case-control study of copper smelter employees. *Am J Epidemiol* 129(1): 112-124.
864. Lemire JA, Harrison JJ, Turner RJ. 2013. Antimicrobial activity of metals: Mechanisms, molecular targets and applications. *Nat Rev Microbiol* 11(6): 371-384.
865. Léonard A, Gerber GB. 1996. Mutagenicity, carcinogenicity and teratogenicity of antimony compounds. *Mutat Res* 366(1): 1-8.

866. Leopold G, Furukawa E, Forth W, Rummel W. 1969. [Comparative study of the absorption of heavy metals in vivo and in vitro]. *Naunyn Schmiedebergs Arch Exp Pathol Pharmakol* 263(1): 275-276.
867. Lessard R, Reed D, Maheux B, Lambert J. 1978. Lung cancer in New Caledonia, a nickel smelting island. *J Occup Med* 20(12): 815-817.
868. Lewis AS, Beyer LA, Zu K. 2015. Considerations in deriving quantitative cancer criteria for inorganic arsenic exposure via inhalation. *Environ Int* 74: 258-273.
869. Lewis FA. 1980. *Health Hazard Evaluation. Bertoia Studio, Bally, Pennsylvania.* HE 79-78-655. Cincinnati, OH: National Institute for Occupational Safety and Health. 9 pp.
870. Leyva AG, Marrero J, Smichowski P, Cicerone D. 2001. Sorption of antimony onto hydroxyapatite. *Environ Sci Technol* 35(18): 3669-3675.
871. Lezhnin VL, Kazantsev VS, Polzik EV. 2014. [A multifactor assessment of effects of technogenic pollution on the occurrence of lung cancer in the population of an industrial town]. *Gig Sanit*(3): 26-30.
872. Li J, Sutterwala S, Farrell JP. 1997. Successful therapy of chronic, nonhealing murine cutaneous leishmaniasis with sodium stibogluconate and gamma interferon depends on continued interleukin-12 production. *Infect Immun* 65(8): 3225-3230.
873. Li J, Wei Y, Zhao L, Zhang J, Shangguan Y, Li F, Hou H. 2014. Bioaccessibility of antimony and arsenic in highly polluted soils of the mine area and health risk assessment associated with oral ingestion exposure. *Ecotoxicol Environ Saf* 110: 308-315.
874. Li Y, Hu B, Jiang Z. 2006. On-line cloud point extraction combined with electrothermal vaporization inductively coupled plasma atomic emission spectrometry for the speciation of inorganic antimony in environmental and biological samples. *Anal Chim Acta* 576(2): 207-214.
875. Li YT, Guo W, Souders AK, Jin LL, Ke YQ, Guo QH, Hu SH. 2016. Using citric acid stabilizing reagent to improve selective hydride generation-ICP-MS method for determination of Sb species in drinking water. *RSC Advances* 6(110): 108247-108254.
876. Liao YH, Hwang LC, Kao JS, Yiin SJ, Lin SF, Lin CH, Lin YC, Aw TC. 2006. Lipid peroxidation in workers exposed to aluminium, gallium, indium, arsenic, and antimony in the optoelectronic industry. *J Occup Environ Med* 48(8): 789-793.
877. Liao YH, Yu HS, Ho CK, Wu MT, Yang CY, Chen JR, Chang CC. 2004. Biological monitoring of exposures to aluminium, gallium, indium, arsenic, and antimony in optoelectronic industry workers. *J Occup Environ Med* 46(9): 931-936.
878. Lieske H. 1979. [American cutaneous and mucous leishmaniasis (mucocutaneous leishmaniasis)]. *Hautarzt* 30(11): 604-606.
879. Lima MI, Arruda VO, Alves EV, de Azevedo AP, Monteiro SG, Pereira SR. 2010. Genotoxic effects of the antileishmanial drug Glucantime. *Arch Toxicol* 84(3): 227-232.
880. Lintschinger J, Koch I, Serves S, Feldmann J, Cullen WR. 1997. Determination of antimony species with high-performance liquid chromatography using element specific detection. *Fresenius J Anal Chem* 359(6): 484-491.
881. Liu D, Wu J, Liu Y, Ouyang L, Wang J. 2014. Effects of lead exposure on 18 elements in blood and excretions in rats. *Beijing Da Xue Xue Bao* 46(2): 232-236.
882. Liu F, Le XC, McKnight-Whitford A, Xia Y, Wu F, Elswick E, Johnson CC, Zhu C. 2010. Antimony speciation and contamination of waters in the Xikuangshan antimony mining and smelting area, China. *Environ Geochem Health* 32(5): 401-413.
883. Liu R, Liu F, Hu C, He Z, Liu H, Qu J. 2015. Simultaneous removal of Cd(II) and Sb(V) by Fe-Mn binary oxide: Positive effects of Cd(II) on Sb(V) adsorption. *J Hazard Mater* 300: 847-854.
884. Loeb LA, Sirover MA, Agarwal SS. 1978. Infidelity of DNA synthesis as related to mutagenesis and carcinogenesis. In *Inorganic and Nutritional Aspects of Cancer*. Schrauzer GN, ed. New York: Plenum Press. p. 103-115.
885. Loeb LA, Sirover MA, Weymouth LA, Dube DK, Seal G, Agarwal SS, Katz E. 1977. Infidelity of DNA synthesis as related to mutagenesis and carcinogenesis. *J Toxicol Environ Health* 2(6): 1297-1304.
886. Lopez Guerrero MM, Cordero MTS, Alonso EV, de Torres AG, Pavon JMC. 2014. Synthesis and characterization of a novel mesoporous silica functionalized with 1,5 bis(di-2-pyridyl)methylene

- thiocarbohydrazide and its application as enrichment sorbent for determination of antimony by FI-HG-ETAAS. *Talanta* 129: 1-8.
887. Lopez S, Aguilar L, Mercado L, Bravo M, Quiroz W. 2015. Sb(V) reactivity with human blood components: Redox effects. *Plos One* 10(1): 12.
888. Lorico A, Bertola A, Baum C, Fodstad O, Rappa G. 2002. Role of the multidrug resistance protein 1 in protection from heavy metal oxyanions: Investigations *in vitro* and in MRP1-deficient mice. *Biochem Biophys Res Commun* 291(3): 617-622.
889. Losler S, Schlief S, Kneifel C, Thiel E, Schrezenmeier H, Rojewski MT. 2009. Antimony-trioxide- and arsenic-trioxide-induced apoptosis in myelogenic and lymphatic cell lines, recruitment of caspases, and loss of mitochondrial membrane potential are enhanced by modulators of the cellular glutathione redox system. *Ann Hematol* 88(11): 1047-1058.
890. Lubin JH, Moore LE, Fraumeni JF, Jr., Cantor KP. 2008. Respiratory cancer and inhaled inorganic arsenic in copper smelters workers: a linear relationship with cumulative exposure that increases with concentration. *Environ Health Perspect* 116(12): 1661-1665.
891. Lubin JH, Pottern LM, Blot WJ, Tokudome S, Stone BJ, Fraumeni JF, Jr. 1981. Respiratory cancer among copper smelter workers: recent mortality statistics. *J Occup Med* 23(11): 779-784.
892. Lubin JH, Pottern LM, Stone BJ, Fraumeni JF, Jr. 2000. Respiratory cancer in a cohort of copper smelter workers: results from more than 50 years of follow-up. *Am J Epidemiol* 151(6): 554-565.
893. Lüdersdorf R, Fuchs A, Mayer P, Skulsksai G, Schäcke G. 1987. Biological assessment of exposure to antimony and lead in the glass-producing industry. *Int Arch Occup Environ Health* 59(5): 469-474.
894. Lukevics E, Shestakova I, Domracheva I, Nesterova A, Zaruma D, Ashaks J. 2006. Cytotoxicity of metal 8-quinolinethiolates. *Chem Heterocycl Compd* 42(6): 761-764.
895. Lundstrom NG, Englyst V, Gerhardsson L, Jin T, Nordberg G. 2006. Lung cancer development in primary smelter workers: a nested case-referent study. *J Occup Environ Med* 48(4): 376-380.
896. Lundström NG, Nordberg G, Englyst V, Gerhardsson L, Hagmar L, Jin T, Rylander L, Wall S. 1997. Cumulative lead exposure in relation to mortality and lung cancer morbidity in a cohort of primary smelter workers. *Scand J Work Environ Health* 23(1): 24-30.
897. Lyon TD, Patriarca M, Howatson G, Fleming PJ, Blair PS, Fell GS. 2002. Age dependence of potentially toxic elements (Sb, Cd, Pb, Ag) in human liver tissue from paediatric subjects. *J Environ Monit* 4(6): 1034-1039.
898. Ma DK, Guo JU, Ming GL, Song H. 2009. DNA excision repair proteins and Gadd45 as molecular players for active DNA demethylation. *Cell Cycle* 8(10): 1526-1531.
899. Ma L, Bai Y, Pu H, Gou F, Dai M, Wang H, He J, Zheng T, Cheng N. 2015. Histone methylation in nickel-smelting industrial workers. *PLoS One* 10(10): e0140339.
900. Maciaszczyk-Dziubinska E, Wawrycka D, Wysocki R. 2012. Arsenic and antimony transporters in eukaryotes. *Int J Mol Sci* 13(3): 3527-3548.
901. Madrakian T, Bozorgzadeh E. 2009. Spectrophotometric determination of Sb(III) and Sb(V) in biological samples after micelle-mediated extraction. *J Hazard Mater* 170(2-3): 809-813.
902. Magnani C, Ferrante D, Barone-Adesi F, Bertolotti M, Todesco A, Mirabelli D, Terracini B. 2008. Cancer risk after cessation of asbestos exposure: a cohort study of Italian asbestos cement workers. *Occup Environ Med* 65(3): 164-170.
903. Magos L. 1991. Epidemiological and experimental aspects of metal carcinogenesis: physicochemical properties, kinetics, and the active species. *Environ Health Perspect* 95: 157-189.
904. Maier AA, Rupnik K, Polakoff PL. 1978. *Health Hazard Evaluation. Sturm Machine Company, Inc., Barboursville, WV*. HHE 72-92. Cincinnati, OH: National Institute for Occupational Safety and Health. 14 pp.
905. Majestic BJ, Turner JA, Marcotte AR. 2012. Respirable antimony and other trace-elements inside and outside an elementary school in Flagstaff, AZ, USA. *Sci Total Environ* 435-436: 253-261.
906. MAK. 2007. Antimony and its inorganic compounds (inhalable fraction). In *The MAK-Collection Part I: MAK Value Documentations*. vol. 23. Weinheim, Germany: WILEY-VCH Verlag GmbH & Co. KGaA.

907. Makris KC, Andra SS, Herrick L, Christophi CA, Snyder SA, Hauser R. 2013. Association of drinking-water source and use characteristics with urinary antimony concentrations. *J Expo Sci Environ Epidemiol* 23(2): 120-127.
908. Mann KK, Davison K, Colombo M, Colosimo AL, Diaz Z, Padovani AM, Guo Q, Scrivens PJ, Gao W, Mader S, Miller WH, Jr. 2006. Antimony trioxide-induced apoptosis is dependent on SEK1/JNK signaling. *Toxicol Lett* 160(2): 158-170.
909. Mansour SA. 2011. Chemical pollutants threatening food safety and security: An overview. In *NATO Science for Peace and Security Series A: Chemistry and Biology*. Springer. p. 73-117.
910. Mansour TE, Bueding E. 1954. The actions of antimonials on glycolytic enzymes of *Schistosoma mansoni*. *Br J Pharmacol Chemother* 9(4): 459-462.
911. Manzano-León N, Quintana R, Sánchez B, Serrano J, Vega E, Vázquez-López I, Rojas-Bracho L, López-Villegas T, O'Neill MS, Vadillo-Ortega F, De Vizcaya-Ruiz A, Rosas I, Osornio-Vargas AR. 2013. Variation in the composition and *in vitro* proinflammatory effect of urban particulate matter from different sites. *J Biochem Mol Toxicol* 27(1): 87-97.
912. Marinovich M, Boraso MS, Testai E, Galli CL. 2014. Metals in cosmetics: an a posteriori safety evaluation. *Regul Toxicol Pharmacol* 69(3): 416-424.
913. Marsh GM, Esmen NA, Buchanich JM, Youk AO. 2009. Mortality patterns among workers exposed to arsenic, cadmium, and other substances in a copper smelter. *Am J Ind Med* 52(8): 633-644.
914. Marsh GM, Stone RA, Esmen NA, Gula MJ, Gause CK, Petersen NJ, Meaney FJ, Rodney S, Prybylski D. 1997. A case-control study of lung cancer mortality in six Gila Basin, Arizona smelter towns. *Environ Res* 75(1): 56-72.
915. Marsh GM, Stone RA, Esmen NA, Gula MJ, Gause CK, Petersen NJ, Meaney FJ, Rodney S, Prybylski D. 1998. A case-control study of lung cancer mortality in four rural Arizona smelter towns. *Arch Environ Health* 53(1): 15-28.
916. Martineau D, Lemberger K, Dallaire A, Labelle P, Lipscomb TP, Michel P, Mikaelian I. 2002. Cancer in wildlife, a case study: beluga from the St. Lawrence estuary, Quebec, Canada. *Environ Health Perspect* 110(3): 285-292.
917. Massey C, Peters A, van de Velde K. 2011. *Environmental Classification of Antimony and its Compounds under REACH (EC 1907/2006) and EU CLP (EC 1272/2008)*. International Antimony Association. 22 pp.
918. Mazumdar S, Redmond CK, Enterline PE, Marsh GM, Costantino JP, Zhou SY, Patwardhan RN. 1989. Multistage modeling of lung cancer mortality among arsenic-exposed copper-smelter workers. *Risk Anal* 9(4): 551-563.
919. McAuslan BR, Reilly W. 1980. Endothelial cell phagokinesis in response to specific metal ions. *Exp Cell Res* 130(1): 147-157.
920. McCallum RI. 1989. The industrial toxicology of antimony. The Ernestine Henry lecture 1987. *J R Coll Physicians Lond* 23(1): 28-32.
921. McCallum RI. 2005. Occupational exposure to antimony compounds. *J Environ Monit* 7(12): 1245-1250.
922. McCulloch D, Brown C, Iland H. 2017. Retinoic acid and arsenic trioxide in the treatment of acute promyelocytic leukemia: current perspectives. *Onco Targets Ther* 10: 1585-1601.
923. McCulloch D, Brown C, Iland H. 2017. Retinoic acid and arsenic trioxide in the treatment of acute promyelocytic leukemia: current perspectives - corrigendum. *Onco Targets Ther* 10: 2511-2512.
924. McIntosh KG, Cusack MJ, Vershinin A, Chen ZW, Zimmerman EA, Molho ES, Celmins D, Parsons PJ. 2012. Evaluation of a prototype point-of-care instrument based on monochromatic X-Ray fluorescence spectrometry: Potential for monitoring trace element status of subjects with neurodegenerative disease. *J Toxicol Environ Health - Pt A: Curr Iss* 75(21): 1253-1268.
925. McLaren Howard J. 2002. The detection of DNA adducts (risk factors for DNA damage). A method for genomic DNA, the results and some effects of nutritional intervention. *J Nutr Environ Med* 12(1): 19-31.

926. McLaughlin JK, Malker HS, Linet MS, Ericsson J, Stone BJ, Weiner J, Blot WJ, Fraumeni JF, Jr. 1988. Multiple myeloma and occupation in Sweden. *Arch Environ Health* 43(1): 7-10.
927. Meland S, Heier LS, Salbu B, Tollesen KE, Farmen E, Rosseland BO. 2010. Exposure of brown trout (*Salmo trutta* L.) to tunnel wash water runoff - Chemical characterisation and biological impact. *Sci Total Environ* 408(13): 2646-2656.
928. Mendil D, Bardak H, Tuzen M, Soylak M. 2013. Selective speciation of inorganic antimony on tetraethylenepentamine bonded silica gel column and its determination by graphite furnace atomic absorption spectrometry. *Talanta* 107: 162-166.
929. Menke A, Guallar E, Cowie CC. 2016. Metals in urine and diabetes in U.S. adults. *Diabetes* 65(1): 164-171.
930. Merli D, Brandone A, Amadasi A, Cattaneo C, Profumo A. 2016. The detection of gunshot residues in the nasal mucus of suspected shooters. *Int J Legal Med* 130(4): 1045-1052.
931. Michalke K, Schmidt A, Huber B, Meyer J, Sulkowski M, Hirner AV, Boertz J, Mosel F, Dammann P, Hilken G, Hedrich HJ, Dorsch M, Rettenmeier AW, Hensel R. 2008. Role of intestinal microbiota in transformation of bismuth and other metals and metalloids into volatile methyl and hydride derivatives in humans and mice. *Appl Environ Microbiol* 74(10): 3069-3075.
932. Miekeley N, Mortari SR, Schubach AO. 2002. Monitoring of total antimony and its species by ICP-MS and on-line ion chromatography in biological samples from patients treated for leishmaniasis. *Anal Bioanal Chem* 372(3): 495-502.
933. Migliore L, Cocchi L, Nesti C, Sabbioni E. 1999. Micronuclei assay and FISH analysis in human lymphocytes treated with six metal salts. *Environ Mol Mutagen* 34(4): 279-284.
934. Mihucz VG, Záray G. 2016. Occurrence of antimony and phthalate esters in polyethylene terephthalate bottled drinking water. *Appl Spectro Rev* 51(3): 183-209.
935. Miranda ES, Miekeley N, De-Carvalho RR, Paumgarten FJ. 2006. Developmental toxicity of meglumine antimoniate and transplacental transfer of antimony in the rat. *Reprod Toxicol* 21(3): 292-300.
936. Miravet R, Lopez-Sanchez JF, Rubio R, Smichowski P, Polla G. 2007. Speciation analysis of antimony in extracts of size-classified volcanic ash by HPLC-ICP-MS. *Anal Bioanal Chem* 387(5): 1949-1954.
937. Mirowsky JE, Jin L, Thurston G, Lighthall D, Tyner T, Horton L, Galdanes K, Chillrud S, Ross J, Pinkerton KE, Chen LC, Lippmann M, Gordon T. 2015. *In vitro* and *in vivo* toxicity of urban and rural particulate matter from California. *Atmos Environ* 103: 256-262.
938. Mohd-Taufek N, Cartwright D, Davies M, Hewavitharana AK, Koorts P, Shaw PN, Sumner R, Lee E, Whitfield K. 2016. The simultaneous analysis of eight essential trace elements in human milk by ICP-MS. *Food Anal Methods* 9(7): 2068-2075.
939. Molokhia MM, Smith H. 1969. Tissue distribution of trivalent antimony in mice infected with *Schistosoma mansoni*. *Bull World Health Organ* 40(1): 123-&.
940. Morales ME, Derbes RS, Ade CM, Ortego JC, Stark J, Deininger PL, Roy-Engel AM. 2016. Heavy metal exposure influences double strand break DNA repair outcomes. *PLoS One* 11(3): e0151367.
941. Moreira VR, de Jesus LCL, Soares RP, Silva LDM, Pinto BAS, Melo MN, Paes AMA, Pereira SRF. 2017. Meglumine antimoniate (glucantime) causes oxidative stress-derived DNA damage in BALB/c mice infected by *Leishmania* (*Leishmania*) *infantum*. *Antimicrob Agents Chemother* 61(6).
942. Moreno T, Oldroyd A, McDonald I, Gibbons W. 2007. Preferential fractionation of trace metals-metalloids into PM10 resuspended from contaminated gold mine tailings at Rodalquilar, Spain. *Water Air Soil Pollut* 179(1-4): 93-105.
943. Morf LS, Tremp J, Gloor R, Huber Y, Stengele M, Zennegg M. 2005. Brominated flame retardants in waste electrical and electronic equipment: substance flows in a recycling plant. *Environ Sci Technol* 39(22): 8691-8699.
944. Morrow PE. 1988. Possible mechanisms to explain dust overloading of the lungs. *Fundam Appl Toxicol* 10(3): 369-384.
945. Morrow PE. 1992. Dust overloading of the lungs: update and appraisal. *Toxicol Appl Pharmacol* 113(1): 1-12.

946. Moseley CL. 1977. *Health Hazard Evaluation*. Washington Post Company, Washington, D.C. Report No. 77-68-417. Cincinnati, OH: National Institute for Occupational Safety and Health. 14 pp.
947. Moss CE, Burr GA. 1996. *Health Hazard Evaluation. Glass Schell Fused Glass Masks, Houston, Texas*. HETA 95-0119-2554. Cincinnati, OH: National Institute for Occupational Safety and Health. 21 pp.
948. Motta V, Angelici L, Nordio F, Bollati V, Fossati S, Frascati F, Tinaglia V, Bertazzi PA, Battaglia C, Baccarelli AA. 2013. Integrative analysis of mirna and inflammatory gene expression after acute particulate matter exposure. *Toxicol Sci* 132(2): 307-316.
949. Mukhopadhyay R, Bhattacharjee H, Rosen BP. 2014. Aquaglyceroporins: Generalized metalloid channels. *Biochimica et Biophysica Acta* 1840(5): 1583-1591.
950. Muller S, Miller WH, Jr., Dejean A. 1998. Trivalent antimonials induce degradation of the PML-RAR oncprotein and reorganization of the promyelocytic leukemia nuclear bodies in acute promyelocytic leukemia NB4 cells. *Blood* 92(11): 4308-4316.
951. Muniz-Junqueira MI, de Paula-Coelho VN. 2008. Meglumine antimonate directly increases phagocytosis, superoxide anion and TNF-alpha production, but only via TNF-alpha it indirectly increases nitric oxide production by phagocytes of healthy individuals, *in vitro*. *Int Immunopharmacol* 8(12): 1633-1638.
952. Murray HW, Delph-Etienne S. 2000. Roles of endogenous gamma interferon and macrophage microbicidal mechanisms in host response to chemotherapy in experimental visceral leishmaniasis. *Infect Immun* 68(1): 288-293.
953. Musimwa AM, Kanteng GW, Kitoko HT, Luboya ON. 2016. [Trace elements in serum of malnourished and well-nourished children living in Lubumbashi and Kawama]. *Pan Afr Med J* 24: 11.
954. Nadler DL, Zurbenko IG. 2014. Estimating cancer latency times using a Weibull model. *Adv Epidemiol* 2014(Article ID 746769): 8.
955. Naimi AI, Richardson DB, Cole SR. 2013. Causal inference in occupational epidemiology: accounting for the healthy worker effect by using structural nested models. *Am J Epidemiol* 178(12): 1681-1686.
956. Narukawa T, Takatsu A, Chiba K, Riley KW, French DH. 2005. Investigation on chemical species of arsenic, selenium and antimony in fly ash from coal fuel thermal power stations. *J Environ Monit* 7(12): 1342-1348.
957. Navas-Acien A, Silbergeld EK, Sharrett AR, Calderon-Aranda E, Selvin E, Guallar E. 2005. Metals in urine and peripheral arterial disease. *Environ Health Perspect* 113(2): 164-169.
958. Nawrot T, Plusquin M, Hogervorst J, Roels HA, Celis H, Thijs L, Vangronsveld J, Van Hecke E, Staessen JA. 2006. Environmental exposure to cadmium and risk of cancer: a prospective population-based study. *Lancet Oncol* 7(2): 119-126.
959. Nawrot TS, Roels HA, Vangronsveld J, Staessen JA. 2012. Cadmium from zinc smelter emission and variation in cancer incidence: the hierarchy of evidence. *Eur J Cancer Prev* 21(5): 497-498.
960. NCI. 2002. *Summary of Data for Chemical Selection: Antimony Trisulfide*. National Cancer Institute. 24 pp.
961. Neuberger JS, Hollowell JG. 1982. Lung cancer excess in an abandoned lead-zinc mining and smelting area. *Sci Total Environ* 25(3): 287-294.
962. Neumann HM, Brown H. 1956. Rate of radioactive exchange between antimony (III) and antimony(V) in hydrochloric acid solution. *J Am Chem Soc* 78(9): 1843-1847.
963. Newhook R, Hirtle H, Byrne K, Meek ME. 2003. Releases from copper smelters and refineries and zinc plants in Canada: human health exposure and risk characterization. *Sci Total Environ* 301(1-3): 23-41.
964. Newkirk CE, Gagnon ZE, Pavel Sizemore IE. 2014. Comparative study of hematological responses to platinum group metals, antimony and silver nanoparticles in animal models. *J Environ Sci Health A Tox Hazard Subst Environ Eng* 49(3): 269-280.
965. Newman JA, Archer VE, Saccomanno G, Kuschner M, Auerbach O, Grondahl RD, Wilson JC. 1976. Histologic types of bronchogenic carcinoma among members of copper-mining and smelting communities. *Ann N Y Acad Sci* 271: 260-268.

966. Newton PE, Bolte HF, Daly IW, Pillsbury BD, Terrill JB, Drew RT, Ben-Dyke R, Sheldon AW, Rubin LF. 1994. Subchronic and chronic inhalation toxicity of antimony trioxide in the rat. *Fundam Appl Toxicol* 22(4): 561-576.
967. Nielson KB, Atkin CL, Winge DR. 1985. Distinct metal-binding configurations in metallothionein. *J Biol Chem* 260(9): 5342-5350.
968. Nieto J, Alvar J, Mullen AB, Carter KC, Rodriguez C, San Andres MI, San Andres MD, Baillie AJ, Gonzalez F. 2003. Pharmacokinetics, toxicities, and efficacies of sodium stibogluconate formulations after intravenous administration in animals. *Antimicrob Agents Chemother* 47(9): 2781-2787.
969. NIOSH. 1978. *Health Hazard Evaluation Determination. Mesta Machine Company, West Homestead, Pennsylvania*. Report No. 77-107-485. Cincinnati, OH: National Institutes for Occupational Safety and Health. 12 pp.
970. Nishioka H. 1975. Mutagenic activities of metal compounds in bacteria. *Mutat Res* 31(3): 185-189.
971. NRC. 2000. *Toxicological Risks of Selected Flame-Retardant Chemicals*, Washington, D.C.: National Academy Press. 535 pp.
972. NTP. 1982. *Carcinogenesis Bioassay of 1,2-Dibromo-3-Chloropropane (CAS no. 96-12-8) in F344 rats and B6C3F1 Mice (Inhalation Study)*. NTP-81-21, NIH Publication No. 82-1762. National Toxicology Program. 191 pp.
973. NTP. 1987. *Toxicology and Carcinogenesis Studies of Dimethyl Methylphosphonate in F344/N Rats and B6C3F1 Mice (Gavage Studies)*. NTP TR 323. National Toxicology Program. 175 pp.
974. NTP. 1992. *Toxicity Studies of Antimony Potassium Tartrate in F344/N Rats and B6C3F<sub>1</sub> Mice (Drinking Water and Intraperitoneal Injection Studies)*. NTP TOX 11, NIH Publication No. 92-3130. National Toxicology Program. 70 pp.
975. NTP. 1994. *Toxicology and Carcinogenesis Studies of Tricresyl Phosphate in F344/N Rats and B6C3F1 Mice (Gavage and Feed Studies)*. NTP TR 433. National Toxicology Program. 321 pp.
976. NTP. 2005. *Brief Review of Toxicological Literature: Antimony Trioxide [CAS No. 1309-64-4]*. Research Triangle Park, NC: National Toxicology Program. 16 pp.
977. NTP. 2015. *Handbook for Preparing the Report on Carcinogens Monographs* Research Triangle Park, NC: National Toxicology Program. 89 pp.  
[http://ntp.niehs.nih.gov/ntp/roc/handbook/roc\\_handbook\\_508.pdf](http://ntp.niehs.nih.gov/ntp/roc/handbook/roc_handbook_508.pdf).
978. NTP. 2016. *Peer Review Draft. Technical Report on the Toxicology and Carcinogenesis Studies of Antimony Trioxide (CAS No. 1309-64-4) in Wistar Han [Crl:Wi (Han)] Rats and B6C3F1/N Mice (Inhalation Studies)*. NTP TR 590. National Toxicology Program. 303 pp.
979. NTP. 2016. *Toxicology and Carcinogenesis Studies of Trim® VX In Wistar Han [Crl:Wi (Han)] Rats and B6C3F1/N Mice (Inhalation Studies)*. NTP TR 591. National Toxicology Program. 198 pp.
980. NTP. 2016. *Report on Carcinogens, Fourteenth Edition*. Research Triangle Park, NC: National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.  
<http://ntp.niehs.nih.gov/go/roc14/>.
981. NTP. 2017. *Draft Toxicology and Carcinogenesis Studies of Antimony Trioxide (CAS No. 1309-64-4) in Wistar Han [Crl:Wi (Han)] Rats and B6C3F1/N Mice (Inhalation Studies)*. NTP TR 590. National Toxicology Program, National Institutes of Health. 303 pp.
982. OEHHA. 2016. *Proposed Public Health Goal for Antimony in Drinking Water*. Office of Environmental Health and Hazard Assessment. 50 pp.
983. Okawa MT. 1975. *Health Hazard Evaluation. Bokan Brothers Corporation, Sacramento, California*. Report No. 75-82-224. Cincinnati, OH: National Institute for Occupational Safety and Health. 6 pp.
984. Olin SS. 2000. The relevance of the rat lung response to particle overload for human risk assessment: A Workshop Consensus Report. *Inhal Toxicol* 12: 1-17.
985. Olivares D, Bravo M, Feldmann J, Raab A, Neaman A, Quiroz W. 2012. Development of an analytical method for antimony speciation in vegetables by HPLC-hydride generation-atomic fluorescence spectrometry. *J AOAC Int* 95(4): 1176-1182.

986. Oliveira Souza JM, Tarley CRT. 2008. Preconcentration and speciation of Sb(III) and Sb(V) in water samples and blood serum after cloud point extraction using chemometric tools for optimization. *Anal Lett* 41(13): 2465-2486.
987. Oliveira-Neto MP, Cuzzi-Maya T, Mattos M, Pirmez C. 2004. Localized eosinophilic panniculitis following intramuscular injection of pentavalent antimonium for treatment of American tegumentary leishmaniasis. *Anais Brasileiros de Dermatologia* 79(4): 463-469.
988. Orisakwe OE. 2012. *Other Heavy Metals: Antimony, Cadmium, Chromium and Mercury, Toxicity of Building Materials*. Cambridge: Woodhead Publ Ltd. 297-333.
989. OSHA. 2016. *Chemical Exposure Health Data*. Occupational Safety and Health Administration, United States Department of Labor. <https://www.osha.gov/opengov/healthsamples.html> and Search on IMIS number (IMIS = 0230) and substance (Substance = Antimony and compounds (as Sb)). Accessed on 8/12/16.
990. Oskarsson A, Fowler BA. 1987. Alterations in renal heme biosynthesis during metal nephrotoxicity. *Ann N Y Acad Sci* 514: 268-277.
991. Otto GF, Maren TH, Brown HW. 1947. Blood levels and excretion rates of antimony in persons receiving trivalent and pentavalent antimonials. *Am J Hyg* 46: 193-211.
992. Pacheco PH, Gil RA, Martinez LD, Polla G, Smichowski P. 2007. A fully automated system for inorganic antimony preconcentration and speciation in urine. *Anal Chim Acta* 603(1): 1-7.
993. Padilla MA, Elobeid M, Ruden DM, Allison DB. 2010. An examination of the association of selected toxic metals with total and central obesity indices: NHANES 99-02. *Int J Environ Res Public Health* 7(9): 3332-3347.
994. Pamplin CL, Desjardins R, Chulay J. 1981. Pharmacokinetics of antimony during sodium stibogluconate therapy for cutaneous leishmaniasis. *Clin Pharmacol Therap* 29(2): 270-271.
995. Pan G, Zhang S, Feng Y, Xu Z. 1998. [Risk of lung cancer among iron and steel workers in Anshan, China--case-control study]. *Wei Sheng Yan Jiu* 27(3): 154-157.
996. Pan SY, Morrison H, Gibbons L, Zhou J, Wen SW, DesMeules M, Mao Y. 2011. Breast cancer risk associated with residential proximity to industrial plants in Canada. *J Occup Environ Med* 53(5): 522-529.
997. Pang Y, Jones MR, Tellez-Plaza M, Guallar E, Vaidya D, Post WS, Kaufman JD, Delaney JA, Navas-Acien A. 2016. Association of geography and ambient air pollution with urine metal concentrations in six US cities: The multi-ethnic study of atherosclerosis. *Int J Environ Res Public Health* 13(3).
998. Pang Y, Peng RD, Jones MR, Francesconi KA, Goessler W, Howard BV, Umans JG, Best LG, Guallar E, Post WS, Kaufman JD, Vaidya D, Navas-Acien A. 2016. Metal mixtures in urban and rural populations in the US: The Multi-Ethnic Study of Atherosclerosis and the Strong Heart Study. *Environ Res* 147: 356-364.
999. Park RM, Stayner LT, Petersen MR, Finley-Couch M, Hornung R, Rice C. 2012. Cadmium and lung cancer mortality accounting for simultaneous arsenic exposure. *Occup Environ Med* 69(5): 303-309.
1000. Pasanen K, Pukkala E, Turunen AW, Patama T, Jussila I, Makkonen S, Salonen RO, Verkasalo PK. 2012. Mortality among population with exposure to industrial air pollution containing nickel and other toxic metals. *J Occup Environ Med* 54(5): 583-591.
1001. Paschal DC, Ting BG, Morrow JC, Pirkle JL, Jackson RJ, Sampson EJ, Miller DT, Caldwell KL. 1998. Trace metals in urine of United States residents: Reference range concentrations. *Environ Res* 76(1): 53-59.
1002. Passlack N, Mainzer B, Lahrsen-Wiederholt M, Schafft H, Palavinskas R, Breithaupt A, Zentek J. 2014. Liver and kidney concentrations of strontium, barium, cadmium, copper, zinc, manganese, chromium, antimony, selenium and lead in cats. *BMC Vet Res* 10: 9.
1003. Passlack N, Mainzer B, Lahrsen-Wiederholt M, Schafft H, Palavinskas R, Breithaupt A, Zentek J. 2015. Concentrations of strontium, barium, cadmium, copper, zinc, manganese, chromium, antimony, selenium, and lead in the liver and kidneys of dogs according to age, gender, and the occurrence of chronic kidney disease. *J Vet Sci* 16(1): 57-66.
1004. Pathak MK, Hu X, Yi T. 2002. Effects of sodium stibogluconate on differentiation and proliferation of human myeloid leukemia cell lines *in vitro*. *Leukemia* 16(11): 2285-2291.

1005. Pathak MK, Yi T. 2001. Sodium stibogluconate is a potent inhibitor of protein tyrosine phosphatases and augments cytokine responses in hemopoietic cell lines. *J Immunol* 167(6): 3391-3397.
1006. Paton GR. 1973. Effects of certain metal ions on DNA repair in mammalian cells. *Mutat Res* 21(4): 199.
1007. Paton GR, Allison AC. 1972. Chromosome damage in human cell cultures induced by metal salts. *Mutat Res* 16(3): 332-336.
1008. Patterson TJ, Ngo M, Aronov PA, Reznikova TV, Green PG, Rice RH. 2003. Biological activity of inorganic arsenic and antimony reflects oxidation state in cultured human keratinocytes. *Chem Res Toxicol* 16(12): 1624-1631.
1009. Patterson TJ, Rice RH. 2007. Arsenite and insulin exhibit opposing effects on epidermal growth factor receptor and keratinocyte proliferative potential. *Toxicol Appl Pharmacol* 221(1): 119-128.
1010. Paumgartten FJ, Chahoud I. 2001. Embryotoxicity of meglumine antimoniate in the rat. *Reprod Toxicol* 15(3): 327-331.
1011. Pearce N, Checkoway H, Kriebel D. 2007. Bias in occupational epidemiology studies. *Occup Environ Med* 64(8): 562-568.
1012. Pearce RB, Callow ME, Macaskie LE. 1998. Fungal volatilization of arsenic and antimony and the sudden infant death syndrome. *FEMS Microbiol Lett* 158(2): 261-265.
1013. Perry H, Isphording W, Trigg C, Riedel R. 2015. Heavy metals in red crabs, *Chaceon quinquedens*, from the Gulf of Mexico. *Mar Pollut Bull* 101(2): 845-851.
1014. Pershagen G. 1985. Lung cancer mortality among men living near an arsenic-emitting smelter. *Am J Epidemiol* 122(4): 684-694.
1015. Pershagen G. 1990. Air pollution and cancer. *IARC Sci Publ*(104): 240-251.
1016. Pershagen G, Axelson O. 1982. A validation of questionnaire information on occupational exposure and smoking. *Scand J Work Environ Health* 8(1): 24-28.
1017. Pershagen G, Bergman F, Klominek J, Damber L, Wall S. 1987. Histological types of lung cancer among smelter workers exposed to arsenic. *Br J Ind Med* 44(7): 454-458.
1018. Pershagen G, Elinder CG, Bolander AM. 1977. Mortality in a region surrounding an arsenic emitting plant. *Environ Health Perspect* 19: 133-137.
1019. Pershagen G, Wall S, Taube A, Linnman L. 1981. On the interaction between occupational arsenic exposure and smoking and its relationship to lung cancer. *Scand J Work Environ Health* 7(4): 302-309.
1020. Petit de Peña Y, Gallignani M, Burguera M, Burguera JL, Añez N, Lugo A. 1990. Selective determination of antimony (III) and antimony (V) in blood serum and urine by hydride generation and atomic absorption spectrometry. *J Braz Chem Soc* 1(2): 72-75.
1021. Petit de Pena Y, Vielma O, Burguera JL, Burguera M, Rondon C, Carrero P. 2001. On-line determination of antimony(III) and antimony(V) in liver tissue and whole blood by flow injection - hydride generation - atomic absorption spectrometry. *Talanta* 55(4): 743-754.
1022. Phillips MA, Cánovas A, Wu PW, Islas-Trejo A, Medrano JF, Rice RH. 2016. Parallel responses of human epidermal keratinocytes to inorganic SbIII and AsIII. *Environ Chem* 13(6): 963-970.
1023. Pi N, Chia SE, Ong CN, Kelly BC. 2016. Associations of serum organohalogen levels and prostate cancer risk: Results from a case-control study in Singapore. *Chemosphere* 144: 1505-1512.
1024. Piasek M, Henson MC, Blanuša M, Kostial K. 2011. Assessment of steroid disruption and metal concentrations in human placenta: Effects of cigarette smoking. In *Handbook of Smoking and Health*. Koskinen CJ, ed.: Nova Science Publishers, Inc. pp. 325-365.
1025. Pinto SS, Henderson V, Enterline PE. 1978. Mortality experience of arsenic-exposed workers. *Arch Environ Health* 33(6): 325-331.
1026. Pirastu R, Bartoli D, Battista G, De Santis M, Iaia T, Orsi D, Tarchi M, Valiani M. 1998. Cancer mortality of art glass workers in Tuscany, Italy. *Scand J Work Environ Health* 24(5): 386-391.

1027. Planer-Friedrich B, Scheinost AC. 2011. Formation and structural characterization of thioantimony species and their natural occurrence in geothermal waters. *Environ Sci Technol* 45(16): 6855-6863.
1028. Planer-Friedrich B, Wilson N. 2012. The stability of tetrathioantimonate in the presence of oxygen, light, high temperature and arsenic. *Chem Geol* 322: 1-10.
1029. Poon R, Chu I. 1998. Effects of potassium antimony tartrate on rat erythrocyte phosphofructokinase activity. *J Biochem Mol Toxicol* 12(4): 227-233.
1030. Poon R, Chu I. 2000. Effects of trivalent antimony on human erythrocyte glutathione-S-transferases. *J Biochem Mol Toxicol* 14(3): 169-176.
1031. Poon R, Chu I, Lecavalier P, Valli VE, Foster W, Gupta S, Thomas B. 1998. Effects of antimony on rats following 90-day exposure via drinking water. *Food Chem Toxicol* 36(1): 21-35.
1032. Popov AM, Davidovich RL, Li IA, Skul'beda AV, Hu SZ. 2005. Search for new drugs: Cytotoxic and antitumor activity of antimony(III) nitrilotriacetate complexes M2SB(Nta)(HNTa) · nH<sub>2</sub>O (M = NH<sub>4</sub>, Na; N = 1, 2). *Pharm Chem J* 39(3): 119-121.
1033. Portugal LA, Ferrer L, Serra AM, Gonçalves Da Silva D, Ferreira SLC, Cerdà V. 2015. A non-chromatographic automated system for antimony speciation in natural water exploiting multisyringe flow injection analysis coupled with online hydride generation-atomic fluorescence spectrometry. *J Anal At Spectrom* 30(5): 1133-1141.
1034. Protano C, Astolfi ML, Canepari S, Vitali M. 2016. Urinary levels of trace elements among primary school-aged children from Italy: The contribution of smoking habits of family members. *Sci Total Environ* 557-558: 378-385.
1035. Pulido MD, Parrish AR. 2003. Metal-induced apoptosis: mechanisms. *Mutat Res* 533(1-2): 227-241.
1036. Quan SX, Yan B, Lei C, Yang F, Li N, Xiao XM, Fu JM. 2014. Distribution of heavy metal pollution in sediments from an acid leaching site of e-waste. *Sci Total Environ* 499(1): 349-355.
1037. Quentel F, Filella M. 2002. Determination of inorganic antimony species in seawater by differential pulse anodic stripping voltammetry: Stability of the trivalent state. *Anal Chim Acta* 452(2): 237-244.
1038. Quiroz W, Aguilar L, Barria M, Veneciano J, Martinez D, Bravo M, Lobos MG, Mercado L. 2013. Sb(V) and Sb(III) distribution in human erythrocytes: speciation methodology and the influence of temperature, time and anticoagulants. *Talanta* 115: 902-910.
1039. Quiroz W, Arias H, Bravo M, Pinto M, Lobos MG, Cortés M. 2011. Development of analytical method for determination of Sb(V), Sb(III) and TMSb(V) in occupationally exposed human urine samples by HPLC-HG-AFS. *Microchem J* 97(1): 78-84.
1040. Quiroz W, Cortés M, Astudillo F, Bravo M, Cereceda F, Vidal V, Lobos MG. 2013. Antimony speciation in road dust and urban particulate matter in Valparaíso, Chile: Analytical and environmental considerations. *Microchem J* 110: 266-272.
1041. Quiroz W, De Gregori I, Basilio P, Bravo M, Pinto M, Lobos MG. 2009. Heavy weight vehicle traffic and its relationship with antimony content in human blood. *J Environ Monit* 11(5): 1051-1055.
1042. Radwan MA, Al Jaser MH, Al Rayes ZR. 2007. The effects of induced diabetes and cutaneous Leishmania infection on the pharmacokinetics of antimony in hamsters. *Ann Trop Med Parasitol* 101(2): 133-142.
1043. Rais S, Perianin A, Lenoir M, Sadak A, Rivollet D, Paul M, Deniau M. 2000. Sodium stibogluconate (Pentostam) potentiates oxidant production in murine visceral leishmaniasis and in human blood. *Antimicrob Agents Chemother* 44(9): 2406-2410.
1044. Ramirez-Andreotta MD, Brusseau ML, Beamer P, Maier RM. 2013. Home gardening near a mining site in an arsenic-endemic region of Arizona: assessing arsenic exposure dose and risk via ingestion of home garden vegetables, soils, and water. *Sci Total Environ* 454-455: 373-382.
1045. Rees PH, Kager PA, Keating MI, Hockmeyer WT. 1980. Renal clearance of pentavalent antimony (Sodium stibogluconate). *Lancet* 2(8188): 226-229.
1046. Reglinksi J. 1998. Environmental and medicinal chemistry of arsenic, antimony, and bismuth. In *Chemistry of Arsenic, Antimony and Bismuth*. Norman NC, ed. London, UK: Blackie Academic and Professional. p. 441-440.

1047. Reis DC, Pinto MC, Souza-Fagundes EM, Rocha LF, Pereira VR, Melo CM, Beraldo H. 2011. Investigation on the pharmacological profile of antimony(III) complexes with hydroxyquinoline derivatives: anti-trypanosomal activity and cytotoxicity against human leukemia cell lines. *Biometals* 24(4): 595-601.
1048. Reith AK, Reichborn-Kjennerud S, Aubele M, Jütting U, Gais P, Burger G. 1994. Biological monitoring of chemical exposure in nickel workers by imaging cytometry (ICM) of nasal smears. *Anal Cell Pathol* 6(1): 9-21.
1049. Rencher AC, Carter MW, McKee DW. 1977. A retrospective epidemiological study of mortality at a large western copper smelter. *J Occup Med* 19(11): 754-758.
1050. Rensing C. 2005. Form and function in metal-dependent transcriptional regulation: Dawn of the enlightenment. *J Bacteriol* 187(12): 3909-3912.
1051. Ribeiro RR, Ferreira WA, Martins PS, Neto RL, Rocha OG, Le Moyec L, Demicheli C, Frézard F. 2010. Prolonged absorption of antimony(V) by the oral route from non-inclusion meglumine antimoniate-beta-cyclodextrin conjugates. *Biopharm Drug Dispos* 31(2-3): 109-119.
1052. Ribeiro RR, Moura EP, Sampaio WM, Silva SM, Fulgêncio GO, Tafuri WL, Michalick MSM, Frézard F. 2013. Complement activation-related pseudoallergy in dogs following intravenous administration of a liposomal formulation of meglumine antimoniate. *Pesquisa Veterinaria Brasileira* 33(8): 1016-1020.
1053. Richardson DB, Cole SR, Chu H, Langholz B. 2011. Lagging exposure information in cumulative exposure-response analyses. *Am J Epidemiol* 174(12): 1416-1422.
1054. Riska A, Martinsen JI, Kjaerheim K, Lynge E, Spare P, Tryggvadottir L, Weiderpass E, Pukkala E. 2012. Occupation and risk of primary fallopian tube carcinoma in Nordic countries. *Int J Cancer* 131(1): 186-192.
1055. Rivas RE, López-García I, Hernández-Córdoba M. 2009. Speciation of very low amounts of arsenic and antimony in waters using dispersive liquid-liquid microextraction and electrothermal atomic absorption spectrometry. *Spectrochim Acta Part B At Spectrosc* 64(4): 329-333.
1056. Roberts RS, Julian JA, Muir DC, Shannon HS. 1989. A study of mortality in workers engaged in the mining, smelting, and refining of nickel. II: Mortality from cancer of the respiratory tract and kidney. *Toxicol Ind Health* 5(6): 975-993.
1057. Robertson AJ. 2006. Re: Mortality experience of male workers at a UK tin smelter. *Occup Med (Lond)* 56(3): 214-215; author reply 215.
1058. Robins JM, Blevins D. 1987. Analysis of proportionate mortality data using logistic regression models. *Am J Epidemiol* 125(3): 524-535.
1059. Robinson D. 2002. Cancer clusters: findings vs feelings. *Med Gen Med* 4(4): 16.
1060. Roig N, Sierra J, Rovira J, Schuhmacher M, Domingo JL, Nadal M. 2013. *In vitro* tests to assess toxic effects of airborne PM10 samples. Correlation with metals and chlorinated dioxins and furans. *Sci Total Environ* 443: 791-797.
1061. Rojewski M, Losler S, Thiel E, Schrezenmeier H. 2001. Induction of apoptosis in malignant myeloid or lymphoid cells by antimony trioxide: Effect on chemo-resistant cells and enhancement of antimony effects by modulation of the glutathione redox system. *Blood* 98(11): 100A-100A.
1062. Rom WN, Varley G, Lyon JL, Shopkow S. 1982. Lung cancer mortality among residents living near the El Paso smelter. *Br J Ind Med* 39(3): 269-272.
1063. Romundstad P, Andersen A, Haldorsen T. 2001. Cancer incidence among workers in the Norwegian silicon carbide industry. *Am J Epidemiol* 153(10): 978-986.
1064. Romundstad P, Haldorsen T, Rønneberg A. 1999. Exposure to PAH and fluoride in aluminum reduction plants in Norway: historical estimation of exposure using process parameters and industrial hygiene measurements. *Am J Ind Med* 35(2): 164-174.
1065. Rondon C, Burguera JL, Burguera M, Brunetto MR, Gallignani M, Petitdepene Y. 1995. Selective determination of antimony(III) and antimony(V) in liver-tissue by microwave-assisted mineralization and hydride generation atomic-absorption spectrometry. *Fresenius J Anal Chem* 353(2): 133-136.
1066. Rønneberg A, Andersen A. 1995. Mortality and cancer morbidity in workers from an aluminium smelter with prebaked carbon anodes--Part II: Cancer morbidity. *Occup Environ Med* 52(4): 250-254.

1067. Rønneberg A, Haldorsen T, Romundstad P, Andersen A. 1999. Occupational exposure and cancer incidence among workers from an aluminum smelter in western Norway. *Scand J Work Environ Health* 25(3): 207-214.
1068. Roper AJ, Williams PA, Filella M. 2012. Secondary antimony minerals: Phases that control the dispersion of antimony in the supergene zone. *Chem Erde - Geochem* 72: 9-14.
1069. Rosenman KD, Stanbury M. 1996. Risk of lung cancer among former chromium smelter workers. *Am J Ind Med* 29(5): 491-500.
1070. Rosensteel RE, Lucas JB. 1974. *Health Hazard Evaluation Determination. Delco Moraine Division, GMC Corporation, Dayton, Ohio.* Report No. 73-40-116. Cincinnati, OH: National Institute for Occupational Safety and Health. 15 pp.
1071. Rossman TG, Klein CB. 2010. Genetic Toxicology of Arsenic and Antimony. In *Biological Chemistry of Arsenic, Antimony and Bismuth*. Sun H, ed.: John Wiley & Sons, Ltd. 331-351.
1072. Rothman K, Greenland S, Lash T. 2008. *Modern Epidemiology* 3rd ed., New York: Lippincott, Wililams, and Wilkins. 851 pp.
1073. Rowland HAK. 1968. Stibokinetics III: Studies on mice with 124Sb-labelled potassium antimony tartrate tissue concentrations: Excretion. *Trans Roy Soc Trop Med Hyg* 62(6): 795-800.
1074. Ruan X, Bhattacharjee H, Rosen BP. 2006. Cys-113 and Cys-422 form a high affinity metalloid binding site in the ArsA ATPase. *J Biol Chem* 281(15): 9925-9934.
1075. Rubinstein MA. 1947. Chemotherapy of multiple myeloma; the use of antimony; preliminary report. *Blood* 2(6): 555-563.
1076. Rubinstein MA. 1949. Use of antimony in multiple myeloma. *Blood* 4(9): 1068-1072.
1077. Ruhe RL. 1978. *Health Hazard Evaluation Determination Report. FMC Corporation - Bearing Division, Indianapolis, Indiana.* HE 77-82-463. Cincinnati, OH: National Institutes for Occupational Health and Safety. 16 pp.
1078. Ruiz-Hernandez A, Kuo CC, Rentero-Garrido P, Tang WY, Redon J, Ordovas JM, Navas-Acien A, Tellez-Plaza M. 2015. Environmental chemicals and DNA methylation in adults: a systematic review of the epidemiologic evidence. *Clin Epigenetics* 7(1): 55.
1079. Rumelhard M, Ramgolam K, Auger F, Dazy AC, Blanchet S, Marano F, Baeza-Squiban A. 2007. Effects of PM<sub>2.5</sub> components in the release of amphiregulin by human airway epithelial cells. *Toxicol Lett* 168(2): 155-164.
1080. Sage AP, Minatel BC, Ng KW, Stewart GL, Dummer TJB, Lam WL, Martinez VD. 2017. Oncogenomic disruptions in arsenic-induced carcinogenesis. *Oncotarget* 8(15): 25736-25755.
1081. Saha P, Mukhopadhyay D, Chatterjee M. 2011. Immunomodulation by chemotherapeutic agents against Leishmaniasis. *Int Immunopharmacol* 11(11): 1668-1679.
1082. Sahin U, de The H, Lallemand-Breitenbach V. 2014. PML nuclear bodies: assembly and oxidative stress-sensitive sumoylation. *Nucleus* 5(6): 499-507.
1083. Sainz RM, Lombo F, Mayo JC. 2012. Radical decisions in cancer: redox control of cell growth and death. *Cancers (Basel)* 4(2): 442-474.
1084. Saknyn AV. 1992. [The article by G. Ia. Lipatov The dust factor, its action on the body and the prevention of worker morbidity in the smelting of copper and nickel ores (Gigiena truda i profzabolevaniia, 1990, No. 9, pp. 34-7)]. *Gig Tr Prof Zabol*(8): 35-37.
1085. Saknyn AV, Shabynina NK. 1973. [Epidemiology of malignant neoplasms in nickel smelters]. *Gig Tr Prof Zabol* 17(9): 25-29.
1086. Salaun P, Gibbon-Walsh KB, Alves GM, Soares HM, van den Berg CM. 2012. Determination of arsenic and antimony in seawater by voltammetric and chronopotentiometric stripping using a vibrated gold microwire electrode. *Anal Chim Acta* 746: 53-62.
1087. Saleh S, Abdel-Aziz MT, El-Sayed HM, Khayyal MT. 1976. Effect of antischistosomal drugs on some aspects of carbohydrate metabolism in mice. *Pharmacol Res Commun* 8(4): 359-368.

1088. Salerno M, Petroutsa M, Garnier-Suillerot A. 2002. The MRP1-mediated effluxes of arsenic and antimony do not require arsenic-glutathione and antimony-glutathione complex formation. *J Bioenerg Biomembr* 34(2): 135-145.
1089. Salisbury S. 1980. *Health Hazard Evaluation. St. Clair Rubber Company, Marysville, Michigan.* HE 79-075-784. Cincinnati, OH: National Institute for Occupational Safety and Health. 25 pp.
1090. Sánchez-Rodas D, Alsioufi L, Sánchez de la Campa AM, González-Castanedo Y. 2017. Antimony speciation as geochemical tracer for anthropogenic emissions of atmospheric particulate matter. *J Hazard Mater* 324: 213-220.
1091. Sandstrom A, Wall S. 1993. Cancer incidence among male salaried employees at a smeltery in northern Sweden. *Acta Oncol* 32(1): 9-14.
1092. Sandstrom A, Wall S. 1995. Lung cancer, smoking and smelter work in a occupational cohort. *Int J Epidemiol* 24(6): 1071-1077.
1093. Sandstrom A, Wall S, Taube A. 1988. [Epidemiology at a smelter (II). The Ronnskar case: how was it then?]. *Lakartidningen* 85(21): 1896-1899.
1094. Sandström AI, Wall SG, Taube A. 1989. Cancer incidence and mortality among Swedish smelter workers. *Br J Ind Med* 46(2): 82-89.
1095. Sandstrom AM, Wall SG. 1992. Continued surveillance of cancer incidence among Swedish smelter workers. *Acta Oncol* 31(1): 11-17.
1096. Sankila R, Karjalainen S, Pukkala E, Oksanen H, Hakulinen T, Teppo L, Hakama M. 1990. Cancer risk among glass factory workers: an excess of lung cancer? *Br J Ind Med* 47(12): 815-818.
1097. Santoyo MM, Flores CR, Torres AL, Wrobel K, Wrobel K. 2011. Global DNA methylation in earthworms: A candidate biomarker of epigenetic risks related to the presence of metals/metalloids in terrestrial environments. *Environ Pollut* 159(10): 2387-2392.
1098. Saravanabhan G, Werry K, Walker M, Haines D, Malowany M, Khouri C. 2016. Human biomonitoring reference values for metals and trace elements in blood and urine derived from the Canadian Health Measures Survey 2007-2013. *Int J Hyg Environ Health* 220: 189-200.
1099. Sardana MK, Sassa S, Kappas A. 1982. Metal ion-mediated regulation of heme oxygenase induction in cultured avian liver cells. *J Biol Chem* 257(9): 4806-4811.
1100. Satiroğlu N, Bektaş S, Genç O, Hazer H. 2000. HPLC/hydride generation AAS coupling for the speciation of Sb(III) and Sb(V) in wastewaters. *Turk J Chem* 24(4): 371-376.
1101. Satsangi PG, Yadav S, Pipal AS, Kumbhar N. 2014. Characteristics of trace metals in fine ( $PM_{2.5}$ ) and inhalable ( $PM_{10}$ ) particles and its health risk assessment along with *in-silico* approach in indoor environment of India. *Atmos Environ* 92: 384-393.
1102. Schäfer A. 2013. Gadd45 proteins: Key players of repair-mediated DNA demethylation. In *Gadd45 Stress Sensor Genes. Advances in Experimental Medicine and Biology*, vol. 793. Liebermann DA, Hoffman B, eds. New York: Springer Science and Business Media. p. 35-50.
1103. Schaumlöffel N, Gebel T. 1998. Heterogeneity of the DNA damage provoked by antimony and arsenic. *Mutagenesis* 13(3): 281-286.
1104. Schettini DA, Costa Val AP, Souza LF, Demicheli C, Rocha OG, Melo MN, Michalick MS, Frezard F. 2003. Distribution of liposome-encapsulated antimony in dogs. *Braz J Med Biol Res* 36(2): 269-272.
1105. Schettini DA, Ribeiro RR, Demicheli C, Rocha OG, Melo MN, Michalick MS, Frezard F. 2006. Improved targeting of antimony to the bone marrow of dogs using liposomes of reduced size. *Int J Pharm* 315(1-2): 140-147.
1106. Schicha H, Muller W, Kasperek K, Schroder R. 1972. [Neutron activation analysis of trace element content in surgically removed samples of the human brain]. *Beitr Pathol* 146(4): 366-374.
1107. Schicha H, Muller W, Kasperek K, Schroder R. 1974. [Neutron activation analysis of the trace elements cobalt, iron, rubidium, selenium, zinc, chromium, silver, cesium, antimony and scandium in surgical specimens of human brain tumors. 1]. *Beitr Pathol* 151(3): 281-296.
1108. Schnorr TM, Steenland K, Thun MJ, Rinsky RA. 1995. Mortality in a cohort of antimony smelter workers. *Am J Ind Med* 27(5): 759-770.

1109. Schramel P, Wendler I, Angerer J. 1997. The determination of metals (antimony, bismuth, lead, cadmium, mercury, palladium, platinum, tellurium, thallium, tin and tungsten) in urine samples by inductively coupled plasma-mass spectrometry. *Int Arch Occup Environ Health* 69(3): 219-223.
1110. Schrauzer GN. 2009. Selenium and selenium-antagonistic elements in nutritional cancer prevention. *Crit Rev Biotechnol* 29(1): 10-17.
1111. Schroeder HA, Mitchener M, Balassa JJ, Kanisawa M, Nason AP. 1968. Zirconium, niobium, antimony and fluorine in mice: effects on growth, survival and tissue levels. *J Nutr* 95(1): 95-101.
1112. Schroeder HA, Mitchener M, Nason AP. 1970. Zirconium, niobium, antimony, vanadium and lead in rats: life term studies. *J Nutr* 100(1): 59-68.
1113. Schulert AR, Browne HG, Salem HH. 1964. Human disposition of antimony administered as antimony sodium dimercapto-succinate. With an analysis of antimony concentration in excreted schistosoma haematobium ova. *Trans R Soc Trop Med Hyg* 58: 48-52.
1114. Schulz C, Angerer J, Ewers U, Heudorf U, Wilhelm M. 2009. Revised and new reference values for environmental pollutants in urine or blood of children in Germany derived from the German Environmental Survey on Children 2003-2006 (GerES IV). *Int J Hyg Environ Health* 212(6): 637-647.
1115. Scinicariello F, Buser MC. 2016. Urinary antimony and leukocyte telomere length: An analysis of NHANES 1999-2002. *Environ Res* 150: 513-518.
1116. Seifried HE, Seifried RM, Clarke JJ, Junghans TB, San RHC. 2006. A compilation of two decades of mutagenicity test results with the ames *Salmonella typhimurium* and L5178Y mouse lymphoma cell mutation assays. *Chem Res Toxicol* 19(5): 627-644.
1117. Seiple LA, Cardellina JH, 2nd, Akee R, Stivers JT. 2008. Potent inhibition of human apurinic/apyrimidinic endonuclease 1 by arylstibonic acids. *Mol Pharmacol* 73(3): 669-677.
1118. Selden AI, Westberg HB, Axelson O. 1997. Cancer morbidity in workers at aluminum foundries and secondary aluminum smelters. *Am J Ind Med* 32(5): 467-477.
1119. Selevan SG, Landrigan PJ, Stern FB, Jones JH. 1985. Mortality of lead smelter workers. *Am J Epidemiol* 122(4): 673-683.
1120. Selikoff IJ, Hammond EC, Seidman H. 1980. Latency of asbestos disease among insulation workers in the United States and Canada. *Cancer* 46(12): 2736-2740.
1121. Serafimovska JM, Arpadjan S, Stafilov T. 2011. Speciation of dissolved inorganic antimony in natural waters using liquid phase semi-microextraction combined with electrothermal atomic absorption spectrometry. *Microchem J* 99(1): 46-50.
1122. Shah K, Khan MF, Badshah A, Khan H, Urrehman A. 2012. Potassium antimony tartrate affects the chemical and metabolic status of glutathione in human blood: *Ex vivo* studies. *Afr J Pharm Pharmacol* 6(5): 310-316.
1123. Shakerian F, Dadfarnia S, Haji Shabani AM, Nili Ahmad Abadi M. 2014. Synthesis and characterisation of nano-pore antimony imprinted polymer and its use in the extraction and determination of antimony in water and fruit juice samples. *Food Chem* 145: 571-577.
1124. Shaltout AA, Boman J, Shehadeh ZF, Al-Malawi DAR, Hemeda OM, Morsy MM. 2015. Spectroscopic investigation of PM<sub>2.5</sub> collected at industrial, residential and traffic sites in Taif, Saudi Arabia. *J Aerosol Sci* 79: 97-108.
1125. Shannon HS, Julian JA, Roberts RS. 1984. A mortality study of 11,500 nickel workers. *J Natl Cancer Inst* 73(6): 1251-1258.
1126. Shao L, Hu Y, Wang J, Hou C, Yang Y, Wu M. 2013. Particle-induced oxidative damage of indoor PM10 from coal burning homes in the lung cancer area of Xuan Wei, China. *Atmos Environ* 77: 959-967.
1127. Sharma M, Patel KS. 1993. Determination and speciation of antimony in waters. *Int J Environ Anal Chem* 50(1): 63-71.
1128. Shelley R, Kim NS, Parsons P, Lee BK, Jaar B, Fadrowski J, Agnew J, Matanoski GM, Schwartz BS, Steuerwald A, Todd A, Simon D, Weaver VM. 2012. Associations of multiple metals with kidney outcomes in lead workers. *Occup Environ Med* 69(10): 727-735.

1129. Shi Y, Chatt A. 2014. Simultaneous determination of inorganic As(III), As(V), Sb(III), Sb(V), and Se(IV) species in natural waters by APDC/MIBK-NAA. *J Radioanal Nucl Chem* 299: 867-877.
1130. Shirai S, Suzuki Y, Yoshinaga J, Mizumoto Y. 2010. Maternal exposure to low-level heavy metals during pregnancy and birth size. *J Environ Sci Health A Tox Hazard Subst Environ Eng* 45(11): 1468-1474.
1131. Shircore JO. 1946. Interim notes on the therapeutics of bismuth, antimony, zinc, iron, and copper arsanilate in the treatment of malignant disease, syphilis, yaws, leprosy, tuberculosis, whooping cough and some minor complaints in the African. *East Afr Med J* 23(8): 226-238.
1132. Shiue I. 2015. Urinary arsenic, heavy metals, phthalates, pesticides, polyaromatic hydrocarbons but not parabens, polyfluorinated compounds are associated with self-rated health: USA NHANES, 2011-2012. *Environ Sci Pollut Res Int* 22(12): 9570-9574.
1133. Shiue I. 2016. People with diabetes, respiratory, liver or mental disorders, higher urinary antimony, bisphenol A, or pesticides had higher food insecurity: USA NHANES, 2005–2006. *Environ Sci Pollut Res* 23(1): 198-205.
1134. Shiue I, Hristova K. 2014. Higher urinary heavy metal, phthalate and arsenic concentrations accounted for 3-19% of the population attributable risk for high blood pressure: US NHANES, 2009-2012. *Hypertens Res* 37(12): 1075-1081.
1135. Sim MR, Del Monaco A, Hoving JL, Macfarlane E, McKenzie D, Benke G, de Klerk N, Fritsch L. 2009. Mortality and cancer incidence in workers in two Australian prebake aluminium smelters. *Occup Environ Med* 66(7): 464-470.
1136. Simonato L, Moulin JJ, Javelaud B, Ferro G, Wild P, Winkelmann R, Saracci R. 1994. A retrospective mortality study of workers exposed to arsenic in a gold mine and refinery in France. *Am J Ind Med* 25(5): 625-633.
1137. Simoni D, Roberti M, Invidiata FP, Aiello E, Aiello S, Marchetti P, Baruchello R, Eleopra M, Di Cristina A, Grimaudo S, Gebbia N, Crosta L, Dieli F, Tolomeo M. 2006. Stilbene-based anticancer agents: resveratrol analogues active toward HL60 leukemic cells with a non-specific phase mechanism. *Bioorg Med Chem Lett* 16(12): 3245-3248.
1138. Singal M, Zey JN, Arnold SJ. 1985. *Health Hazard Evaluation. Johnson Controls, Inc., Owosso, Michigan.* HETA 84-041-1592. National Institutes for Occupational Safety and Health. 48 pp.
1139. Sirover MA, Loeb LA. 1976. Infidelity of DNA synthesis *in vitro*: screening for potential metal mutagens or carcinogens. *Science* 194(4272): 1434-1436.
1140. Smith AH. 1988. Epidemiologic input to environmental risk assessment. *Arch Environ Health* 43(2): 124-129.
1141. Smith AH, Ercumen A, Yuan Y, Steinmaus CM. 2009. Increased lung cancer risks are similar whether arsenic is ingested or inhaled. *J Expo Sci Environ Epidemiol* 19(4): 343-348.
1142. Smith MT, Guyton KZ, Gibbons CF, Fritz JM, Portier CJ, Rusyn I, DeMarini DM, Caldwell JC, Kavlock RJ, Lambert PF, Hecht SS, Bucher JR, Stewart BW, Baan RA, Cogliano VJ, Straif K. 2016. Key characteristics of carcinogens as a basis for organizing data on mechanisms of carcinogenesis. *Environ Health Perspect* 124(6): 713-721.
1143. Smith SE. 1969. Uptake of antimony potassium tartrate by mouse liver slices. *Br J Pharmacol* 37(2): 476-484.
1144. Snawder JE, Tirmenstein MA, Mathias PI, Toraason M. 1999. Induction of stress proteins in rat cardiac myocytes by antimony. *Toxicol Appl Pharmacol* 159(2): 91-97.
1145. Snedeker SM. 2014. Antimony in Food Contact Materials and Household Plastics: Uses, Exposure, and Health Risk Considerations. In *Toxicants in Food Packaging and Household Plastics: Exposure and Health Risks to Consumers*. Molecular and Integrative Toxicology. Snedeker SM, ed. Godalming: Springer-Verlag London Ltd. p. 205-230.
1146. Snow SJ, De Vizcaya-Ruiz A, Osornio-Vargas A, Thomas RF, Schladweiler MC, McGee J, Kodavanti UP. 2014. The effect of composition, size, and solubility on acute pulmonary injury in rats following exposure to Mexico City ambient particulate matter samples. *J Toxicol Environ Health Part A Curr Iss* 77(19): 1164-1182.

1147. Socaciu C, Bara A, Silvestru C, Haiduc I. 1991. Antitumor organometallics. II. Inhibitory effects of two diphenyl-antimony (III) dithiophosphorus derivatives on *in vitro* and *in vivo* Ehrlich ascites tumor. *In Vivo* 5(4): 425-428.
1148. Sorahan T. 2005. Re: mortality experience of male workers at a UK tin smelter. *Occup Med (Lond)* 55(7): 579; author reply 579-580.
1149. Sousa Ferreira H, Costa Ferreira SL, Cervera ML, de la Guardia M. 2009. Development of a non-chromatographic method for the speciation analysis of inorganic antimony in mushroom samples by hydride generation atomic fluorescence spectrometry. *Spectrochim Acta Part B At Spectrosc* 64(6): 597-600.
1150. Stayner L, Smith R, Thun M, Schnorr T, Lemen R. 1992. A dose-response analysis and quantitative assessment of lung cancer risk and occupational cadmium exposure. *Ann Epidemiol* 2(3): 177-194.
1151. Steenland K, Boffetta P. 2000. Lead and cancer in humans: where are we now? *Am J Ind Med* 38(3): 295-299.
1152. Steenland K, Selevan S, Landrigan P. 1992. The mortality of lead smelter workers: an update. *Am J Public Health* 82(12): 1641-1644.
1153. Stemmer KL. 1976. Pharmacology and toxicology of heavy metals: antimony. *Pharmac Ther A* 1: 157-160.
1154. Stohs SJ, Bagchi D, Bagchi M. 1997. Toxicity of trace elements in tobacco smoke. *Inhal Toxicol* 9(9): 867-890.
1155. Sudhandiran G, Shah C. 2003. Antimonial-induced increase in intracellular Ca<sup>2+</sup> through non-selective cation channels in the host and the parasite is responsible for apoptosis of intracellular *Leishmania donovani* amastigotes. *J Biol Chem* 278(27): 25120-25132.
1156. Sughis M, Nawrot TS, Haufroid V, Nemery B. 2012. Adverse health effects of child labor: High exposure to chromium and oxidative DNA damage in children manufacturing surgical instruments. *Environ Health Perspect* 120(10): 1469-1474.
1157. Sullivan M. 2012. An historical example of selective publication with contemporary implications: lead smelter workers and cancer. *Int J Occup Environ Health* 18(2): 124-129.
1158. Sullivan M. 2015. More evidence of unpublished industry studies of lead smelter/refinery workers. *Int J Occup Environ Health* 21(4): 308-313.
1159. Sullivan MJ, Leavey S. 2011. Heavy metals in bottled natural spring water. *J Environ Health* 73(10): 8-13.
1160. Sumi SM. 1971. Variations in the location and size of pyroantimonate precipitates in the immature rat cerebral cortex. *J Histochem Cytochem* 19(10): 591-604.
1161. Sun H, Yan SC, Cheng WS. 2000. Interaction of antimony tartrate with the tripeptide glutathione implication for its mode of action. *Eur J Biochem* 267(17): 5450-5457.
1162. Sundar S, Chakravarty J. 2010. Antimony toxicity. *Int J Environ Res Public Health* 7(12): 4267-4277.
1163. Sunderman FW, Jr. 2001. Nasal toxicity, carcinogenicity, and olfactory uptake of metals. *Ann Clin Lab Sci* 31(1): 3-24.
1164. Sunderman FW, Jr., McCully KS. 1983. Carcinogenesis tests of nickel arsenides, nickel antimonide, and nickel telluride in rats. *Cancer Invest* 1(6): 469-474.
1165. Sunderman FW, Jr., McCully KS, Hopfer SM. 1984. Association between erythrocytosis and renal cancers in rats following intrarenal injection of nickel compounds. *Carcinogenesis* 5(11): 1511-1517.
1166. Sunderman Jr FS, Hopfer SM. 1983. Correlation between carcinogenic activities of nickel compounds and their potencies for stimulating erythropoiesis in rats. *Proc Am Assoc Cancer Res* 23: 171-181.
1167. Sunderman Jr FW. 1984. Carcinogenicity of nickel compounds in animals. *IARC Sci Publ* 53: 127-142.
1168. Taba AH. 1981. Problems of occupational carcinogenesis in developing countries. *Cancer Detect Prev* 4(1-4): 25-30.

1169. Tagesson C, Källberg M, Wingren G. 1996. Urinary malondialdehyde and 8-hydroxydeoxyguanosine as potential markers of oxidative stress in industrial art glass workers. *Int Arch Occup Environ Health* 69(1): 5-13.
1170. Taiwo O, Galusha D, Tessier-Sherman B, Kirsche S, Cantley L, Slade MD, Cullen MR, Donoghue AM. 2014. Acoustic neuroma: potential risk factors and audiometric surveillance in the aluminium industry. *Occup Environ Med* 71(9): 624-628.
1171. Taiwo OA, Slade MD, Cantley LF, Tessier-Sherman B, Galusha D, Kirsche SR, Donoghue AM, Cullen MR. 2015. Bladder cancer screening in aluminum smelter workers. *J Occup Environ Med* 57(4): 421-427.
1172. Takahashi S, Okayasu R, Sato H, Kubota Y, Bedford JS. 2002. Inhibition of radiation-induced DNA-double strand break repair by various metal/metalloid compounds. In *Radiation and Homeostasis, Proceedings*. International Congress Series, 1236. Sugahara T, Nikaido O, Niwa O, eds. Amsterdam: Elsevier Science Bv. 327-330.
1173. Takahashi S, Sato H, Kubota Y, Utsumi H, Bedford JS, Okayasu R. 2002. Inhibition of DNA-double strand break repair by antimony compounds. *Toxicology* 180(3): 249-256.
1174. Takahashi Y, Sakuma K, Itai T, Zheng G, Mitsunobu S. 2008. Speciation of antimony in PET bottles produced in Japan and China by X-ray absorption fine structure spectroscopy. *Environ Sci Technol* 42(24): 9045-9050.
1175. Takaoka M, Yamamoto T, Tanaka T, Takeda N, Oshita K, Uruga T. 2005. Direct speciation of lead, zinc and antimony in fly ash from waste treatment facilities by XAFS spectroscopy. *Phys Scr T* 115: 943-945.
1176. Taylor A, Branch S, Day MP, Patriarca M, White M. 2010. Atomic spectrometry update. Clinical and biological materials, foods and beverages. *J Anal At Spectrom* 25(4): 453-492.
1177. Taylor HE, Antweiler RC, Roth DA, Alpers CN, Dileanis P. 2012. Selected trace elements in the Sacramento River, California: occurrence and distribution. *Arch Environ Contam Toxicol* 62(4): 557-569.
1178. Taylor PR, Qiao YL, Schatzkin A, Yao SX, Lubin J, Mao BL, Rao JY, McAdams M, Xuan XZ, Li JY. 1989. Relation of arsenic exposure to lung cancer among tin miners in Yunnan Province, China. *Br J Ind Med* 46(12): 881-886.
1179. Tellez-Plaza M, Tang WY, Shang Y, Umans JG, Francesconi KA, Goessler W, Ledesma M, Leon M, Laclaustra M, Pollak J, Guallar E, Cole SA, Fallin MD, Navas-Acien A. 2014. Association of global DNA methylation and global DNA hydroxymethylation with metals and other exposures in human blood DNA samples. *Environ Health Perspect* 122(9): 946-954.
1180. Tessier S, Martin-Martin N, de The H, Carracedo A, Lallemand-Breitenbach V. 2017. Promyelocytic leukemia protein, a protein at the crossroad of oxidative stress and metabolism. *Antioxid Redox Signal* 26(9): 432-444.
1181. Thériault G, Tremblay C, Cordier S, Gingras S. 1984. Bladder cancer in the aluminium industry. *Lancet* 1(8383): 947-950.
1182. Thienpont JR, Korosi JB, Hargan KE, Williams T, Eickmeyer DC, Kimpe LE, Palmer MJ, Smol JP, Blais JM. 2016. Multi-trophic level response to extreme metal contamination from gold mining in a subarctic lake. *Proc Biol Sci* 283(1836).
1183. Thoburn TW, Carnow BW. 1978. *Health Hazard Evaluation. N.L. Bearings, Fremont, Nebraska*. TA 76-107, HHE 76-137. Cincinnati, OH: National Institute for Occupational Safety and Health. 14 pp.
1184. Thoburn TW, Carnow BW. 1978. *Health Hazard Evaluation. Gould, Inc., Kanakee, Illinois. Sherwin Williams, Coffeyville, Kansas. N.L. Industries, Fremont, Nebraska*. TA 76-105 (HETA 760135), TA 76-106 (HETA 760136), TA 76-107 (HETA 760137). Cincinnati, OH: National Institute for Occupational Safety and Health. 43 pp.
1185. Thomas RG, Felicetti SW, Lucchino RV, McClellan RO. 1973. Retention patterns of antimony in mice following inhalation of particles formed at different temperatures. *Proceed Soc Exp Biol Med* 144(2): 544-550.
1186. Tillett T. 2014. Zeroing in on a risk factor? PBDE exposure and acute lymphoblastic leukemia. *Environ Health Perspect* 122(10): A282.

1187. Tirmenstein MA, Mathias PI, Snawder JE, Wey HE, Toraason M. 1997. Antimony-induced alterations in thiol homeostasis and adenine nucleotide status in cultured cardiac myocytes. *Toxicology* 119(3): 203-211.
1188. Tirmenstein MA, Plews PI, Walker CV, Woolery MD, Wey HE, Toraason MA. 1995. Antimony-induced oxidative stress and toxicity in cultured cardiac myocytes. *Toxicol Appl Pharmacol* 130(1): 41-47.
1189. Tokudome S, Haratake J, Horie A, Era S, Fujii H, Kawachi J, Miyamoto Y, Suko S, Tokunaga M, Tsuji K, et al. 1988. Histologic types of lung cancers among male Japanese copper smelter workers. *Am J Ind Med* 14(2): 137-143.
1190. Tokudome S, Kuratsune M. 1976. A cohort study on mortality from cancer and other causes among workers at a metal refinery. *Int J Cancer* 17(3): 310-317.
1191. Tokudome S, Kuratsune M. 1983. Mortality from cancer and other causes among workers at a metal refinery. *J UOEH* 5 Suppl: 101-108.
1192. Torjussen W, Solberg LA, Høgetveit AC. 1979. Histopathological changes of the nasal mucosa in active and retired nickel workers. *Br J Cancer* 40(4): 568-580.
1193. Torrus D, Massa B, Boix V, Portilla J, Perez-Mateo M. 1996. Meglumine antimoniate-induced pancreatitis. *Am J Gastroenterol* 91(4): 820-821.
1194. Tran CL, Buchanan D, Cullen RT, Searl A, Jones AD, Donaldson K. 2000. Inhalation of poorly soluble particles. II. Influence Of particle surface area on inflammation and clearance. *Inhal Toxicol* 12(12): 1113-1126.
1195. TRI. 2016. *TRI Explorer Chemical Report. On-site Disposal to Class I Underground Injection Wells, RCRA Subtitle C Landfills, and Other Landfills.* U.S. Environmental Protection Agency. <http://www.epa.gov/triexplorer>. Accessed on 8/18/16.
1196. Tsai CAN, Chen CH, Lee TC, Ho IC, Yang UC, Chen JJ. 2004. Gene selection for sample classifications in microarray experiments. *DNA Cell Biol* 23(10): 607-614.
1197. Turner A, Filella M. 2017. Field-portable-XRF reveals the ubiquity of antimony in plastic consumer products. *Sci Total Environ* 584-585: 982-989.
1198. Turner A, Kearl ER, Solman KR. 2016. Lead and other toxic metals in playground paints from South West England. *Sci Total Environ* 544: 460-466.
1199. Tylenda CA, Sullivan DW, Fowler BA. 2007. Antimony. In *Handbook on the Toxicology of Metals*. 4th ed. Nordberg GF, Fowler BA, Nordberg M, eds. Waltham, MA: Elsevier. p. 565-579.
1200. Tyrrell J, Melzer D, Henley W, Galloway TS, Osborne NJ. 2013. Associations between socioeconomic status and environmental toxicant concentrations in adults in the USA: NHANES 2001-2010. *Environ Int* 59: 328-335.
1201. Urgut OS, Ozturk, II, Banti CN, Kourkoumelis N, Manoli M, Tasiopoulos AJ, Hadjikakou SK. 2016. New antimony(III) halide complexes with dithiocarbamate ligands derived from thiuram degradation: The effect of the molecule's close contacts on in vitro cytotoxic activity. *Mater Sci Eng C Mater Biol Appl* 58: 396-408.
1202. Urrestarazu P, Villavicencio G, Opazo M, Arbildua J, Boreiko C, Delbeke K, Rodriguez PH. 2014. Migration protocol to estimate metal exposure from mouthing copper and tin alloy objects. *Environ Health* 13(1).
1203. USGS. 2015. *2013 Minerals Yearbook. Antimony.* U.S. Department of Interior, U.S. Geological Survey. 9 pp.
1204. Vahter M, Marafante E. 1993. Metabolism of alkyl arsenic and antimony compounds. *Met Ions Biol Syst* 29: 161-184.
1205. Valladares JE, Alberola J, Esteban M, Arboix M. 1996. Disposition of antimony after the administration of N-methylglucamine antimoniate to dogs. *Vet Rec* 138(8): 181-183.
1206. Valladares JE, Freixas J, Alberola J, Franquelo C, Cristofol C, Arboix M. 1997. Pharmacokinetics of liposome-encapsulated meglumine antimonate after intramuscular and subcutaneous administration in dogs. *Am J Trop Med Hyg* 57(4): 403-406.

1207. Valladares JE, Riera C, Alberola J, Gallego M, Portus M, Cristofol C, Franquelo C, Arboix M. 1998. Pharmacokinetics of meglumine antimoniate after administration of a multiple dose in dogs experimentally infected with *Leishmania infantum*. *Vet Parasitol* 75(1): 33-40.
1208. Van Bruwaene R, Gerber GB, Kirchmann R, Colard J. 1982. Metabolism of antimony-124 in lactating dairy cows. *Health Phys* 43(5): 733-738.
1209. Van Overmeire I, Pussemier L, Hanot V, De Temmerman L, Hoenig M, Goeyens L. 2006. Chemical contamination of free-range eggs from Belgium. *Food Addit Contam* 23(11): 1109-1122.
1210. Vandecasteele C, Cornelis G. 2010. Oxyanions in waste: Occurrence, leaching, stabilisation, relation to wastewater treatment. In *Water Treatment Technologies for the Removal of High-Toxicity Pollutants*. NATO Science for Peace and Security Series C-Environmental Security. Vaclavikova M, Vitale K, Gallios GP, Ivanicova L, eds. Dordrecht: Springer. 149-159.
1211. Vasquez L, Scorza Dagert JV, Scorza JV, Vicuna-Fernandez N, de Pena YP, Lopez S, Bendezu H, Rojas E, Vasquez L, Perez B. 2006. Pharmacokinetics of experimental pentavalent antimony after intramuscular administration in adult volunteers. *Curr Ther Res Clin Exp* 67(3): 193-203.
1212. Vásquez LC, Vicuña-Fernández N, Vásquez L, Rojas E, Scorza J, López S, Petit Y. 2013. Urinary kinetics of pentavalent antimony (Ulamina®) after intramuscular administration in volunteers. *Revista Latinoamericana de Hipertension* 8(3): 56-61.
1213. Vásquez P LC, Dagert JVS, Bendezú H, Vicuña-Fernández N, Petit Y, López S, Pirela E. 2013. Pharmacokinetic disposition of ulamina in dogs administered as intravenous and intramuscular acute test. *Boletín de Malariología y Salud Ambiental* 53(1): 12-18.
1214. Verdugo M, Ogra Y, Quiroz W. 2016. Mechanisms underlying the toxic effects of antimony species in human embryonic kidney cells (HEK-293) and their comparison with arsenic species. *J Toxicol Sci* 41(6): 783-792.
1215. Verhoeven RH, Louwman MW, Buntinx F, Botterweck AM, Lousbergh D, Faes C, Coebergh JW. 2011. Variation in cancer incidence in northeastern Belgium and southeastern Netherlands seems unrelated to cadmium emission of zinc smelters. *Eur J Cancer Prev* 20(6): 549-555.
1216. Verma DK, Julian JA, Roberts RS, Muir DC, Jadon N, Shaw DS. 1992. Polycyclic aromatic hydrocarbons (PAHs): a possible cause of lung cancer mortality among nickel/copper smelter and refinery workers. *Am Ind Hyg Assoc J* 53(5): 317-324.
1217. Vernhet L, Séité MP, Allain N, Guillouzo A, Fardel O. 2001. Arsenic induces expression of the multidrug resistance associated protein 2 (MRP2) gene in primary rat and human hepatocytes. *J Pharmacol Exp Ther* 298(1): 234-239.
1218. Villevieille C, Ionica-Bousquet CM, De Benedetti A, Morato F, Pierson JF. 2011. Self supported nickel antimonides based electrodes for Li ion battery. *Solid State Ionics* 192: 298-303.
1219. Vinas P, Lopez-Garcia I, Merino-Merono B, Hernandez-Cordoba M. 2006. Liquid chromatography-hydride generation-atomic fluorescence spectrometry hybridation for antimony speciation in environmental samples. *Talanta* 68(4): 1401-1405.
1220. Viren J, Silvers A. 1999. Nonlinearity in the lung cancer dose-response for airborne arsenic: apparent confounding by year of hire in evaluating lung cancer risks from arsenic exposure in Tacoma smelter workers. *Regul Toxicol Pharmacol* 30(2 Pt 1): 117-129.
1221. Vyskocil A, Viau C, Camus M. 2004. Risk assessment of lung cancer related to environmental PAH pollution sources. *Hum Exp Toxicol* 23(3): 115-127.
1222. Wagner SE, Peryea FJ, Filby RA. 2003. Antimony impurity in lead arsenate insecticide enhances the antimony content of old orchard soils. *J Environ Qual* 32(2): 736-738.
1223. Waheed S, Rahman S, Siddique N. 2014. Calcium supplements as source of trace elements: Adequacy and safety of supplements with vitamin C, vitamin D and phosphate formulations. *Appl Radiat Isotopes* 89: 134-140.
1224. Waheed S, Rahman S, Siddique N, Faiz Y. 2013. Calcium supplements as additional source of trace elements in health and disease Part 1: Adequacy and safety of chelated calcium supplements. *J Radioanal Nucl Chem* 298(2): 1453-1461.
1225. Wahl RL, Liebert M, Wilson BS, Petry NA. 1988. Radiolabeled antibodies, albumin and antimony sulfide colloid: A comparison as lymphoscintigraphic agents. *Nucl Med Biol* 15(3): 243-250.

1226. Waitz JA, Ober RE, Meisenhelder JE, Thompson PE. 1965. Physiological disposition of antimony after administration of  $^{124}\text{Sb}$ -labelled tartar emetic to rats, mice and monkeys, and the effects of tris (p-aminophenyl) Carbonium pamoate on this distribution. *Bull World Health Organ* 33(4): 537-546.
1227. Wall S. 1980. Survival and mortality pattern among Swedish smelter workers. *Int J Epidemiol* 9(1): 73-87.
1228. Wall S, Taube A, Sandstrom A. 1991. *The Rönnskär Case: An Epidemiological Study of Mortality and Cancer Incidence Among Swedish Smelter Workers*, Acta Oncologica, Supplementum 3, Oslo - Stockholm: Scandinavian University Press. 102 pp.
1229. Wang B, Yu W, Guo J, Jiang X, Lu W, Liu M, Pang X. 2015. The antiparasitic drug, potassium antimony tartrate, inhibits tumor angiogenesis and tumor growth in nonsmall-cell lung cancer. *J Pharmacol Exp Ther* 352(1): 129-138.
1230. Wang KF, Cie YR. 1962. [The effect of sodium 1,2-dihydroxybenzene-3,5-disulphonate on the distribution and the elimination of antimony after administration of tartar emetic]. *Yao Xue Xue Bao* 13: 309-313.
1231. Wang Q, Warelow TP, Kang YS, Romano C, Osborne TH, Lehr CR, Bothner B, McDermott TR, Santini JM, Wang G. 2015. Arsenite oxidase also functions as an antimonite oxidase. *Appl Environ Microbiol* 81(6): 1959-1965.
1232. Wang S, Pan X. 2012. Effects of Sb(V) on growth and chlorophyll fluorescence of *Microcystis aeruginosa* (FACHB-905). *Curr Microbiol* 65(6): 733-741.
1233. Wang SF, Fouquet S, Chapon M, Salmon H, Regnier F, Labroquere K, Badoual C, Damotte D, Validire P, Maubec E, Delongchamps NB, Cazes A, Gibault L, Garcette M, Dieu-Nosjean MC, Zerbib M, Avril MF, Prevost-Blondel A, Randriamampita C, Trautmann A, Bercovici N. 2011. Early T cell signalling is reversibly altered in PD-1+ T lymphocytes infiltrating human tumors. *PLoS One* 6(3): e17621.
1234. Wang X, Liu Z, Qun Q, et al. 2005. Effect of apoptosis by potassium antimonyl tartrate in human hepatoma cell line *in vitro*. *Med J Wuhan Univ* 26(4): 446-448.
1235. Wang YX, Sun Y, Huang Z, Wang P, Feng W, Li J, Yang P, Wang M, Sun L, Chen YJ, Liu C, Yue J, Gu LJ, Zeng Q, Lu WQ. 2016. Associations of urinary metal levels with serum hormones, spermatozoa apoptosis and sperm DNA damage in a Chinese population. *Environ Int* 94: 177-188.
1236. Wang Z, Dong D, Liang X, Qu G, Wu J, Xu X. 1996. Cancer mortality among silicotics in China's metallurgical industry. *Int J Epidemiol* 25(5): 913-917.
1237. Ward MH, Colt JS, Deziel NC, Whitehead TP, Reynolds P, Gunier RB, Nishioka M, Dahl GV, Rappaport SM, Buffler PA, Metayer C. 2014. Residential levels of polybrominated diphenyl ethers and risk of childhood acute lymphoblastic leukemia in California. *Environ Health Perspect* 122(10): 1110-1116.
1238. Warheit DB. 2016. *How Does One Interpret the Relevance of Particle Overload/ Rat Lung Tumor Findings in Chronic Inhalation Studies with PSPs for Assessing Human Occupational Health Risks? Granular Biopersistent Dusts (GBS) and Translational Toxicology: Deriving HECs/ Occupational Limit Values*. Berlin, Germany. 57 pp.
1239. Warheit DB, Kreiling R, Levy LS. 2016. Relevance of the rat lung tumor response to particle overload for human risk assessment-Update and interpretation of new data since ILSI 2000. *Toxicology* 374: 42-59.
1240. Warnock DW, Delves HT, Campell CK, Croudace IW, Davey KG, Johnson EM, Sieniawska C. 1995. Toxic gas generation from plastic mattresses and sudden infant death syndrome. *Lancet* 346(8989): 1516-1520.
1241. Watanabe N, Inoue S, Ito H. 1999. Antimony in municipal waste. *Chemosphere* 39(10): 1689-1698.
1242. Watt WD. 1983. *Chronic Inhalation Toxicity of Antimony Trioxide: Validation of the Threshold Limit Value*. Detroit, MI: Wayne State University, PhD Thesis.
1243. Welch K, Higgins I, Oh M, Burchfiel C. 1982. Arsenic exposure, smoking, and respiratory cancer in copper smelter workers. *Arch Environ Health* 37(6): 325-335.
1244. Welnic W, Botti S, Reining L, Wuttig M. 2007. Origin of the optical contrast in phase-change materials. *Phys Rev Lett* 98(23): 236403.

1245. Wester PO. 1973. Trace elements in serum and urine from hypertensive patients before and during treatment with chlorthalidone. *Acta Medica Scandinavica* 194(1-6): 505-512.
1246. Wester PO. 1974. Trace elements in serum and urine from hypertensive patients treated for six months with chlorthalidone. *Acta Medica Scandinavica* 196(1-6): 489-494.
1247. Wester PO. 1975. The urinary excretion of trace elements before and during treatment with hydralazine. *Acta Medica Scandinavica* 197(1-6): 307-309.
1248. Wester PO, Brune D, Nordberg G. 1981. Arsenic and selenium in lung, liver, and kidney tissue from dead smelter workers. *Br J Ind Med* 38(2): 179-184.
1249. Wey HE, Richards D, Tirmenstein MA, Mathias PI, Toraason M. 1997. The role of intracellular calcium in antimony-induced toxicity in cultured cardiac myocytes. *Toxicol Appl Pharmacol* 145(1): 202-210.
1250. Whanger PD, Weswig PH. 1978. Influence of 19 elements on development of liver necrosis in selenium and vitamin E deficient rats. *Nutr Rep Int* 18(4): 421-428.
1251. White PA, Claxton LD. 2004. Mutagens in contaminated soil: A review. *Mutat Res Rev Mutat Res* 567(2-3 SPEC. ISS.): 227-345.
1252. WHO. 2003. *Antimony in Drinking-water. Background document for the development of WHO Guidelines for Drinking Water*. WHO/SDE/WSH/03.04/74. Geneva, Switzerland: World Health Organization. 22 pp.
1253. Wiethege T, Wesch H, Wegener K, Müller KM, Mehlhorn J, Spiethoff A, Schömig D, Hollstein M, Bartsch H. 1999. German uranium miner study--pathological and molecular genetic findings. German Uranium Miner Study, Research Group Pathology. *Radiat Res* 152(6 Suppl): S52-55.
1254. Wiles MC, Huebner HJ, Afriyie-Gyawu E, Taylor RJ, Bratton GR, Phillips TD. 2004. Toxicological evaluation and metal bioavailability in pregnant rats following exposure to clay minerals in the diet. *J Toxicol Environ Health Pt A* 67(11): 863-874.
1255. Williamson J. 1949. A note on the distribution and excretion of antimony in mice treated with sodium p-melaminylnphenylstibonate. *Ann Trop Med Parasitol* 43(2): 209-212.
1256. Willis SS, Haque SE, Johannesson KH. 2011. Arsenic and antimony in groundwater flow systems: A comparative study. *Aquatic Geochem* 17(6): 775-807.
1257. Wingren G. 2004. Mortality and cancer incidence in a Swedish art glassworks--an updated cohort study. *Int Arch Occup Environ Health* 77(8): 599-603.
1258. Wingren G, Axelson O. 1985. Mortality pattern in a glass producing area in SE Sweden. *Br J Ind Med* 42(6): 411-414.
1259. Wingren G, Axelson O. 1987. Mortality in the Swedish glassworks industry. *Scand J Work Environ Health* 13(5): 412-416.
1260. Wingren G, Axelson O. 1993. Epidemiologic studies of occupational cancer as related to complex mixtures of trace elements in the art glass industry. *Scand J Work Environ Health* 19 Suppl 1: 95-100.
1261. Winship KA. 1987. Toxicity of antimony and its compounds. *Adverse Drug React Acute Poisoning Rev* 6(2): 67-90.
1262. Wong O, Harris F. 2000. Cancer mortality study of employees at lead battery plants and lead smelters, 1947-1995. *Am J Ind Med* 38(3): 255-270.
1263. Wong O, Whorton MD, Foliant DE, Lowengart R. 1992. An ecologic study of skin cancer and environmental arsenic exposure. *Int Arch Occup Environ Health* 64(4): 235-241.
1264. Wortmann GW, Aronson NE, Byrd JC, Grever MR, Oster CN. 1998. Herpes zoster and lymphopenia associated with sodium stibogluconate therapy for cutaneous leishmaniasis. *Clin Infect Dis* 27(3): 509-512.
1265. Wu D, Sun S. 2016. Speciation analysis of As, Sb and Se. *Trends Environ Anal Chem* 11: 9-22.
1266. Wu F, Fu Z, Liu B, Mo C, Chen B, Corns W, Liao H. 2011. Health risk associated with dietary co-exposure to high levels of antimony and arsenic in the world's largest antimony mine area. *Sci Total Environ* 409(18): 3344-3351.

1267. Wu H, Wang X, Liu B, Liu Y, Li S, Lu J, Tian J, Zhao W, Yang Z. 2011. Simultaneous speciation of inorganic arsenic and antimony in water samples by hydride generation-double channel atomic fluorescence spectrometry with on-line solid-phase extraction using single-walled carbon nanotubes micro-column. *Spectrochim Acta Part B At Spectrosc* 66(1): 74-80.
1268. Wu KG. 1989. [Analysis of conditional logistic regression for risk factors of lung cancer in Dachang Tin Mine]. *Zhonghua Zhong Liu Za Zhi* 11(2): 124-126.
1269. Wu KG, Fu H, Mo CZ, Yu LZ. 1989. Smelting, underground mining, smoking, and lung cancer: a case-control study in a tin mine area. *Biomed Environ Sci* 2(2): 98-105.
1270. Wu-Williams AH, Dai XD, Blot W, Xu ZY, Sun XW, Xiao HP, Stone BJ, Yu SF, Feng YP, Ershow AG, et al. 1990. Lung cancer among women in north-east China. *Br J Cancer* 62(6): 982-987.
1271. Wu-Williams AH, Xu ZY, Blot WJ, Dai XD, Louie R, Xiao HP, Stone BJ, Sun XW, Yu SF, Feng YP, et al. 1993. Occupation and lung cancer risk among women in northern China. *Am J Ind Med* 24(1): 67-79.
1272. Wulff M, Höglberg U, Sandström A. 1996. Cancer incidence for children born in a smelting community. *Acta Oncol* 35(2): 179-183.
1273. Wyllie S, Fairlamb AH. 2006. Differential toxicity of antimonial compounds and their effects on glutathione homeostasis in a human leukaemia monocyte cell line. *Biochem Pharmacol* 71(3): 257-267.
1274. Wysocki R, Tamas MJ. 2010. How *Saccharomyces cerevisiae* copes with toxic metals and metalloids. *FEMS Microbiol Rev* 34(6): 925-951.
1275. Xiang P, He RW, Han YH, Sun HJ, Cui XY, Ma LQ. 2016. Mechanisms of housedust-induced toxicity in primary human corneal epithelial cells: Oxidative stress, proinflammatory response and mitochondrial dysfunction. *Environ Int* 89-90: 30-37.
1276. Xiao HP, Xu ZY. 1985. Air pollution and lung cancer in Liaoning Province, People's Republic of China. *Natl Cancer Inst Monogr* 69: 53-58.
1277. Xing L, Chen C, Li B, Yu H, Chai ZF. 2006. Distribution and location of selenium and other elements in different mitochondrial compartments of human liver by neutron activation analysis. *J Radioanal Nucl Chem* 269(3): 527-534.
1278. Xu Z, Brown LM, Pan GW, Liu TF, Gao GS, Stone BJ, Cao RM, Guan DX, Sheng JH, Yan ZS, Dosemeci M, Fraumeni JF, Jr., Blot WJ. 1996. Cancer risks among iron and steel workers in Anshan, China, Part II: Case-control studies of lung and stomach cancer. *Am J Ind Med* 30(1): 7-15.
1279. Xu ZY, Blot WJ, Li G, Fraumeni JF, Jr., Zhao DZ, Stone BJ, Yin Q, Wu A, Henderson BE, Guan BP. 1991. Environmental determinants of lung cancer in Shenyang, China. *IARC Sci Publ*(105): 460-465.
1280. Xu ZY, Blot WJ, Xiao HP, Wu A, Feng YP, Stone BJ, Sun J, Ershow AG, Henderson BE, Fraumeni JF, Jr. 1989. Smoking, air pollution, and the high rates of lung cancer in Shenyang, China. *J Natl Cancer Inst* 81(23): 1800-1806.
1281. Xu ZY, Brown L, Pan GW, Li G, Feng YP, Guan DX, Liu TF, Liu LM, Chao RM, Sheng JH, Gao GC. 1996. Lifestyle, environmental pollution and lung cancer in cities of Liaoning in northeastern China. *Lung Cancer* 14(Suppl 1): S149-160.
1282. Yamamoto A, Kohyama Y, Hanawa T. 2002. Mutagenicity evaluation of forty-one metal salts by the umu test. *J Biomed Mater Res* 59(1): 176-183.
1283. Yang LL, Li N, Zhang DQ. 2007. [Simultaneous speciation analysis of arsenic and antimony in traditional Chinese medicines by hydride generation-double channel atomic fluorescence spectrometry]. *Guang Pu Xue Yu Guang Pu Fen Xi* 27(4): 810-812.
1284. Yi T, Pathak MK, Lindner DJ, Ketterer ME, Farver C, Borden EC. 2002. Anticancer activity of sodium stibogluconate in synergy with IFNs. *J Immunol* 169(10): 5978-5985.
1285. Yin Y, Zhang T, Dai Y, Zheng X, Pei L, Lu X. 2009. Pilot study of association of anembryonic pregnancy with 55 elements in the urine, and serum level of folate, homocysteine and s-adenosylhomocysteine in shanxi province, china. *J Am College Nutr* 28(1): 50-55.

1286. Yoon IK, Cox J, Zhou Y, Lukes Y, Reinhardt B, Valencia-Micolta A, Wortmann G. 2008. Varicella zoster virus-specific immune response after treatment with sodium stibogluconate for cutaneous leishmaniasis. *Am J Trop Med Hyg* 78(3): 402-405.
1287. Yorita Christensen KL. 2013. Metals in blood and urine, and thyroid function among adults in the United States 2007-2008. *Int J Hyg Environ Health* 216(6): 624-632.
1288. Yu DY, Hostet HE, Batabyal SK. 2014. Bulk antimony sulfide with excellent cycle stability as next-generation anode for lithium-ion batteries. *Sci Rep* 4: 4562.
1289. Yu RC, Rappaport SM. 1996. Relation between pulmonary clearance and particle burden: a Michaelis-Menten-like kinetic model. *Occup Environ Med* 53(8): 567-572.
1290. Yu RC, Rappaport SM. 1997. A lung retention model based on Michaelis-Menten-like kinetics. *Environ Health Perspect* 105(5): 496-503.
1291. Zadnik V, Pompe-Kirn V. 2007. Effects of 500-year mercury mining and milling on cancer incidence in the region of Idrija, Slovenia. *Coll Antropol* 31(3): 897-903.
1292. Zaghloul IY, Al-Jasser M. 2004. Effect of renal impairment on the pharmacokinetics of antimony in hamsters. *Ann Trop Med Parasitol* 98(8): 793-800.
1293. Zangi R, Filella M. 2012. Transport routes of metalloids into and out of the cell: a review of the current knowledge. *Chem Biol Interact* 197(1): 47-57.
1294. Zaridze DG, Zemlianaya GM, Aitakov ZN. 1995. [Role of outdoor and indoor air pollution in the etiology of lung cancer]. *Vestn Ross Akad Med Nauk*(4): 6-10.
1295. Zhang H, Huang GH, Zeng GM. 2009. Health risks from arsenic-contaminated soil in Flin Flon-Creighton, Canada: integrating geostatistical simulation and dose-response model. *Environ Pollut* 157(8-9): 2413-2420.
1296. Zhang L, Li J, Wang Y, Wu G, Wei F. 2012. [Descriptive study of the environmental epidemiology of high lung cancer incidence rate in Qujing, Yunnan, China]. *Zhongguo Fei Ai Za Zhi* 15(3): 159-163.
1297. Zhang XW, Yan XJ, Zhou ZR, Yang FF, Wu ZY, Sun HB, Liang WX, Song AX, Lallemand-Breitenbach V, Jeanne M, Zhang QY, Yang HY, Huang QH, Zhou GB, Tong JH, Zhang Y, Wu JH, Hu HY, de The H, Chen SJ, Chen Z. 2010. Arsenic trioxide controls the fate of the PML-RARalpha oncoprotein by directly binding PML. *Science* 328(5975): 240-243.
1298. Zhao JY, Lewinski N, Riediker M. 2015. Physico-chemical characterization and oxidative reactivity evaluation of aged brake wear particles. *Aerosol Sci Tech* 49(2): 65-74.
1299. Zheng G, Zhong H, Guo Z, Wu Z, Zhang H, Wang C, Zhou Y, Zuo Z. 2014. Levels of heavy metals and trace elements in umbilical cord blood and the risk of adverse pregnancy outcomes: a population-based study. *Biol Trace Elem Res* 160(3): 437-444.
1300. Zheng J, Iijima A, Furuta N. 2001. Complexation effect of antimony compounds with citric acid and its application to the speciation of antimony(III) and antimony(V) using HPLC-ICP-MS. *J Anal At Spectrom* 16(8): 812-818.
1301. Zheng J, Ohata M, Furuta N. 2000. Studies on the speciation of inorganic and organic antimony compounds in airborne particulate matter by HPLC-ICP-MS. *Analyst* 125(6): 1025-1028.
1302. Zheng J, Ohata M, Furuta N. 2000. Antimony speciation in environmental samples by using high-performance liquid chromatography coupled to inductively coupled plasma mass spectrometry. *Anal Sci* 16(1): 75-80.
1303. Zheng W, McLaughlin JK, Gao YT, Gao RN, Blot WJ. 1992. Occupational risks for nasopharyngeal cancer in Shanghai. *J Occup Med* 34(10): 1004-1007.
1304. Zhu L, Wang ZT, Xu HB, Sun RB, Zhang H, Zhang JB. 2016. Exposure assessment of Sb<sub>2</sub>O<sub>3</sub> in pet food contact materials. *Biomed Environ Sci* 29(4): 305-313.
1305. Zih-Perényi K, Neuróhr K, Nagy G, Balla M, Lásztity A. 2010. Selective extraction of traffic-related antimony compounds for speciation analysis by graphite furnace atomic absorption spectrometry. *Spectrochim Acta Part B At Spectrosc* 65(9-10): 847-851.
1306. Zmirou D, Masclet P, Boudet C, Dor F, Déchenaux J. 2000. Personal exposure to atmospheric polycyclic aromatic hydrocarbons in a general adult population and lung cancer risk assessment. *J Occup Environ Med* 42(2): 121-126.

