

Arsenic

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Arsenic is a chemical element that has the symbol As and atomic number 33. Arsenic was discovered by Albertus Magnus in 1250. Its Atomic Mass is 74.92. Its Ionic Charge is Its position in the periodic table is shown at right. This is a notoriously poisonous metalloid that has many allotropic forms: yellow and several black and gray forms are a few that are seen. Three metalloidal forms of arsenic with different crystal structures are found free in nature , but it is more commonly found as arsenide and arsenate compounds. Several hundred such mineral species are known. Arsenic and its compounds are used as pesticides, herbicides, insecticides and various alloys. The most common oxidation states for arsenic are -3 , +3 or arsenites, and most organoarsenic compounds), and +5 : the most stable inorganic arsenic oxycompounds). Arsenic also bonds readily to itself, forming, for instance, As-As pairs in the red sulfide realgar and square As_4^{3-} ions in the arsenide skutterudite. In the +3 oxidation state, the stereochemistry of arsenic is affected by possession of a lone pair of electrons. ([From the Wikipedia article Arsenic](#).)

Recent Publications on Arsenic:



- [Concentrations and Source Assessment of Some Atmospheric Trace Elements in Northwestern Region of Tehran, Iran.](#)
*Outdoor concentrations of some elements such as iron, aluminum, magnesium,...*20th November, 2009
Environmental Group, Materials and Energy Research Center (MERC), P.O. Box- Bull Environ Contam Toxicol. 2009 Nov 19. ([DOI Direct Link](#))
- [Sorption of Arsenic\(V\) and Arsenic\(III\) to Schwertmannite.](#)
*This study describes the sorption of As(V) and As(III) to schwertmannite...*20th November, 2009
Southern Cross GeoScience, Southern Cross University, Lismore, NSW 2480,- Environ Sci Technol. 2009 Nov 18. ([DOI Direct Link](#))
- [Evaluating the Community Health Legacy of WWI Chemical Weapons Testing.](#)
*Spring Valley, Washington, DC, was built over a World War I chemical...*19th November, 2009
Department of Health Policy and Management, Johns Hopkins Bloomberg School- J Community Health. 2009 Nov 18. ([DOI Direct Link](#))
- [A sorption kinetics model for arsenic adsorption to magnetite nanoparticles.](#)
*INTRODUCTION: Arsenic is a well known water contaminant that causes...*19th November, 2009
University of Texas-San Antonio, One UTSA Circle, San Antonio, TX, 78249,- Environ Sci Pollut Res Int. 2009 Nov 18. ([DOI Direct Link](#))
- [Intracellular redox imbalance and extracellular amino acid metabolic abnormality contribute to arsenic-induced developmental retardation in mouse preimplantation embryos.](#)
*Inorganic arsenic, an environmental contaminant, is known to cause cancer,...*18th November, 2009
Graduate School of Peking Union Medical College, Beijing, China.- J Cell Physiol. 2009 Nov 13. ([DOI Direct Link](#))

- [Haemolytic anaemia secondary to arsenic poisoning: a case report.](#)
*We report the case of a 56-year-old white man who presented at the...*18th November, 2009
- Cases J. 2009 Aug 11;2:7768. ([DOI Direct Link](#))
- [Environmental toxins, a potential risk factor for diabetes among Canadian Aboriginals.](#)
*Objectives. To review the current literature to determine if there is a...*18th November, 2009
Environmental Stewardship Unit, Assembly of First Nations, Ottawa, ON K1R- Int J Circumpolar Health. 2009 Sep;68(4):316-26.
- [The chemistry and behaviour of antimony in the soil environment with comparisons to arsenic: A critical review.](#)
*This article provides a critical review of the environmental chemistry of...*17th November, 2009
School of Environmental and Rural Science, University of New England,- Environ Pollut. 2009 Nov 13.
([DOI Direct Link](#))
- [Genetic polymorphisms of glutathione S-transferase \(GST\) superfamily and arsenic metabolism in residents of the Red River Delta, Vietnam.](#)
*To elucidate the role of genetic factors in arsenic metabolism, we...*17th November, 2009
Department of Legal Medicine, Shimane University Faculty of Medicine, Enya- Toxicol Appl Pharmacol. 2009 Nov 12. ([DOI Direct Link](#))
- [Compound heterozygous mutation with a novel splice donor region DNA sequence variant in the succinate dehydrogenase subunit B gene in malignant paraganglioma.](#)
*Pheochromocytoma and paraganglioma (PGL) are rare neuroendocrine tumors in...*1st September, 2009
Department of Pediatrics, University of Mississippi Medical Center,- Pediatr Blood Cancer. 2009 Nov 19. ([DOI Direct Link](#))
- [Syk is a novel target of arsenic trioxide \(ATO\) and is involved in the toxic effect of ATO in human neutrophils.](#)
*The anticancer drug arsenic trioxide (ATO) is known to be toxic for human...*1st September, 2009
Laboratoire de recherche en inflammation et physiologie des granulocytes,- Toxicol In Vitro. 2009 Nov 16. ([DOI Direct Link](#))
- [Arsenic Limits Trace Mineral Nutrition \(Selenium, Zinc, and Nickel\) in Bangladesh Rice Grain.](#)
*A reconnaissance of 23 paddy fields, from three Bangladesh districts,...*1st September, 2009
Research Centre for Eco-Environmental Sciences, Chinese Academy of- Environ Sci Technol. 2009 Nov 1;43(21):8430-8436. ([DOI Direct Link](#))
- [Environmental and Genetic Control of Arsenic Accumulation and Speciation in Rice Grain: Comparing a Range of Common Cultivars Grown in Contaminated Sites Across Bangladesh, China, and India.](#)
*The concentration of arsenic (As) in rice grains has been identified as a...*1st September, 2009
Institute of Biological and Environmental Sciences, University of- Environ Sci Technol. 2009 Nov 1;43(21):8381-8386. ([DOI Direct Link](#))
- [Quantitative and Qualitative Trapping of Arsines Deployed to Assess Loss of Volatile Arsenic from Paddy Soil.](#)
*Arsenic volatilization in the environment is thought to be an important...*1st September, 2009
Institute for Biological and Environmental Sciences, University of- Environ Sci Technol. 2009 Nov 1;43(21):8270-8275. ([DOI Direct Link](#))
- [Arsenic in rice: a recipe for nutrient loss.](#)
*Rice feeds half the world, but in some regions, high arsenic levels may be...*1st September, 2009
- Environ Sci Technol. 2009 Nov 1;43(21):8004. ([DOI Direct Link](#))

BioNews Results for Arsenic

- [Bioaccumulation of Arsenic in recombinant Escherichia coli expressing human metallothionein](#)
Bioscience Technology Online: Nov 20 2009 5:22PM Matching: arsenic

- [Pfizer's Geodon gets expanded FDA approval](#)
Bioscience Technology Online: Nov 20 2009 8:56PM Matching: arsenic
- [Ethnic difference in patients with type 2 diabetes mellitus in inter-East Asian populations: A systematic review](#)
Bioscience Technology Online: Nov 20 2009 6:32PM Matching: arsenic
- [Expression of Bombyx mori 30Kc19 protein in Escherichia coli and its anti-apoptotic effect in Sf9 cell](#)
Bioscience Technology Online: Nov 20 2009 6:31PM Matching: arsenic
- [Does long-term farmyard manure fertilization affect short-term nitrogen mineralization from farmyard manure?](#)
Bioscience Technology Online: Nov 20 2009 6:31PM Matching: arsenic
- [Overexpression, purification, and functional characterization of the group II chaperonin from the hyperthermop](#)
Bioscience Technology Online: Nov 20 2009 5:23PM Matching: arsenic
- [Fruits and vegetables consumption and the risk of histological subtypes of lung cancer in the European Prospec](#)
Bioscience Technology Online: Nov 20 2009 5:23PM Matching: arsenic
- [Effects of oxygen volumetric mass transfer coefficient on transglutaminase production by Bacillus circulans BL](#)
Bioscience Technology Online: Nov 20 2009 5:22PM Matching: arsenic
- [Responses of GS-NS0 Myeloma cells to osmolality: Cell growth, intracellular mass metabolism, energy metabolism](#)
Bioscience Technology Online: Nov 20 2009 5:21PM Matching: arsenic
- [Bioethanol production from ammonia percolated wheat straw](#)
Bioscience Technology Online: Nov 20 2009 5:19PM Matching: arsenic
- [Origin Of Dissolved Arsenic In Bangladesh Drinking Water Pinpointed By MIT Scientists](#)
Medical News Today: Nov 16 2009 4:30PM Matching: arsenic
- [Deadly Puzzle of Bangladesh's Mass Arsenic Poisoning Solved](#)
MedIndia: Nov 16 2009 2:36PM Matching: arsenic
- [Medical News: Origin Of Dissolved Arsenic In Bangladesh Drinking Water Pinpointed By MIT Scientists](#)
BioFind: Nov 16 2009 1:08PM Matching: arsenic
- [Iarc Strengthens Its Findings On Several Carcinogenic Personal Habits And Household Exposures](#)
International Agency for Research on Cancer: Nov 3 2009 5:07PM Matching: arsenic
- [Arsenic trioxide as first-line treatment for acute promyelocytic leukemia](#)
MDLinx: Oct 26 2009 11:41AM Matching: arsenic

Arsenic Clinical Trials:



- [Decitabine, Arsenic Trioxide and Ascorbic Acid for Myelodysplastic Syndromes and Acute Myeloid Leukemia](#)



Arsenic Patents:

- 7617593- [Micromachine and method of fabricating the same](#)
- 7618858- [Method of fabricating a heterojunction bipolar transistor](#)
- 7618861- [Method of manufacturing non-volatile memory device using multiple element isolation regions and perpendicular extensive device regions](#)
- 7618865- [Method in the fabrication of a monolithically integrated vertical device on an SOI substrate](#)
- 7618868- [Method of manufacturing field effect transistors using sacrificial blocking layers](#)
- 7618870- [Non-uniformly doped high voltage drain-extended transistor and method of manufacture thereof](#)
- 7618871- [Method for the production of a bipolar transistor comprising an improved base terminal](#)
- 7618872- [Semiconductor device structures for bipolar junction transistors and methods of fabricating such structures](#)
- 7618882- [Method for manufacturing semiconductor device and laser irradiation apparatus](#)
- 7618904- [Method of manufacturing a semiconductor device](#)
- 7618909- [Precision press-molding preform, process for the production thereof, optical element and process for the production of the optical element](#)
- 7618855- [Manufacturing method of semiconductor device](#)
- 7618853- [Field effect transistors with dielectric source drain halo regions and reduced miller capacitance](#)
- 7618839- [Pinned photodiode structure and method of formation](#)
- 7617723- [Thermal type flow rate measuring apparatus having decrease in coupling capacitance between wiring portions of detection element](#)
- 7617964- [Solder compositions; method of soldering, and a laminated transparency having bus bars](#)
- 7618027- [Vaporizer for delivery of low vapor pressure gases](#)
- 7618606- [Separation of carbon dioxide \(CO.sub.2\) from gas mixtures](#)
- 7618683- [Ink composition, inkjet recording method, printed material, process for producing lithographic printing plate, and lithographic printing plate](#)
- 7618713- [Circuit-connecting material and circuit terminal connected structure and connecting method](#)
- 7618725- [Low contaminant formic acid fuel for direct liquid fuel cell](#)
- 7618756- [Photoconductors containing chelating components](#)
- 7618757- [Imaging member having first and second charge transport layers](#)
- 7618777- [Composition and method for array hybridization](#)
- 7618914- [Method for producing hydroxylamine compound using platinum catalyst fixed on ion-exchange resin](#)
- 7618939- [Compositions and methods to prevent cancer with cupredoxins](#)
- 7619275- [Process for forming an electronic device including discontinuous storage elements](#)
- 7619278- [Semiconductor memory device](#)
- 7619288- [Thin film transistor substrate, liquid crystal display device provided with such thin film transistor substrate and method for manufacturing thin film transistor substrate](#)
- 7619290- [Nanosensors](#)
- 7619299- [Semiconductor device and method of manufacturing the same](#)
- 7619301- [GaAs semiconductor substrate and fabrication method thereof](#)
- 7619672- [Retrograde well structure for a CMOS imager](#)
- 7619675- [Solid-state image taking apparatus with photoelectric converting and vertical charge transferring sections and method for fabricating the same](#)

- 7619700- [Defective pixel compensation system and display device using the system](#)
- 7619806- [Methods and apparatus for spatial light modulation](#)
- 7619271- [Deep trench device with single sided connecting structure and fabrication method thereof](#)
- 7619270- [Electronic device including discontinuous storage elements](#)
- 7619269- [Semiconductor device, manufacturing process thereof and imaging device](#)
- 7618971- [Mitotic kinesin inhibitors](#)
- 7619000- [S-dimethylarsino-thiosuccinic acid S-dimethylarsino-2-thiobenzoic acid S-\(dimethylarsino\) glutathione as treatments for cancer](#)
- 7619037- [Transparent resin composition](#)
- 7619047- [Dual metallocene catalysts for polymerization of bimodal polymers](#)
- 7619054- [Dendrimer compositions with high branching multiplicity](#)
- 7619128- [Stabilizing catalyst activity during catalyst regeneration](#)
- 7619228- [Technique for improved ion beam transport](#)
- 7619253- [Crystalline semiconductor thin film, method of fabricating the same, semiconductor device, and method of fabricating the same](#)
- 7619263- [Method of radiation generation and manipulation](#)
- 7619266- [Image sensor with improved surface depletion](#)
- 7620090- [Semiconductor laser device](#)

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Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

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