

Clean Air Publications – Exposure Science
[Sorted by Author]
1998-April 2009

1. Adgate,J.L., Ramachandran,G., Pratt,G.C., Waller,L.A., Sexton,K., 2002. Spatial and temporal variability in outdoor, indoor, and personal PM_{2.5} exposure, *Atmos. Environ.* 36, pp. 3255-3265.
2. Adgate,J.L., Ramachandran,G., Pratt,G.C., Waller,L.A., Sexton,K., 2003. Longitudinal variability in outdoor, indoor, and personal PM_{2.5} exposure in healthy non-smoking adults, *Atmos. Environ.* 37, pp. 993-1002.
3. Adgate,J.L., Church,T.R., Ryan,A.D., Ramachandran,G., Fredrickson,A.L., Stock,T.H., Morandi,M.T., Sexton,K., 2004. Outdoor, indoor, and personal exposure to VOCs in children, *Environ. Health Perspect.* 112, pp. 1386-1392.
4. Allen,R., Larson,T., Sheppard,L., Wallace,L., Liu,L.-J.S., 2003. Use of real-time light scattering data to estimate the contribution of infiltrated and indoor-generated particles to indoor air, *Environ. Sci. Technol.* 37, pp. 3484-3492.
5. Allen,R., Wallace,L., Larson,T.V., Sheppard,L., Liu,L.-J.S., 2004. Estimated hourly personal exposures to ambient and non-ambient particulate matter among sensitive populations in Seattle, Washington, *J. Air Waste Manag. Assoc.* 54, pp. 1197-1211.
6. Allen,R.W., Mar,T., Koenig,J., Liu,L.-J.S., Gould,T., Simpson,C., Larson,T., 2008. Changes in Lung Function and Airway Inflammation Among Asthmatic Children Residing in a Woodsmoke-Impacted Urban Area, *Inhal. Toxicol.* 20, pp. 423-433.
7. Anderson,M.J., Miller,S.L., Milford,J.B., 2001. Source apportionment of exposure to toxic volatile organic compounds using positive matrix factorization, *J. Expo. Anal. Environ. Epidemiol.* 11, pp. 295-307.
8. Anderson,M.J., Daly,E.P., Miller,S.L., Milford,J.B., 2002. Source apportionment of exposures to volatile organic compounds: II. Application of receptor models to TEAM study data, *Atmos. Environ.* 36, pp. 3643-3658.
9. Baldauf,R.W., Lane,D.D., Marotz,G.A., 2001. Ambient Air Quality Monitoring Network Design for Assessing Human Health Impacts from Exposures to Airborne Contaminants, *Environmental Monitoring and Assessment* 66, pp. 63-76.
10. Baldauf,R., Fortune,C., Weinstein,J., Wheeler,M., Blanchard,F., 2006. Air contaminant exposures during the operation of lawn and garden equipment, *J Expos Sci Environ Epidemiol* 16, pp. 362-370.
11. Barr,D.B., Landsittel,D., Nishioka,M., Thomas,K., Curwin,B., Raymer,J., Donnelly,K.C., McCauley,L., Ryan,P.B., 2006. A survey of laboratory and statistical issues related to farmworker exposure studies, *Environ. Health Perspect.* 114, pp. 961-968.
12. Bayer-Oglesby,L., Schindler,C., Hazenkamp-von Arx,M.E., Braun-Fahrlander,C., Keidel,D., Rapp,R., Kunzli,N., Braendli,O., Burdet,L., Liu,L.-J.S., Leuenberger,P., Ackermann-Liebrich,U., the SAPALDIA Team, 2006. Living near Main Streets and Respiratory Symptoms in Adults: The Swiss Cohort Study on Air Pollution and Lung Diseases in Adults, *Am. J. Epidemiol.* 164, pp. 1190-1198.

13. Bell,M.L., Kim,J.Y., Dominici,F., 2007. Potential confounding of particulate matter on the short-term association between ozone and mortality in multisite time-series studies, *Environ. Health Perspect.* 115, pp. 1591-1595.
14. Belnap,J., Gillette,D.A., 1998. Vulnerability of desert biological soil crusts to wind erosion: the influences of crust development, soil texture, and disturbance, *Journal of Arid Environments* 39, pp. 133-142.
15. Benignus,V.A., Bushnell,P.J., Boyes,W.K., 2005. Toward cost-benefit analysis of acute behavioral effects of toluene in humans, *Risk Anal.* 25, pp. 447-456.
16. Benignus,V.A., Boyes,W.K., Bushnell,P.J., 1998. A Dosimetric Analysis of Behavioral Effects of Acute Toluene Exposure in Rats and Humans, *Toxicol. Sci.* 43, pp. 186-195.
17. Bird,S.L., Perry,S.G., Ray,S.L., Teske,M.E., 2002. Evaluation of the AgDISP aerial spray algorithms in the AgDRIFT model., *Environmental Toxicology and Chemistry* 21, pp. 672-681.
18. Boyes,W.K., Bushnell,P.J., Crofton,K.M., Evans,M., Simmons,J.E., 2000. Neurotoxic and pharmacokinetic responses to trichloroethylene as a function of exposure scenario, *Environ. Health Perspect.* 108 Suppl 2, pp. 317-322.
19. Boyes,W.K., Evans,M.V., Eklund,C., Janssen,P., Simmons,J.E., 2005. Duration adjustment of acute exposure guideline level values for trichloroethylene using a physiologically-based pharmacokinetic model, *Risk Anal.* 25, pp. 677-686.
20. Boyes,W.K., Bercegeay,M., Krantz,T., Evans,M., Benignus,V., Simmons,J.E., 2005. Momentary brain concentration of trichloroethylene predicts the effects on rat visual function, *Toxicol. Sci.* 87, pp. 187-196.
21. Boyes,W.K., Bushnell,P.J., 2006. Managing exposures to neurotoxic air pollutants., *EM: Air and Waste Management Association's Magazine for Environmental Managers* Feb., p. 33.
22. Boyes,W.K., Simmons,J.E., Eklund,C., Benignus,V.A., Janssen,P., Bushnell,P.J., 2005. Applications of dosimetry modeling to assessment of neurotoxic risk, *Environ. Toxicol. Pharmacol.* 19, pp. 599-605.
23. Burke,J.M., Zufall,M.J., Ozkaynak,H., 2001. A population exposure model for particulate matter: case study results for PM(2.5) in Philadelphia, PA, *J. Expo. Anal. Environ. Epidemiol.* 11, pp. 470-489.
24. Bushnell,P.J., Oshiro,W.M., 2000. Behavioral components of tolerance to repeated inhalation of trichloroethylene (TCE) in rats, *Neurotoxicol. Teratol.* 22, pp. 221-229.
25. Bushnell,P.J., Shafer,T.J., Bale,A.S., Boyes,W.K., Simmons,J.E., Eklund,C., Jackson,T.L., 2005. Developing an exposure-dose-response model for the acute neurotoxicity of organic solvents: overview and progress on in vitro models and dosimetry, *Environ. Toxicol. Pharmacol.* 19, pp. 607-614.
26. Calderon-Garcidueñas,L., Gambling,T.M., Acuna,H., Garcia,R., Osnaya,N., Monroy,S., Villarreal-Calderon,A., Carson,J., Koren,H.S., Devlin,R.B., 2001. Canines as sentinel species for assessing chronic exposures to air pollutants: part 2. Cardiac pathology, *Toxicol. Sci.* 61, pp. 356-67.
27. Cardello,N., Volckens,J., Tolocka,M.P., Wiener,R.W., Buckley,T.J., 2002. Technical Note: Performance of a personal electrostatic precipitator particle sampler, *Aerosol Sci. Technol.* 36, pp. 162-165.

28. Chakrabarti,B., Fine,P., Delfino,R., Sioutas,C., 2004. Performance Evaluation of an Active Personal DataRAM PM2.5 Mass Monitor (Thermo Anderson pDR-1200) Designed for Continuous Personal Exposure Measurements, *Atmos. Environ.* 38, pp. 3329-3340.
29. Chakrabarti,B., Singh,M., Sioutas,C., 2004. Development of a Near-Continuous Monitor for Measurement of the Sub-150 nm PM Mass Concentration, *Aerosol Sci. Technol.* 38, pp. 239-252.
30. Chang,J.C.S., Guo,Z., Fortmann,R., Lao,H.C., 2002. Characterization and Reduction of Formaldehyde Emissions from a Low-VOC Latex Paint, *Indoor Air* 12, pp. 10-16.
31. Chang,M.C., Geller,M.D., Sioutas,C., Fokkens,P.H.B., Cassee,F.R., 2002. Development and Evaluation of a Compact Highly Efficient Coarse Particle Concentrator for Toxicological Studies, *Aerosol Sci. Technol.* 36, pp. 492-501.
32. Chen,C.Y., Chow,D., Chiamvimonvat,N., Glatter,K.A., Li,N., He,Y., Pinkerton,K.E., Bonham,A.C., 2008. Short-term secondhand smoke exposure decreases heart rate variability and increases arrhythmia susceptibility in mice, *AJP - Heart and Circulatory Physiology* 295, p. H632-H639.
33. Chen,F.L., Williams,R., Svendsen,E., Yeatts,K., Creason,J., Scott,J., Terrell,D., Case,M., 2007. Coarse particulate matter concentrations from residential outdoor sites associated with the North Carolina Asthma and Children's Environment Studies (NC-ACES), *Atmos. Environ.* 41, pp. 1200-1208.
34. Chen,J.C., Stone,P.H., Verrier,R.L., Nearing,B.D., MacCallum,G., Kim,J.Y., Herrick,R.F., You,J., Zhou,H., Christiani,D.C., 2006. Personal coronary risk profiles modify autonomic nervous system responses to air pollution, *J. Occup. Environ. Med.* 48, pp. 1133-1142.
35. Chow,J.C., Engelbrecht,J.P., Freeman,N.C.G., Hashim,J.H., Jantunen,M., Michaud,J.-P., Saenz de Tejada,S., Watson,J.G., Wei,F., Wilson,W.E., Yasuno,M., Zhu,T., 2002. Chapter One: Exposure Measurements, *Chemosphere* 49, pp. 873-901.
36. Chow,J.C., Engelbrecht,J.P., Watson,J.G., Wilson,W.E., Frank,N.H., Zhu,T., 2002. Designing monitoring networks to represent outdoor human exposure, *Chemosphere* 49, pp. 961-978.
37. Chow,J.C., Scheffe,R., Solomon,P.A., 2004. Preface: Special Section of the Journal of Air & Waste Management Association for Particulate Matter: Atmospheric Sciences, Exposure And The Fourth Colloquium On PM and Human Health, *J. Air Waste Manag. Assoc.* 54, p. 1025.
38. Clark,M., Paulsen,M., Canuz,E., Smith,K.R., Simpson,C.D., 2007. Urinary Methoxyphenol Biomarkers and Woodsmoke Exposure: Comparisons in Rural Guatemala with Personal CO and Kitchen CO, Levoglucosan, and PM2.5, *Environ. Sci. Technol.* 41, pp. 3481-3487.
39. Cohen,M.D., Prophete,C., Sisco,M., Chen,L.C., Zelikoff,J.T., Smee,J.J., Holder,A.A., Crans,D.C., 2006. Pulmonary Immunotoxic Potentials of Metals Are Governed by Select Physicochemical Properties: Chromium Agents, *J. Immunotoxicol.* 3, pp. 69-81.
40. Conner,T.L., Norris,G.A., Landis,M.S., Williams,R.W., 2001. Individual particle analysis of indoor, outdoor, and community samples from the 1998 Baltimore particulate matter study, *Atmos. Environ.* 35, pp. 3935-3946.
41. Conner,T.L., Williams,R.W., 2004. Identification of possible sources of particulate matter in the personal cloud using SEM/EDX, *Atmos. Environ.* 38, pp. 5305-5310.

42. Cook,R., Strum,M., Touma,J.S., Palma,T., Thurman,J., Ensley,D., Smith,R., 2006. Inhalation exposure and risk from mobile source air toxics in future years, *J Expos Sci Environ Epidemiol* 17, pp. 95-105.
43. Cook,R., Touma,J.S., Fernandez,A., Thurman,J., Strum,M., Ensley,D., Baldauf,R., 2007. Impact of Underestimating the Effects of Cold Temperature on Motor Vehicle Start Emissions of Air Toxics in the United States, *J. Air Waste Manag. Assoc.* 57, pp. 1469-1479.
44. Corey,L.M., Baker,C., Luchtel,D.L., 2006. Heart rate variability in the apolipoprotein E knockout transgenic mouse following exposure to Seattle particulate matter, *J. Toxicol. Environ. Health A* 69, pp. 953-965.
45. Costa,D.L., Dreher,K.L., 1999. What do we need to know about airborne particles to make effective risk management decisions?, *Hum. Ecol. Risk Assess.* 5, pp. 481-492.
46. Costa,D.L., 2003. Issues that must be addressed for risk assessment of mixed exposures: the EPA experience with air quality., *J. Toxicol. Environ. Health A* 67, pp. 195-207.
47. Cui,Y., Zhang,Z.F., Froines,J., Zhao,J.K., Wang,H., Yu,S.Z., Detels,R., 2003. Air pollution and case fatality of SARS in the people's republic of China: an ecologic study, *Environmental Health: A Global Access Science Source* 2003 2, p. 15.
48. Davis,J.M., Calabrese,E.J., 1998. The biological effects of low-level exposures (BELLE)., *Comments On Toxicology* 6, pp. 241-246.
49. Davis,J.M., Jarabek,A.M., Mage,D.T., Graham,J.A., 1998. The EPA health risk assessment of methylcyclopentadienyl manganese tricarbonyl (MMT), *Risk Anal.* 18, pp. 57-70.
50. Davis,J.M., Farland,W.H., 1998. Biological effects of low-level exposures: a perspective from U.S. EPA scientists, *Environ. Health Perspect.* 106 Suppl 1, pp. 379-381.
51. Demokritou,P., Kavouras,I., Ferguson,S., Koutrakis,P., 2001. Development and Laboratory Performance Evaluation of a Personal Multipollutant Sampler for Simultaneous Measurements of Particulate and Gaseous Pollutants, *Aerosol Sci. Technol.* 35, pp. 741-752.
52. Demokritou,P., Gupta,T., Ferguson,S., Koutrakis,P., 2002. Development and laboratory performance evaluation of a personal cascade impactor, *J. Air Waste Manag. Assoc.* 52, pp. 1230-1237.
53. Demokritou,P., Gupta,T., Ferguson,S., Koutrakis,P., 2003. Development of a high-volume concentrated ambient particles system (CAPS) for human and animal inhalation toxicological studies, *Inhal. Toxicol.* 15, pp. 111-129.
54. Dills,R.L., Zhu,X., Kalman,D.A., 2001. Measurement of urinary methoxyphenols and their use for biological monitoring of wood smoke exposure, *Environ. Res.* 85, pp. 145-158.
55. Dills,R.L., Paulsen,M., Ahmad,J., Kalman,D.A., Elias,F.N., Simpson,C.D., 2006. Evaluation of Urinary Methoxyphenols as Biomarkers of Woodsmoke Exposure, *Environ. Sci. Technol.* 40, pp. 2163-2170.
56. Doherty,S.P., Prophete,C., Maciejczyk,P., Salnikow,K., Gould,T., Larson,T., Koenig,J., Jaques,P., Sioutas,C., Zelikoff,J.T., Lippmann,M., Cohen,M.D., 2007. Detection of Changes in Alveolar Macrophage Iron Status Induced by Select PM_{2.5}-Associated Components Using Iron-Response Protein Binding Activity, *Inhal. Toxicol.* 19, pp. 553-562.

57. Ebelt,S.T., Wilson,W.E., Brauer,M., 2005. Exposure to Ambient and Nonambient Components of Particulate Matter: A Comparison of Health Effects, *Epidemiology* 16, pp. 396-405.
58. Elder,A.C.P., Gelein,R., Finkelstein,J., Phipps,R.P., Frampton,M., Utell,M.J., Kittelson,D.B., Watts,W.F., Hopke,P.K., Jeong,C.-H., Liu,W., Zhao,W., Zhou,L., Vincent,R., Kumarathasan,P., Oberdorster,G., 2004. On-Road Exposure to Highway Aerosols. 2. Exposures of Aged, Compromised Rats, *Inhal. Toxicol.* 16, pp. 41-53.
59. Evans,G.F., Highsmith,R.V., Sheldon,L.S., Suggs,J.C., Williams,R.W., Zweidinger,R.B., Creason,J.P., Walsh,D., Rodes,C.E., Lawless,P.A., 2000. The 1999 Fresno particulate matter exposure studies: comparison of community, outdoor, and residential PM mass measurements, *J. Air Waste Manag. Assoc.* 50, pp. 1887-96.
60. Evans,J.S., Wolff,K., Phonboon,K., Levy,J.I., Smith,K.R., 2002. Exposure Efficiency: An Idea Whose Time has Come?, *Chemosphere* 49, pp. 1075-1091.
61. Finkelstein,P.L., Davison,A.W., Neufeld,H.S., Meyers,T.P., Chappelka,A.H., 2004. Sub-canopy deposition of ozone in a stand of cutleaf coneflower, *Environmental Pollution* 131, pp. 295-303.
62. Foos,B., Marty,M., Schwartz,J., Bennett,W., Moya,J., Jarabek,A.M., Salmon,A.G., 2008. Focusing on Children's Inhalation Dosimetry and Health Effects for Risk Assessment: An Introduction, *J. Toxicol. Environ. Health A* 71, pp. 149-165.
63. Frampton,M.W., Stewart,J.C., Oberdorster,G., Morrow,P.E., Chalupa,D., Pietropaoli,A.P., Frasier,L.M., Speers,D.M., Cox,C., Huang,L.-S., Utell,M.J., 2006. Inhalation of ultrafine particles alters blood leukocyte expression of adhesion molecules in humans, *Environ. Health Perspect.* 114, pp. 51-58.
64. Fruin,S.A., St.Denis,M.J., Winer,A.M., Colome,S.D., Lurmann,F.W., 2001. Reductions in Human Benzene Exposure in the California South Coast Air Basin, *Atmos. Environ.* 35, pp. 1069-1077.
65. Gauderman,W.J., Avol,E., Lurmann,F., Kuenzli,N., Gilliland,F., Peters,J., McConnell,R., 2005. Childhood Asthma and Exposure to Traffic and Nitrogen Dioxide, *Epidemiology* 16, pp. 737-743.
66. Geller,M.D., Chang,M., Sioutas,C., Ostro,B.D., Lipsett,M.J., 2002. Indoor/outdoor relationship and chemical composition of fine and coarse particles in the southern California deserts, *Atmos. Environ.* 36, pp. 1099-1110.
67. Godwin,C.C., Batterman,S.A., Sahni,S.P., Peng,C.-Y., 2003. Indoor environment quality in dental clinics: Potential concerns from particulate matter., *American Journal of Dentistry* 16, pp. 260-266.
68. Gonzales,M., Qualls,C., Hudgens,E., Neas,L., 2005. Characterization of a spatial gradient of nitrogen dioxide across a United States-Mexico border city during winter, *Sci. Total Environ.* 337, pp. 163-173.
69. Goswami,E., Larson,T., Lumley,T., Liu,L.-J.S., 2002. Spatial characteristics of fine particulate matter: identifying representative monitoring locations in Seattle, Washington, *J. Air Waste Manag. Assoc.* 52, pp. 324-333.
70. Gould,T., Larson,T., Stewart,J., Kaufman,J.D., Slater,D., McEwen,N., 2008. A Controlled Inhalation Diesel Exhaust Exposure Facility with Dynamic Feedback Control of PM Concentration, *Inhal. Toxicol.* 20, pp. 49-52.

71. Gulson,B., Mizon,K., Taylor,A., Korsch,M., Stauber,J., Davis,J.M., Louie,H., Wu,M., Swan,H., 2006. Changes in manganese and lead in the environment and young children associated with the introduction of methylcyclopentadienyl manganese tricarbonyl in gasoline--preliminary results, *Environ. Res.* 100, pp. 100-114.
72. Guo,Z., Mosley,R.B., Wasson,S.J., Fortmann,R.C., McBriar,J.A., 2001. Dissociation of sulfur hexafluoride tracer gas in the presence of an indoor combustion source, *J. Air Waste Manag. Assoc.* 51, pp. 616-622.
73. Haneuse,S., Wakefield,L., Sheppard,L., 2007. The interpretation of exposure effect estimates in chronic air pollution studies, *Stat. Med.* 26, pp. 3172-3187.
74. Hecht,S.S., Ye,M., Carmella,S.G., Fredrickson,A., Adgate,J.L., Greaves,I.A., Church,T.R., Ryan,A.D., Mongin,S.J., Sexton,K., 2001. Metabolites of a tobacco-specific lung carcinogen in the urine of elementary school-aged children, *Cancer Epidemiol Biomarkers Prev.* 10, pp. 1109-1116.
75. Hopke,P.K., Ramadan,Z., Paatero,P., Norris,G.A., Landis,M.S., Williams,R.W., Lewis,C.W., 2003. Receptor modeling of ambient and personal exposure samples: 1998 Baltimore particulate matter epidemiology-exposure study, *Atmos. Environ.* 37, pp. 3289-3302.
76. Houston,D., Wu,J., Ong,P., Winer,A., 2004. Structural Disparities of Urban Traffic in Southern California: Implications for Vehicle-related Air Pollution Exposure in Minority and High-poverty Neighborhoods, *J. Urban Aff.* 26, pp. 565-592.
77. Howard-Reed,C., Rea,A.W., Zufall,M.J., Burke,J.M., Williams,R.W., Suggs,J.C., Sheldon,L.S., Walsh,D., Kwok,R., 2000. Use of a continuous nephelometer to measure personal exposure to particles during the U.S. Environmental Protection Agency Baltimore and Fresno Panel studies, *J. Air Waste Manag. Assoc.* 50, pp. 1125-1132.
78. Howard-Reed,C., Wallace,L.A., Ott,W.R., 2002. The effect of opening windows on air change rates in two homes., *J. Air Waste Manag. Assoc.* 52, pp. 147-159.
79. Isakov,V., Graham,S.E., Burke,J.M., Ozkaynak,H.A., 2006. Linking air quality and exposure models, *EM: Air and Waste Management Association's Magazine for Environmental Managers* September, pp. 26-29.
80. Isakov,V., Irwin,J., Ching,J.K., 2007. Using CMAQ for exposure modeling and characterizing the sub-grid variability for exposure estimates, *Journal of Applied Meteorology and Climatology* 46, pp. 1354-1371.
81. Ito,K., Thurston,G.D., Nádas,A., Lippmann,M., 2001. Monitor-to-monitor temporal correlation of air pollution and weather variables in the North-Central U.S, *J. Expo. Anal. Environ. Epidemiol.* 11, pp. 21-32.
82. Karr,C., Lumley,T., Schreuder,A., Davis,R., Larson,T., Ritz,B., Kaufman,J., 2007. Effects of Subchronic and Chronic Exposure to Ambient Air Pollutants on Infant Bronchiolitis, *Am. J. Epidemiol.* 165, pp. 553-560.
83. Kennedy,I.M., 2007. The health effects of combustion-generated aerosols, *Proc. Combust. Inst.* 31, pp. 2757-2770.
84. Kim,J.Y., Burnett,R.T., Neas,L., Thurston,G.D., Schwartz,J., Tolbert,P.E., Brunekreef,B., Goldberg,M.S., Romieu,I., 2007. Panel discussion review: session two--interpretation of observed associations between multiple ambient air pollutants and health effects in epidemiologic analyses, *J Expos Sci Environ Epidemiol* 17, p. S83-S89.

85. Kim,S., Chang,M.C., Kim,D., Sioutas,C., 2000. A New Generation of Portable Coarse, Fine and Ultrafine Particle Concentrators for Use in Inhalation Toxicology, *Inhal. Toxicol.* 12, pp. 121-137.
86. Kim,S., Sioutas,C., Chang,M.C., Gong,H., Jr., 2000. Factors affecting the stability of the performance of ambient fine-particle concentrators, *Inhal. Toxicol.* 12, pp. 281-298.
87. Kim,S., Jaques,P.A., Chang,M., Barone,T., Xiong,C., Friedlander,S.K., Sioutas,C., 2001. Versatile Aerosol Concentration Enrichment System (VACES) for Simultaneous In Vivo and In Vitro Evaluation of Toxic Effects of Ultrafine, Fine and Coarse Ambient Particles. Part II: Field Evaluation, *J. Aerosol Sci.* 32, pp. 1299-1314.
88. Kim,S., Jaques,P.A., Chang,M., Froines,J.R., Sioutas,C., 2001. Versatile Aerosol Concentration Enrichment System (VACES) for Simultaneous In Vivo and In Vitro Evaluation of Toxic Effects of Ultrafine, Fine and Coarse Ambient Particles. Part I: Development and Laboratory Characterization, *J. Aerosol Sci.* 32, pp. 1281-1297.
89. Kittelson,D.B., Watts,W.F., Johnson,J.P., Remerowski,M.L., Ische,E.E., Oberdorster,G., Gelein,R.M., Elder,A.C.P., Hopke,P.K., Kim,E., Zhao,W., Zhou,L., Jeong,C.-H., 2004. On-road exposure to highway aerosols. 1. Aerosol and gas measurements, *Inhal. Toxicol.* 16, pp. 31-39.
90. Koenig,J.Q., Jansen,K., Mar,T.F., Lumley,T., Kaufman,J., Trenga,C.A., Sullivan,J., Liu,L.-J.S., Shapiro,G.G., Larson,T.V., 2003. Measurement of offline exhaled nitric oxide in a study of community exposure to air pollution, *Environ. Health Perspect.* 111, pp. 1625-1629.
91. Krudysz,M., Froines,J., Fine,P.M., Sioutas,C., 2008. Intra-community spatial variation of size-fractionated PM mass, OC, EC, and trace elements in the Long Beach, CA area, *Atmos. Environ.* 42, pp. 5374-5389.
92. Kuhn,T., Krudysz,M., Zhu,Y., Fine,P.M., Hinds,W.C., Froines,J., Sioutas,C., 2005. Volatility of Indoor and Outdoor Ultrafine Particulate Matter Near a Freeway, *J. Aerosol Sci.* 36, pp. 291-302.
93. Lall,R., Kendall,M., Ito,K., Thurston,G., 2004. Estimation of historical annual PM2.5 exposures for health effects assessment, *Atmos. Environ.* 38, pp. 5217-5226.
94. Landis,M.S., Norris,G.A., Williams,R.W., Weinstein,J.P., 2001. Personal exposures to PM2.5 Mass and Trace Elements in Baltimore, Maryland., *Atmos. Environ.* 35, pp. 6511-6524.
95. Landrigan,P.J., Lioy,P.J., Thurston,G., Berkowitz,G., Chen,L.C., Chillrud,S.N., Gavett,S.H., Georgopoulos,P.G., Gehy,A.S., Levin,S., Perera,F., Rappaport,S.M., Small,C., NIEHS World Trade Center Working Group, 2004. Health and environmental consequences of the World Trade Center Disaster, *Environ. Health Perspect.* 112, pp. 731-739.
96. LaRosa,L.E., Buckley,T.J., Wallace,L.A., 2002. Real-time indoor and outdoor measurements of black carbon in an occupied house: an examination of sources, *J. Air Waste Manag. Assoc.* 52, pp. 41-49.
97. Lawless,P., Rodes,C., Evans,G., Sheldon,L., Creason,J., 2001. Aerosol concentrations during the 1999 Fresno exposure studies as functions of size, season, and meteorology., *Aerosol Sci. Technol.* 34, pp. 66-74.
98. Ledbetter,A.D., Killough,P.M., Hudson,G.F., 1998. A low-sample-consumption dry-particulate aerosol generator for use in nose-only inhalation exposures., *Inhal. Toxicol.* 10, pp. 239-251.
99. Lee,S.J., Demokritou,P., Koutrakis,P., 2005. Performance Evaluation of Commonly Used Impaction Substrates under Various Loading Conditions, *J. Aerosol Sci.* 36, pp. 881-895.

100. Levy,J.I., Houseman,E.A., Ryan,L., Richardson,D., Spengler,J.D., 2000. Particle concentrations in urban microenvironments, *Environ. Health Perspect.* 108, pp. 1051-1057.
101. Levy,J.I., Houseman,E.A., Spengler,J.D., Loh,P., Ryan,L., 2001. Fine particulate matter and polycyclic aromatic hydrocarbon concentration patterns in Roxbury, Massachusetts: a community-based GIS analysis, *Environ. Health Perspect.* 109, pp. 341-347.
102. Levy,J.I., Dumyahn,T., Spengler,J.D., 2002. Particulate matter and polycyclic aromatic hydrocarbon concentrations in indoor and outdoor microenvironments in Boston, Massachusetts, *J. Expo. Anal. Environ. Epidemiol.* 12, pp. 104-14.
103. Levy,J.I., Wolff,S.K., Evans,J.S., 2002. A Regression-Based Approach for Estimating Primary and Secondary Particulate Matter Intake Fractions, *Risk Anal.* 22, pp. 895-904.
104. Levy,J.I., Wilson,A., Evans,J.S., Spengler,J.D., 2003. Estimation of Primary and Secondary Particulate Matter Intake Fractions for Power Plants in Georgia, *Environ. Sci. Technol.* 37, pp. 5528-5536.
105. Liao,D., Duan,Y., Whitsel,E.A., Zheng,Z., Heiss,G., Chinchilli,V.M., Lin,H.-M., 2004. Association of higher levels of ambient criteria pollutants with impaired cardiac autonomic control: A population-based study., *Am. J. Epidemiol.* 159, pp. 768-777.
106. Liao,D., Heiss,G., Chinchilli,V.M., Duan,Y., Folsom,A.R., Lin,H.-M., Salomaa,V., 2005. Association of criteria pollutants with plasma hemostatic/inflammatory markers: A population-based study., *J. Expo. Anal. Environ. Epidemiol.* 15, pp. 319-328.
107. Liou,P.J., Vallero,D., Foley,G., Georgopoulos,P., Heiser,J., Watson,T., Reynolds,M., Daloia,J., Tong,S., Isukapalli,S., 2007. A personal exposure study employing scripted activities and paths in conjunction with atmospheric releases of perfluorocarbon tracers in Manhattan, New York, *J Expos Sci Environ Epidemiol* 17, pp. 409-425.
108. Liu,L.-J.S., Slaughter,C., Larson,T., 2002. Comparison of light scattering devices and impactors for particulate measurements in indoor, outdoor, and personal environments, *Environ. Sci. Technol.* 36, pp. 2977-2986.
109. Liu,L.-J.S., Box,M., Kalman,D., Kaufman,J., Koenig,J., Larson,T., Lumley,T., Sheppard,L., Wallace,L., 2003. Exposure assessment of particulate matter for susceptible populations in Seattle, *Environ. Health Perspect.* 111, pp. 909-918.
110. Long,C.M., Suh,H.H., Catalano,P.J., Koutrakis,P., 2001. Using time- and size-resolved particulate data to quantify indoor penetration and deposition behavior, *Environ. Sci. Technol.* 35, pp. 2089-2099.
111. Lu,R., Wu,J., Turco,R.P., Winer,A.M., Atkinson,R., Arey,J., Paulson,S.E., Lurmann,F.W., Miguel,A.H., Eiguren-Fernandez,A., 2005. Naphthalene Distributions and Human Exposure in Southern California, *Atmos. Environ.* 39, pp. 489-507.
112. Mage,D., Wilson,W., Hasselblad,V., Grant,L., 1999. Assessment of human exposure to ambient particulate matter, *J. Air Waste Manag. Assoc.* 49, pp. 1280-1291.
113. McBride,S., Williams,R., Creason,J., 2007. Bayesian hierarchical modeling of personal exposure to particulate matter, *Atmos. Environ.* 41, pp. 6143-6155.
114. McConnell,R., Jones,C., Milam,J., Gonzales,P., Berhane,K., Clement,L., Richardson,J., Hanley-Lopez,J., Kwong,K., Maalouf,N., Galvan,J., Platts-Mills,T., 2003. Cockroach counts and house

- dust allergen concentrations after professional cockroach control and cleaning, *Ann. Allergy. Asthma Immunol.* 91, pp. 546-552.
115. McConnell,R., Berhane,K., Yao,L., Lurmann,F.W., Avol,E., Peters,J.M., 2006. Predicting residential ozone deficits from nearby traffic, *Sci. Total Environ.* 363, pp. 166-174.
 116. Miller,K.A., Siscovick,D.S., Sheppard,L., Shepherd,K., Sullivan,J.H., Anderson,G.L., Kaufman,J.D., 2007. Long-Term Exposure to Air Pollution and Incidence of Cardiovascular Events in Women, *The New England Journal of Medicine* 356, pp. 447-458.
 117. Miller,S.L., Anderson,M.J., Daly,E.P., Milford,J.B., 2002. Source apportionment of exposures to volatile organic compounds. I. Evaluation of receptor models using simulated exposure data, *Atmos. Environ.* 36, pp. 3629-3641.
 118. Misra,C., Singh,M., Hall,P., Sioutas,C., 2002. Development and Evaluation of a Personal Cascade Impactor Sampler (PCIS), *J. Aerosol Sci.* 33, pp. 1027-1047.
 119. Misra,C., Fine,P., Singh,M., Sioutas,C., 2004. Development and Evaluation of a Compact Facility for Exposing Humans to Concentrated Ambient Ultrafine Particles, *Aerosol Sci. Technol.* 38, pp. 27-35.
 120. Moffet,R., Shields,L., Berntsen,J., Devlin,R., Prather,K., 2004. Characterization of an Ambient Coarse Particle Concentrator Used for Human Exposure Studies: Aerosol Size Distributions, Chemical Composition, and Concentration Enrichment, *Aerosol Sci. Technol.* 38, pp. 1123-1137.
 121. Mosley,R.B., Greenwell,D.J., Sparks,L.E., Guo,Z., Tucker,W.G., Fortmann,R., Whitfield,C., 2001. Penetration of ambient fine particles into the indoor environment, *Aerosol Sci. Technol.* 34, pp. 127-136.
 122. Nadadur,S.S., Miller,C.A., Hopke,P.K., Gordon,T., Vedal,S., Vandenberg,J.J., Costa,D.L., 2007. The Complexities of Air Pollution Regulation: the Need for an Integrated Research and Regulatory Perspective, *Toxicol. Sci.* 100, pp. 318-327.
 123. Needham,L.L., Sexton,K., 2000. Assessing children's exposure to hazardous environmental chemicals: an overview of selected research challenges and complexities, *J. Expo. Anal. Environ. Epidemiol.* 10, pp. 611-629.
 124. Needham,L.L., Ozkaynak,H., Whyatt,R.M., Barr,D.B., Wang,R.Y., Naehler,L., Akland,G., Bahadori,T., Bradman,A., Fortmann,R., Liu,L.-J.S., Morandi,M., O'Rourke,M.K., Thomas,K., Quackenboss,J., Ryan,P.B., Zartarian,V., 2005. Exposure assessment in the National Children's Study: introduction, *Environ. Health Perspect.* 113, pp. 1076-1082.
 125. Ng,S.P., Dimitroulopoulou,C., Grossinho,A., Chen,L.C., Kendall,M., 2005. PM2.5 exposure assessment of the population in Lower Manhattan area of New York City after the World Trade Center disaster, *Atmos. Environ.* 39, pp. 1979-1992.
 126. Oberdörster,G., Stone,V., Donaldson,K., 2007. Toxicology of nanoparticles: A historical perspective, *Nanotoxicology* 1, pp. 2-25.
 127. Oldham,M.J., Phalen,R.F., Robinson,R.J., Kleinman,M.T., 2004. Performance of a Portable Whole Body Mouse Exposure System, *Inhal. Toxicol.* 16, pp. 657-662.
 128. Pagan,I., 2007. Chloroprene: Overview of studies under consideration for the development of an IRIS assessment, *Chemico-Biological Interactions* 166, pp. 341-351.

129. Pang,Y., Gundel,L.A., Larson,T., Finn,D., Liu,L.-J.S., Claiborn,C.S., 2002. Development and evaluation of a personal particulate organic and mass sampler, *Environ. Sci. Technol.* 36, pp. 5205-5210.
130. Patterson,E., Eatough,D.J., 2000. Indoor/Outdoor relationships for ambient PM_{2.5} and associated pollutants: epidemiological implications in Lindon, Utah, *J. Air Waste Manag. Assoc.* 50, pp. 103-110.
131. Perlin,S.A., Sexton,K., Wong,D.W., 1999. An examination of race and poverty for populations living near industrial sources of air pollution, *J. Expo. Anal. Environ. Epidemiol.* 9, pp. 29-48.
132. Phillips,M.L., Hall,T.A., Esmen,N.A., Lynch,R., Johnson,D.L., 2001. Use of global positioning system technology to track subject's location during environmental exposure sampling, *J. Expo. Anal. Environ. Epidemiol.* 11, pp. 207-215.
133. Pratt,G.C., Palmer,K., Wu,C.Y., Oliaei,F., Hollerbach,C., Fenske,M.J., 2000. An assessment of air toxics in Minnesota, *Environ. Health Perspect.* 108, pp. 815-825.
134. Presto,A.A., Huff Hartz,K.E., Donahue,N.M., 2005. Secondary Organic Aerosol Production from Terpene Ozonolysis. 1. Effect of UV Radiation, *Environ. Sci. Technol.* 39, pp. 7036-7045.
135. Pui,D.Y.H., Qi,C., Stanley,N., Oberdorster,G., Maynard,A., 2008. Recirculating air filtration significantly reduces exposure to airborne nanoparticles, *Environ. Health Perspect.* 116, pp. 863-866.
136. Qian,Z., Zhang,J., Wei,F., Wilson,W.E., Chapman,R.S., 2001. Long term ambient air pollution levels in four Chinese cities: inter city and intra city concentration gradients for epidemiological studies, *J. Expo. Anal. Environ. Epidemiol.* 11, pp. 341-351.
137. Quintana,P.J., Valenzia,J.R., Delfino,R.J., Liu,L.-J.S., 2001. Monitoring of 1-min personal particulate matter exposures in relation to voice-recorded time-activity data, *Environ. Res.* 87, pp. 199-213.
138. Ramachandran,G., Adgate,J.L., Hill,N., Sexton,K., Pratt,G.C., Bock,D., 2000. Comparison of short-term variations (15-minute averages) in outdoor and indoor PM_{2.5} concentrations, *J. Air Waste Manag. Assoc.* 50, pp. 1157-1166.
139. Ramachandran,G., Adgate,J.L., Pratt,G.C., Sexton,K., 2003. Characterizing indoor and outdoor 15-minute average PM_{2.5} concentrations in urban neighborhoods, *Aerosol Sci. Technol.* 37, pp. 33-45.
140. Ramachandran,G., Adgate,J.L., Banerjee,S., Church,T.R., Jones,D., Fredrickson,A., Sexton,K., 2005. Indoor air quality in two urban elementary schools--measurements of airborne fungi, carpet allergens, CO₂, temperature, and relative humidity, *J. Occup. Environ. Hyg.* 2, pp. 553-566.
141. Rea,A.W., Zufall,M.J., Williams,R.W., Sheldon,L., Howard-Reed,C., 2001. The influence of human activity patterns on personal PM exposure: a comparative analysis of filter-based and continuous particle measurements, *J. Air Waste Manag. Assoc.* 51, pp. 1271-1279.
142. Riediker,M., Williams,R., Devlin,R.B., Griggs,T., Bromberg,P.A., 2003. Exposure to particulate matter, volatile organic compounds, and other air pollutants inside patrol cars, *Environ. Sci. Technol.* 37, pp. 2084-2093.
143. Riesenfeld,E., Chalupa,D., Gibb,F.R., Oberdorster,G., Gelein,R., Morrow,P.E., Utell,M.J., Frampton,M.W., 2000. Ultrafine particle concentrations in a hospital, *Inhal. Toxicol.* 12, pp. 83-94.

144. Rodes,C.E., Lawless,P.A., Evans,G.F., Sheldon,L.S., Williams,R.W., Vette,A.F., Creason,J.P., Walsh,D., 2001. The relationships between personal PM exposures for elderly populations and indoor and outdoor concentrations for three retirement center scenarios, *J. Expo. Anal. Environ. Epidemiol.* 11, pp. 103-115.
145. Rosati,J.A., Brown,J.S., Peters,T.M., Leith,D., Kim,C.S., 2002. A polydisperse aerosol inhalation system for use in human inhalation studies., *Aerosol Sci. Technol.* 33, pp. 1433-1446.
146. Salnikow,K., Davidson,T., Zhang,Q., Chen,L.C., Su,W., Costa,M., 2003. The Involvement of Hypoxia-inducible Transcription Factor-1-dependent Pathway in Nickel Carcinogenesis, *Cancer Res.* 63, pp. 3524-3530.
147. Sardar,S.B., Fine,P.M., Yoon,H., Sioutas,C., 2004. Associations between particle number and gaseous co-pollutant concentrations in the Los Angeles Basin., *J. Air Waste Manag. Assoc.* 54, pp. 992-1005.
148. Sardar,S.B., Fine,P.M., Sioutas,C., 2005. Seasonal and Spatial Variability of the Size-Resolved Chemical Composition of PM₁₀ in the Los Angeles Basin, *J. Geophys. Res. (D Atmos.)* 110, p. D07S08.
149. Sarnat,J.A., Koutrakis,P., Suh,H., 2000. Assessing the Relationship between Personal Particulate and Gaseous Exposures of Senior Citizens Living in Baltimore, *J. Air Waste Manag. Assoc.* 50, pp. 1184-1198.
150. Sarnat,J.A., Schwartz,J., Catalano,P., Suh,H., 2001. Gaseous Pollutants in Particulate Matter Epidemiology: Confounders or Surrogates?, *Environ. Health Perspect.* 109, pp. 1053-1061.
151. Sarnat,J.A., Long,C.M., Koutrakis,P., Coull,B.A., Schwartz,J., Suh,H.H., 2002. Using sulfur as a tracer of outdoor fine particulate matter, *Environ. Sci. Technol.* 36, pp. 5305-5314.
152. Sarnat,J.A., Brown,K.W., Schwartz,J., Coull,B.A., Koutrakis,P., 2005. Ambient Gas Concentrations and Personal Particulate Matter Exposures: Implications for Studying the Health Effects of Particles, *Epidemiology* 16, pp. 385-395.
153. Sarnat,S.E., Coull,B., Schwartz,J., Gold,D.R., Suh,H.H., 2006. Factors Affecting the Association between Ambient Concentrations and Personal Exposures to Particles and Gases, *Environ. Health Perspect.* 114, pp. 649-654.
154. Sarnat,S.E., Ruiz,P.A., Coull,B.A., Koutrakis,P., Suh,H.H., 2006. The Influences of Ambient Particle Composition and Size on Particle Infiltration in Los Angeles, CA Residences, *J. Air Waste Manag. Assoc.* 56, pp. 186-196.
155. Savage,S.T., Lawrence,J., Katz,T., Stearns,R.C., Coull,B.A., Godleski,J.J., 2003. Does the Harvard/U.S. Environmental Protection Agency Ambient Particle Concentrator Change the Toxic Potential of Particles?, *J. Air Waste Manag. Assoc.* 53, pp. 1088-1097.
156. Schneider,A., Neas,L., Herbst,M.C., Case,M., Williams,R.W., Cascio,W., Hinderliter,A., Holguin,F., Buse,J., Dungan,K., Styner,M., Peters,A., Devlin,R.B., 2008. Endothelial dysfunction: Associations with exposure to ambient fine particles in diabetic individuals, *Environ. Health Perspect.* 116, pp. 1666-1674.
157. Schwartz,J., Sarnat,J.A., Coull,B.A., Wilson,W.E., 2007. Effects of exposure measurement error on particle matter epidemiology: a simulation using data from a panel study in Baltimore, MD, *J Expos Sci Environ Epidemiol* 17, p. S2-S10.

158. Sen,B., Mahadevan,B., DeMarini,D.M., 2007. Transcriptional responses to complex mixtures--A review, *Mutation Research/Reviews in Mutation Research* 636, pp. 144-177.
159. Sexton,K., Greaves,I.A., Church,T.R., Adgate,J.L., Ramachandran,G., Tweedie,R.L., Fredrickson,A., Geisser,M., Sikorski,M., Fischer,G., Jones,D., Ellringer,P., 2000. A school-based strategy to assess children's environmental exposures and related health effects in economically disadvantaged urban neighborhoods, *J. Expo. Anal. Environ. Epidemiol.* 10, pp. 682-694.
160. Sexton,K., Adgate,J.L., Church,T.R., Greaves,I.A., Ramachandran,G., Fredrickson,A.L., Geisser,M.S., Ryan,A.D., 2003. Recruitment, retention, and compliance results from a probability study of children's environmental health in economically disadvantaged neighborhoods, *Environ. Health Perspect.* 111, pp. 731-736.
161. Sexton,K., Adgate,J.L., Church,T.R., Hecht,S.S., Ramachandran,G., Greaves,I.A., Fredrickson,A.L., Ryan,A.D., Carmella,S.G., Geisser,M.S., 2004. Children's exposure to environmental tobacco smoke: using diverse exposure metrics to document ethnic/racial differences, *Environ. Health Perspect.* 112, pp. 392-397.
162. Sexton,K., Adgate,J.L., Ramachandran,G., Pratt,G.C., Mongin,S.J., Stock,T.H., Morandi,M.T., 2004. Comparison of personal, indoor, and outdoor exposures to hazardous air pollutants in three urban communities, *Environ. Sci. Technol.* 38, pp. 423-430.
163. Sexton,K., Adgate,J.L., Mongin,S.J., Pratt,G.C., Ramachandran,G., Stock,T.H., Morandi,M.T., 2004. Evaluating differences between measured personal exposures to volatile organic compounds and concentrations in outdoor and indoor air, *Environ. Sci. Technol.* 38, pp. 2593-2602.
164. Sexton,K., Adgate,J.L., Fredrickson,A.L., Ryan,A.D., Needham,L.L., Ashley,D.L., 2006. Using biologic markers in blood to assess exposure to multiple environmental chemicals for inner-city children 3-6 years of age, *Environ. Health Perspect.* 114, pp. 453-459.
165. Shah,A.P., Pietropaoli,A.P., Frasier,L.M., Speers,D.M., Chalupa,D., Delehanty,J.M., Huang,L.-S., Utell,M.J., Frampton,M.W., 2008. Effect of inhaled carbon ultrafine particles on reactive hyperemia in healthy human subjects, *Environ. Health Perspect.* 116, pp. 375-380.
166. Sheppard,L., Damian,D., 2000. Estimating short-term PM effects accounting for surrogate exposure measurements from ambient monitors, *Environmetrics* 11, pp. 675-687.
167. Sheppard,L., Levy,D., Checkoway,H., 2001. Correcting for the effects of location and atmospheric conditions on air pollution exposures in a case-crossover study, *J. Expo. Anal. Environ. Epidemiol.* 11, pp. 86-96.
168. Sheppard,L., 2005. Acute air pollution effects: Consequences of exposure distribution and measurements, *J. Toxicol. Environ. Health A* 68, pp. 1127-1135.
169. Sheppard,L., Slaughter,J.C., Schildcrout,J., Liu,L.-J.S., Lumley,T., 2005. Exposure and measurement contributions to estimates of acute air pollution effects, *J. Expo. Anal. Environ. Epidemiol.* 15, pp. 366-376.
170. Simmons,J.E., Evans,M.V., Boyes,W.K., 2005. Moving from external exposure concentration to internal dose: duration extrapolation based on physiologically based pharmacokinetic derived estimates of internal dose, *J. Toxicol. Environ. Health A* 68, pp. 927-950.
171. Singh,M., Misra,C., Sioutas,C., 2003. Field Evaluation of a Personal Cascade Impactor Sampler (PCIS), *Atmos. Environ.* 37, pp. 4781-4793.

172. Singh,R.B., Huber,A.H., Braddock,J.N., 2003. Development of a microscale emission factor model for particulate matter for predicting real-time motor vehicle emissions, *J. Air Waste Manag. Assoc.* 53, pp. 1204-1217.
173. Sioutas,C., Delfino,R.J., Singh,M., 2005. Exposure Assessment for Atmospheric Ultrafine Particles (UFPs) and Implications in Epidemiologic Research, *Environ. Health Perspect.* 113, pp. 947-955.
174. Slaughter,J.C., Koenig,J.Q., Reinhardt,T.E., 2004. Association between lung function and exposure to smoke among firefighters at prescribed burns, *J. Occup. Environ. Hyg.* 1, pp. 45-49.
175. Smith,K.R., Veranth,J.M., Kodavanti,U.P., Aust,A.E., Pinkerton,K.E., 2006. Acute Pulmonary and Systemic Effects of Inhaled Coal Fly Ash in Rats: Comparison to Ambient Environmental Particles, *Toxicol. Sci.* 93, pp. 390-399.
176. Su,J.G., Buzzelli,M., Brauer,M., Gould,T., Larson,T.V., 2008. Modeling spatial variability of airborne levoglucosan in Seattle, Washington, *Atmos. Environ.* 42, pp. 5519-5525.
177. Su,Y., Sipin,M.F., Prather,K.A., Gelein,R.M., Lunts,A., Oberdörster,G., 2005. ATOFMS Characterization of Individual Model Aerosol Particles Used for Exposure Studies, *Aerosol Sci. Technol.* 39, pp. 400-407.
178. Sullivan,J., Sheppard,L., Schreuder,A., Ishikawa,N., Siscovick,D., Kaufman,J., 2005. Relation between short-term fine particulate matter exposure and onset of myocardial infarction, *Epidemiology* 16, pp. 41-48.
179. Sun,L., Zidek,J.V., Le,N.D., Ozkaynak,H., 2000. Interpolating Vancouver's daily ambient PM10 field, *Environmetrics* 11, pp. 651-663.
180. Sun,Q., Yue,P., Ying,Z., Cardounel,A.J., Brook,R.D., Devlin,R., Hwang,J.S., Zweier,J.L., Chen,L.C., Rajagopalan,S., 2008. Air Pollution Exposure Potentiates Hypertension Through Reactive Oxygen Species-Mediated Activation of Rho/ROCK, *Arteriosclerosis, Thrombosis, and Vascular Biology* 28, pp. 1760-1766.
181. Surratt,J.D., Kroll,J.H., Kleindienst,T.E., Edney,E.O., Claeys,M., Sorooshian,A., Ng,N.L., Offenberg,J.H., Lewandowski,M., Jaoui,M., Flagan,R.C., Seinfeld,J.H., 2007. Evidence for Organosulfates in Secondary Organic Aerosol, *Environ. Sci. Technol.* 41, pp. 517-527.
182. Thornburg,J.W., Ensor,D.S., Rhodes,C.E., Lawless,P.A., Sparks,L.E., Mosley,R.B., 2001. Penetration of particles into buildings and associated physical factors, part I: Model development and computer simulations, *Aerosol Sci. Technol.* 34, pp. 284-296.
183. Wallace,L., Williams,R., 2005. Use of Personal-Indoor-Outdoor Sulfur Concentrations to Estimate the Infiltration Factor and Outdoor Exposure Factor for Individual Homes and Persons, *Environ. Sci. Technol.* 39, pp. 1707-1714.
184. Wallace,L.A., Mitchell,H., O'Connor,G.T., Neas,L., Lippmann,M., Kattan,M., Koenig,J., Stout,J.W., Vaughn,B.J., Wallace,D., Walter,M., Adams,K., Liu,L.-J.S., 2003. Particle concentrations in inner-city homes of children with asthma: the effect of smoking, cooking, and outdoor pollution, *Environ. Health Perspect.* 111, pp. 1265-1272.
185. Wallace,L., 2000. Correlations of Personal Exposure to Particles with Outdoor Air Measurements: A Review of Recent Studies, *Aerosol Sci. Technol.* 32, pp. 15-25.

186. Wallace,L., Williams,R., 2005. Validation of a Method for Estimating Long-Term Exposures Based on Short-Term Measurements, *Risk Anal.* 25, pp. 687-694.
187. Wallace,L., Williams,R., Rea,A., Croghan,C., 2006. Continuous weeklong measurements of personal exposures and indoor concentrations of fine particles for 37 health-impaired North Carolina residents for up to four seasons, *Atmos. Environ.* 40, pp. 399-414.
188. White,L.D., Cory-Slechta,D.A., Gilbert,M.E., Tiffany-Castiglioni,E., Zawia,N.H., Virgolini,M., Rossi-George,A., Lasley,S.M., Qian,Y.C., Basha,M., 2007. New and evolving concepts in the neurotoxicology of lead, *Toxicol. Appl. Pharmacol.* 225, pp. 1-27.
189. Williams,R., Suggs,J., Creason,J., Rodes,C., Lawless,P., Kwok,R., Zweidinger,R., Sheldon,L., 2000. The 1998 Baltimore Particulate Matter Epidemiology-Exposure Study: part 2. Personal exposure assessment associated with an elderly study population, *J. Expo. Anal. Environ. Epidemiol.* 10, pp. 533-43.
190. Williams,R., Creason,J., Zweidinger,R., Watts,R., Sheldon,L., Shy,C., 2000. Indoor, outdoor, and personal exposure monitoring of particulate air pollution: The Baltimore elderly epidemiology-exposure pilot study., *Atmos. Environ.* 34, pp. 4193-4204.
191. Williams,R., Suggs,J., Rodes,C., Lawless,P., Zweidinger,R., Kwok,R., Creason,J., Sheldon,L., 2000. Comparison of PM2.5 and PM10 monitors, *J. Expo. Anal. Environ. Epidemiol.* 10, pp. 497-505.
192. Williams,R.W., Watts,R.R., Stevens,R.K., Stone,C.L., Lewtas,J., 1999. Evaluation of a personal air sampler for twenty-four hour collection of fine particles and semivolatile organics, *J. Expo. Anal. Environ. Epidemiol.* 9, pp. 158-66.
193. Williams,R., Suggs,J., Rea,A., Sheldon,L., Rodes,C., Thornburg,J., 2003. The Research Triangle Park particulate matter panel study: modeling ambient source contribution to personal and residential PM mass concentrations, *Atmos. Environ.* 37, pp. 5365-5378.
194. Williams,R., Suggs,J., Rea,A., Leovic,K., Vette,A., Croghan,C., Sheldon,L., Rodes,C., Thornburg,J., Ejire,A., 2003. The Research Triangle Park particulate matter panel study: PM mass concentration relationships, *Atmos. Environ.* 37, pp. 5349-5363.
195. Wilson,W.E., Mage,D.T., Grant,L.D., 2000. Estimating separately personal exposure to ambient and non-ambient particulate matter for epidemiology and risk assessment; why and how, *J. Air Waste Manag. Assoc.* 50, pp. 1167-1183.
196. Wilson,W.E., Brauer,M., 2006. Estimation of ambient and non-ambient components of particulate matter exposure from a personal monitoring panel study, *J Expos Sci Environ Epidemiol* 16, pp. 264-274.
197. Wu,C.F., Delfino,R.J., Floro,J.N., Samimi,B.S., Quintana,P.J., Kleinman,M.T., Liu,L.-J.S., 2005. Evaluation and quality control of personal nephelometers in indoor, outdoor and personal environments, *J. Expo. Anal. Environ. Epidemiol.* 15, pp. 99-110.
198. Wu,C.F., Delfino,R.J., Floro,J.N., Quintana,P.J.E., Samimi,B.S., Kleinman,M.T., Allen,R.W., Liu,L.-J.S., 2005. Exposure assessment and modeling of particulate matter for asthmatic children using personal nephelometers, *Atmos. Environ.* 39, pp. 3457-3469.
199. Wu,C.F., Jimenez,J., Claiborn,C., Gould,T., Simpson,C.D., Larson,T., Liu,L.J., 2006. Agricultural burning smoke in Eastern Washington: Part II. Exposure assessment, *Atmos. Environ.* 40, pp. 5379-5392.

200. Wu,J., Funk,T., Lurmann,F., Winer,A.M., 2005. Improving Spatial Accuracy of Roadway Networks and Geocoded Addresses, *Transactions in GIS* 9, pp. 585-601.
201. Wu,J., Lurmann,F., Winer,A., Lu,R., Turco,R., Funk,T., 2005. Development of an individual exposure model for application to the Southern California children's health study, *Atmos. Environ.* 39, pp. 259-273.
202. Xue,J., Liu,S.V., Ozkaynak,H., 2005. Parameter evaluation and model validation of ozone exposure assessment using Harvard Southern California chronic ozone exposure study data., *J. Air Waste Manag. Assoc.* 55, pp. 1508-1514.
203. Zhao,W., Hopke,P.K., Norris,G., Williams,R., Paatero,P., 2006. Source apportionment and analysis on ambient and personal exposure samples with a combined receptor model and an adaptive blank estimation strategy, *Atmos. Environ.* 40, pp. 3788-3801.
204. Zheng,J., Frey,H.C., 2005. Quantitative Analysis of Variability and Uncertainty with Known Measurement Error: Methodology and Case Study, *Risk Anal.* 25, pp. 663-675.
205. Zhu,Y., Hinds,W.C., Krudysz,M., Kuhn,T., Froines,J., Sioutas,C., 2005. Penetration of Freeway Ultrafine Particles into Indoor Environments, *J. Aerosol Sci.* 36, pp. 303-322.
206. Zidek,J.V., Sun,L., Le,N.D., Ozkaynak,H., 2002. Contending with space-time interaction in the spatial prediction of pollution: Vancouver's hourly ambient PM10 field., *Environmetrics* 13, pp. 595-613.