# Alvaro Osornio-Vargas

## List of Publications by Year in Descending Order



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| 107 papers | 3,449 citations | 31 h-index | 56 g-index |
| 145 ext. papers | 3,992 ext. citations | 4.4 avg, IF | 5.19 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 107 | Residential proximity to greenness and adverse birth outcomes in urban areas: Findings from a national Canadian population-based study. *Environmental Research*, **2022**, 204, 112344 | 7.9 | 0 |
| 106 | AI Applied to Air Pollution and Environmental Health: A Case Study on Hypothesis Generation **2022**, 195-222 | | |
| 105 | Barriers and opportunities to incorporate scientific evidence into air quality management in Mexico: A stakeholders□perspective. *Environmental Science and Policy*, **2022**, 129, 87-95 | 6.2 | 1 |
| 104 | A case study unpacking the collaborative research process: Eight essential components. *Environmental Science and Policy*, **2022**, 131, 209-220 | 6.2 | |
| 103 | PM induces airway hyperresponsiveness and inflammation via the AhR pathway in a sensitized Guinea pig asthma-like model. *Toxicology*, **2021**, 465, 153026 | 4.4 | 0 |
| 102 | Patterns of respiratory health services utilization from birth to 5 years of children who experienced adverse birth outcomes. *PLoS ONE*, **2021**, 16, e0247527 | 3.7 | 0 |
| 101 | Long-term exposure to particulate matter from air pollution alters airway □defensin-3 and -4 and cathelicidin host defense peptides production in a murine model. *Peptides*, **2021**, 142, 170581 | 3.8 | 1 |
| 100 | Effect of titanium dioxide nanoparticles on DNA methylation of human peripheral blood mononuclear cells. *Toxicology Research*, **2021**, 10, 1045-1051 | 2.6 | 0 |
| 99 | Wildfire exposure during pregnancy and the risk of adverse birth outcomes: A systematic review. *Environment International*, **2021**, 156, 106644 | 12.9 | 7 |
| 98 | Air pollution and children's respiratory health: a scoping review of socioeconomic status as an effect modifier. *International Journal of Public Health*, **2020**, 65, 649-660 | 4 | 7 |
| 97 | Systematic review of the measurement properties of indices of prenatal care utilization. *BMC Pregnancy and Childbirth*, **2020**, 20, 171 | 3.2 | 5 |
| 96 | Natural environments in the urban context and gut microbiota in infants. *Environment International*, **2020**, 142, 105881 | 12.9 | 14 |
| 95 | Socioeconomic gradients of adverse birth outcomes and related maternal factors in rural and urban Alberta, Canada: a concentration index approach. *BMJ Open*, **2020**, 10, e033296 | 3 | 7 |
| 94 | Space-time hot spots of critically ill small for gestational age newborns and industrial air pollutants in major metropolitan areas of Canada. *Environmental Research*, **2020**, 186, 109472 | 7.9 | 4 |
| 93 | Assessing the Influence of Socioeconomic Status and Air Pollution Levels on the Public Perception of Local Air Quality in a Mexico-US Border City. *International Journal of Environmental Research and Public Health*, **2020**, 17, | 4.6 | 5 |
| 92 | Stated benefits from air quality improvement through urban afforestation in an arid city □A contingent valuation in Mexicali, Baja California, Mexico. *Urban Forestry and Urban Greening*, **2020**, 55, 126854 | 5.4 | 6 |
| 91 | 104 House Rules and Clean Kids: The down-low on Tobacco. *Paediatrics and Child Health*, **2020**, 25, e43-e43 | 1.7 | 78 |

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| 90 | Spatiotemporal Patterns of Small for Gestational Age and Low Birth Weight Births and Associations With Land Use and Socioeconomic Status. *Environmental Health Insights*, **2019**, 13, 1178630219869922 | 1.4 | 6 |
| 89 | Chemical composition of PM and its effect on in vitro hemolysis of human red blood cells (RBCs): a comparison study during dust storm and inversion. *Journal of Environmental Health Science & Engineering*, **2019**, 17, 493-502 | 2.9 | 7 |
| 88 | The index lift in data mining has a close relationship with the association measure relative risk in epidemiological studies. *BMC Medical Informatics and Decision Making*, **2019**, 19, 112 | 3.6 | 3 |
| 87 | Using maps to communicate environmental exposures and health risks: Review and best-practice recommendations. *Environmental Research*, **2019**, 176, 108518 | 7.9 | 10 |
| 86 | Proinflammatory effects of dust storm and thermal inversion particulate matter (PM) on human peripheral blood mononuclear cells (PBMCs) in vitro: a comparative approach and analysis. *Journal of Environmental Health Science & Engineering*, **2019**, 17, 433-444 | 2.9 | 14 |
| 85 | A Collaborative Research Exploration of Pollutant Mixtures and Adverse Birth Outcomes by Using Innovative Spatial Data Mining Methods: The DoMiNO Project. *Challenges*, **2019**, 10, 25 | 3.4 | 2 |
| 84 | Urban airborne particle exposure impairs human lung and blood immunity. *Thorax*, **2019**, 74, 675-683 | 7.3 | 21 |
| 83 | Building a children's health and environment research agenda in Alberta, Canada: A multi-stakeholder engagement process. *Gateways: International Journal of Community Research and Engagement*, **2019**, 12, | 1 | 2 |
| 82 | Geographical Analysis of the Distribution of Publications Describing Spatial Associations among Outdoor Environmental Variables and Really Small Newborns in the USA and Canada. *Challenges*, **2019**, 10, 11 | 3.4 | 1 |
| 81 | Interdisciplinary-driven hypotheses on spatial associations of mixtures of industrial air pollutants with adverse birth outcomes. *Environment International*, **2019**, 131, 104972 | 12.9 | 13 |
| 80 | Season and size of urban particulate matter differentially affect cytotoxicity and human immune responses to Mycobacterium tuberculosis. *PLoS ONE*, **2019**, 14, e0219122 | 3.7 | 18 |
| 79 | Urban Air Pollution Particulates Suppress Human T-Cell Responses to. *International Journal of Environmental Research and Public Health*, **2019**, 16, | 4.6 | 23 |
| 78 | In utero exposure to ultrafine particles promotes placental stress-induced programming of renin-angiotensin system-related elements in the offspring results in altered blood pressure in adult mice. *Particle and Fibre Toxicology*, **2019**, 16, 7 | 8.4 | 21 |
| 77 | Geographic information assessment of maternal ambient health hazards and adverse birth outcomes in Canada. *Science of the Total Environment*, **2019**, 696, 134091 | 10.2 | 4 |
| 76 | Maternal Area of Residence, Socioeconomic Status, and Risk of Adverse Maternal and Birth Outcomes in Adolescent Mothers. *Journal of Obstetrics and Gynaecology Canada*, **2019**, 41, 1752-1759 | 1.3 | 13 |
| 75 | Social determinants of health and adverse maternal and birth outcomes in adolescent pregnancies: A systematic review and meta-analysis. *Paediatric and Perinatal Epidemiology*, **2019**, 33, 88-99 | 2.7 | 53 |
| 74 | Proximity to two main sources of industrial outdoor air pollution and emergency department visits for childhood asthma in Edmonton, Canada. *Canadian Journal of Public Health*, **2018**, 108, e523-e529 | 3.2 | 9 |
| 73 | Discovering co-location patterns with aggregated spatial transactions and dependency rules. *International Journal of Data Science and Analytics*, **2018**, 5, 137-154 | 2 | 3 |

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| 72 | Tracking Trends in Emissions of Developmental Toxicants and Potential Associations with Congenital Heart Disease in Alberta, Canada. *Challenges*, **2018**, 9, 28 | 3.4 | |
| 71 | Industrial Developmental Toxicants and Congenital Heart Disease in Urban and Rural Alberta, Canada. *Challenges*, **2018**, 9, 26 | 3.4 | 5 |
| 70 | Exposure to ambient particulate matter induces oxidative stress in lung and aorta in a size- and time-dependent manner in rats. *Toxicology Research and Application*, **2018**, 2, 239784731879485 | 0.8 | 9 |
| 69 | Land use regression models to assess air pollution exposure in Mexico City using finer spatial and temporal input parameters. *Science of the Total Environment*, **2018**, 639, 40-48 | 10.2 | 42 |
| 68 | Airborne particulate matter in vitro exposure induces cytoskeleton remodeling through activation of the ROCK-MYPT1-MLC pathway in A549 epithelial lung cells. *Toxicology Letters*, **2017**, 272, 29-37 | 4.4 | 23 |
| 67 | Inhalation of concentrated PM from Mexico City acts as an adjuvant in a guinea pig model of allergic asthma. *Environmental Pollution*, **2017**, 228, 474-483 | 9.3 | 26 |
| 66 | Air pollution and genomic instability: The role of particulate matter in lung carcinogenesis. *Environmental Pollution*, **2017**, 229, 412-422 | 9.3 | 52 |
| 65 | A systematic review of data mining and machine learning for air pollution epidemiology. *BMC Public Health*, **2017**, 17, 907 | 4.1 | 95 |
| 64 | Mapping outdoor habitat and abnormally small newborns to develop an ambient health hazard index. *International Journal of Health Geographics*, **2017**, 16, 43 | 3.5 | 8 |
| 63 | Discovering spatial contrast and common sets with statistically significant co-location patterns **2017**, | | 1 |
| 62 | The role of socioeconomic position as an effect-modifier of the association between outdoor air pollution and children's asthma exacerbations: an equity-focused systematic review. *Reviews on Environmental Health*, **2016**, 31, 297-309 | 3.8 | 12 |
| 61 | On discovering co-location patterns in datasets: a case study of pollutants and child cancers. *GeoInformatica*, **2016**, 20, 651-692 | 2.5 | 37 |
| 60 | Atmospheric particulate matter (PM10) exposure-induced cell cycle arrest and apoptosis evasion through STAT3 activation via PKC□and Src kinases in lung cells. *Environmental Pollution*, **2016**, 214, 646-656 | 9.3 | 29 |
| 59 | TNF□and IL-6 Responses to Particulate Matter in Vitro: Variation According to PM Size, Season, and Polycyclic Aromatic Hydrocarbon and Soil Content. *Environmental Health Perspectives*, **2016**, 124, 406-12 | 8.4 | 68 |
| 58 | Aeroparticles, Composition, and Lung Diseases. *Frontiers in Immunology*, **2016**, 7, 3 | 8.4 | 180 |
| 57 | An assessment of air pollutant exposure methods in Mexico City, Mexico. *Journal of the Air and Waste Management Association*, **2015**, 65, 581-91 | 2.4 | 40 |
| 56 | Induction of c-Jun by air particulate matter (PM)□of Mexico city: Participation of polycyclic aromatic hydrocarbons. *Environmental Pollution*, **2015**, 203, 175-182 | 9.3 | 22 |
| 55 | Air pollution particulate matter alters antimycobacterial respiratory epithelium innate immunity. *Infection and Immunity*, **2015**, 83, 2507-17 | 3.7 | 77 |

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| 54 | Development of a Canadian socioeconomic status index for the study of health outcomes related to environmental pollution. *BMC Public Health*, **2015**, 15, 714 | 4.1 | 29 |
| 53 | Sampling and composition of airborne particulate matter (PM10) from two locations of Mexico City. *Data in Brief*, **2015**, 4, 353-6 | 1.2 | 12 |
| 52 | The effects of outdoor air pollution on the respiratory health of Canadian children: A systematic review of epidemiological studies. *Canadian Respiratory Journal*, **2015**, 22, 282-92 | 2.1 | 23 |
| 51 | Particulate matter (PM) induces metalloprotease activity and invasion in airway epithelial cells. *Toxicology Letters*, **2015**, 237, 167-73 | 4.4 | 22 |
| 50 | The effect of composition, size, and solubility on acute pulmonary injury in rats following exposure to Mexico city ambient particulate matter samples. *Journal of Toxicology and Environmental Health - Part A: Current Issues*, **2014**, 77, 1164-82 | 3.2 | 42 |
| 49 | Cytoplasmic p21(CIP1/WAF1), ERK1/2 activation, and cytoskeletal remodeling are associated with the senescence-like phenotype after airborne particulate matter (PM(10)) exposure in lung cells. *Toxicology Letters*, **2014**, 225, 12-9 | 4.4 | 27 |
| 48 | Using pollutant release and transfer register data in human health research: a scoping review. *Environmental Reviews*, **2014**, 22, 51-65 | 4.5 | 15 |
| 47 | Air pollution, inflammation and preterm birth: a potential mechanistic link. *Medical Hypotheses*, **2014**, 82, 219-24 | 3.8 | 85 |
| 46 | Exposure to Beta-(1,3)-D-glucan in house dust at age 7-10 is associated with airway hyperresponsiveness and atopic asthma by age 11-14. *PLoS ONE*, **2014**, 9, e98878 | 3.7 | 30 |
| 45 | Discovering Statistically Significant Co-location Rules in Datasets with Extended Spatial Objects. *Lecture Notes in Computer Science*, **2014**, 124-135 | 0.9 | 12 |
| 44 | Exposure to inhaled particulate matter activates early markers of oxidative stress, inflammation and unfolded protein response in rat striatum. *Toxicology Letters*, **2013**, 222, 146-54 | 4.4 | 81 |
| 43 | Variation in the composition and in vitro proinflammatory effect of urban particulate matter from different sites. *Journal of Biochemical and Molecular Toxicology*, **2013**, 27, 87-97 | 3.4 | 30 |
| 42 | Particulate matter promotes in vitro receptor-recognizable low-density lipoprotein oxidation and dysfunction of lipid receptors. *Journal of Biochemical and Molecular Toxicology*, **2013**, 27, 69-76 | 3.4 | 6 |
| 41 | Air pollution, inflammation and preterm birth in Mexico City: study design and methods. *Science of the Total Environment*, **2013**, 448, 79-83 | 10.2 | 21 |
| 40 | Discovering Co-location Patterns in Datasets with Extended Spatial Objects. *Lecture Notes in Computer Science*, **2013**, 84-96 | 0.9 | 8 |
| 39 | Fish consumption by children in Canada: Review of evidence, challenges and future goals. *Paediatrics and Child Health*, **2012**, 17, 241-5 | 0.7 | 7 |
| 38 | Particulate matter Air Pollution induces hypermethylation of the p16 promoter Via a mitochondrial ROS-JNK-DNMT1 pathway. *Scientific Reports*, **2012**, 2, 275 | 4.9 | 68 |
| 37 | Air pollution: An environmental factor contributing to intestinal disease. *Journal of Crohn's and Colitis*, **2011**, 5, 279-86 | 1.5 | 119 |

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| 36 | Food additives, essential nutrients and neurodevelopmental behavioural disorders in children: A brief review. *Paediatrics and Child Health*, **2011**, 16, e54-6 | 0.7 | 4 |
| 35 | The oxidative potential and biological effects induced by PM10 obtained in Mexico City and at a receptor site during the MILAGRO Campaign. *Environmental Pollution*, **2011**, 159, 3446-54 | 9.3 | 16 |
| 34 | In vitro biological effects of airborne PM and PM from a semi-desert city on the Mexico-US border. *Chemosphere*, **2011**, 83, 618-26 | 8.4 | 50 |
| 33 | Ambient particulate matter induces interleukin-8 expression through an alternative NF- (nuclear factor-kappa B) mechanism in human airway epithelial cells. *Environmental Health Perspectives*, **2011**, 119, 1379-83 | 8.4 | 39 |
| 32 | PM(10) impairs the antioxidant defense system and exacerbates oxidative stress driven cell death. *Toxicology Letters*, **2010**, 193, 209-16 | 4.4 | 51 |
| 31 | Cellular Mechanisms behind Particulate Matter Air Pollution Related Health Effects **2010**, 249-274 | | 6 |
| 30 | An overview of the MILAGRO 2006 Campaign: Mexico City emissions and their transport and transformation. *Atmospheric Chemistry and Physics*, **2010**, 10, 8697-8760 | 6.8 | 296 |
| 29 | DNA damage response of A549 cells treated with particulate matter (PM10) of urban air pollutants. *Cancer Letters*, **2009**, 278, 192-200 | 9.9 | 70 |
| 28 | Induction of IL-6 and inhibition of IL-8 secretion in the human airway cell line Calu-3 by urban particulate matter collected with a modified method of PM sampling. *Environmental Research*, **2009**, 109, 528-35 | 7.9 | 64 |
| 27 | Melamine food contamination: Relevance to Canadian children. *Paediatrics and Child Health*, **2009**, 14, 222-4 | 0.7 | 4 |
| 26 | Trends in childhood cancer incidence: review of environmental linkages. *Pediatric Clinics of North America*, **2007**, 54, 177-203, x | 3.6 | 32 |
| 25 | Mortality due to lung cancer in Mexico. *Lung Cancer*, **2007**, 58, 184-90 | 5.9 | 18 |
| 24 | Potential toxic effects associated to metals and endotoxin present in PM10: an ancillary study using multivariate analysis. *Inhalation Toxicology*, **2007**, 19 Suppl 1, 49-53 | 2.7 | 16 |
| 23 | E-Selectin expression in human endothelial cells exposed to PM10: the role of endotoxin and insoluble fraction. *Environmental Research*, **2007**, 103, 221-8 | 7.9 | 34 |
| 22 | Relations between PM10 composition and cell toxicity: a multivariate and graphical approach. *Chemosphere*, **2007**, 67, 1218-28 | 8.4 | 71 |
| 21 | Ambient air pollution and children's health: A systematic review of Canadian epidemiological studies. *Paediatrics and Child Health*, **2007**, 12, 225-33 | 0.7 | 9 |
| 20 | Characterization and in vitro biological effects of concentrated particulate matter from Mexico City. *Atmospheric Environment*, **2006**, 40, 583-592 | 5.3 | 70 |
| 19 | Ambient particulate matter affects cardiac recovery in a Langendorff ischemia model. *Inhalation Toxicology*, **2006**, 18, 633-43 | 2.7 | 25 |

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| 18 | The effects of air pollution on the health of children. *Paediatrics and Child Health*, **2006**, | 0.7 | 1 |
| 17 | The effects of air pollution on the health of children. *Paediatrics and Child Health*, **2006**, 11, 513-6 | 0.7 | 20 |
| 16 | Proinflammatory and cytotoxic effects of Mexico City air pollution particulate matter in vitro are dependent on particle size and composition. *Environmental Health Perspectives*, **2003**, 111, 1289-93 | 8.4 | 212 |
| 15 | Biologic effects induced in vitro by PM10 from three different zones of Mexico City. *Environmental Health Perspectives*, **2002**, 110, 715-20 | 8.4 | 155 |
| 14 | Animal and worker exposure to dust and biological particles in animal care houses. *Aerobiologia*, **2001**, 17, 49-59 | 2.4 | 6 |
| 13 | Priming of cytokine release and increased levels of bactericidal permeability-increasing protein in the blood of animal facility workers. *International Archives of Occupational and Environmental Health*, **1999**, 72, 323-9 | 3.2 | 8 |
| 12 | Human cervical cancer-associated nuclear matrix proteins. *Experimental Cell Research*, **1998**, 244, 14-25 | 4.2 | 10 |
| 11 | Induction of the lung myofibroblast PDGF receptor system by urban ambient particles from Mexico City. *American Journal of Respiratory Cell and Molecular Biology*, **1998**, 19, 672-80 | 5.7 | 95 |
| 10 | Differential binding and regulation of platelet-derived growth factor A and B chain isoforms by alpha 2-macroglobulin. *Journal of Biological Chemistry*, **1995**, 270, 16236-42 | 5.4 | 26 |
| 9 | Ferruginous bodies as markers of environmental exposure to inorganic particles: experience with 270 autopsy cases in Mexico. *Environmental Research*, **1994**, 64, 10-7 | 7.9 | 7 |
| 8 | Early-passage rat lung fibroblasts do not migrate in vitro to transforming growth factor-beta. *American Journal of Respiratory Cell and Molecular Biology*, **1993**, 8, 468-71 | 5.7 | 9 |
| 7 | Inorganic particles induce secretion of a macrophage homologue of platelet-derived growth factor in a density-and time-dependent manner in vitro. *Experimental Lung Research*, **1991**, 17, 1011-24 | 2.3 | 14 |
| 6 | Lung cell toxicity experimentally induced by a mixed dust from Mexicali, Baja California, Mexico. *Environmental Research*, **1991**, 56, 31-47 | 7.9 | 18 |
| 5 | Differential proliferation of rat lung fibroblasts induced by the platelet-derived growth factor-AA, -AB, and -BB isoforms secreted by rat alveolar macrophages. *American Journal of Respiratory Cell and Molecular Biology*, **1991**, 5, 539-47 | 5.7 | 98 |
| 4 | PDGF-stimulated fibroblast proliferation is enhanced synergistically by receptor-recognized alpha 2-macroglobulin. *Journal of Cellular Physiology*, **1990**, 145, 1-8 | 7 | 53 |
| 3 | Rat alveolar macrophage-derived platelet-derived growth factor is chemotactic for rat lung fibroblasts. *American Journal of Respiratory Cell and Molecular Biology*, **1990**, 3, 595-602 | 5.7 | 26 |
| 2 | Extrapulmonary silicosis: a clinical, morphologic, and ultrastructural study. *Human Pathology*, **1985**, 16, 393-412 | 3.7 | 83 |
| 1 | The role of socioeconomic status and the development of congenital heart disease: A scoping review. *Advances in Pediatric Research*, | 3.5 | 2 |