## Recent Publications:


1. Zhuo Zhu and Yuegang Zuo (2013) Bisphenol A and other alkylphenols in the environment – Occurrence, fate, health effects and analytical techniques. *Advances in Environmental Research* (in press).

2. Yuegang Zuo, et al. (2013) Hydrophilic interaction liquid chromatography: Fundamentals and applications. In: Yuegang Zuo (Eds.), *High-Performance Liquid Chromatography (HPLC): Principles, Procedures and Practices*. Nova Science Publishers, Inc.

3. Liu Feng-Jiao Li Shun-Xing Zheng Feng-Ying Huang Xu-Guang Zuo Yue-Gang Tu Teng-Xiu and Wu Xue-Qing (2013) Risk assessment of nitrate and oxytetracycline addition on coastal ecosystem functions. *Aquatic Toxicology* (in press).

4. Yong Chen, Kai Zhang and Yuegang Zuo (2013) Direct and indirect photodegradation of estriol in the presence of humic acid, nitrate and iron complexes in water solutions. *Science of the Total Environment* 463-464, 802-809.

5. Yuegang Zuo, Kai Zhang and Si Zhou (2013) Determination of estrogenic steroids and microbial and photochemical degradation of 17α-ethinylestradiol (EE2) in lake surface water, A case study. *Environmental Science: Processes & Impacts* 15, 1529-1535.

6. Hans Laufer, Ming Chen, Bryan Baclaski, James M Bobbitt, James D Stuart, Yuegang Zuo, Molly W Jacobs (2013) Multiple Factors in Marine Environments Affecting Lobster Survival, Development and Growth with Emphasis on Alkylphenols: A Perspective. *Canadian Journal of Fisheries and Aquatic Sciences* 70, 1588-1600.

7. Si Zhou, Ruixiao Zuo, Zhuo Zhu, Di Wu, Kruti Vasa, Yiwei Deng and Yuegang Zuo (2013) An eco-friendly hydrophilic interaction HPLC method for the determination of renal function biomarkers, creatinine and uric acid, in human fluids. *Anal. Methods* 5, 1307-1311.

8. Yong Chen, Qi Liang, Danna Zhou, Zongping Wang, Tao Tao, and Yuegang Zuo (2013) Photodegradation kinetics, products and mechanism of timolol under simulated sunlight. *J. Hazardous Materials* 252-253, 220-226.

9. Shun-Xing Li, Feng-Jiao Liu, Feng-Ying Zheng, Yuegang Zuo, Xu-Guang Huang (2013) Effects of nutrate addition and iron spectiation on trace element transfer in coastal food webs under phosphate and iron enrichment.

*Chemosphere* 91, 1486-1494.

10. Chengjun Wang, Yuegang Zuo, Joe A. Vinson and Yiwei Deng (2012) Absorption and excretion of cranberry-derived phenolics in humans. *Food Chemistry* 132, 1420-1428.

11. Yong Chen, Hong Li, Zongping Wang, Huijie Li, Tao Tao, and Yuegang Zuo (2012) Photodegradation of selected ß-blockers in aqueous fulvic acid solutions: Kinetics, mechanism, and product analysis. *Water Research* 46, 2965-2872.

12. Xiaonan Feng, Zongping Wang, Yong Chen, Tao Tao, Feng Wu and Yuegang Zuo (2012) Effect of Fe(III)/citrate concentrations and ratio on the photoproduction of hydroxyl radicals: Application on the degradation of diphenhydramine. *Industrial & Engineering Chemistry Research*. 51, 7007-7012.

13. Yuegang Zuo, Yang Yang, Zhuo Zhu, Wanshu He and Ziya Aydin (2011) Hydrophilic interaction chromatographic determination of uric acid, a biomarker for hyperuricemia and antioxidant capacity, and creatinine in human urine. *Talanta*, 82, 1707-1710.

14. Chengjun Wang and Yeugang Zuo (2011) Ultrasound-assisted hydrolysis and gas chromatography-mass spectrometric determination of phenolic compounds in cranberry products. *Food Chemistry* 128, 562-568.

15. Yuegang Zuo, Kai Zhang, Jinping Wu and Bin Men (2011) Determination of phthalic acid in snow and its photochemical degradation by capillary gas chromatography coupled with flame ionization and mass spectrometric detection. *Chemosphere* 83, 1014-1019.

16. Chengjun Wang, Yuegang Zuo and Chen-lu Yang (2009) Selective catalytic reduction of NO by $NH_3$ in flue gases over a novel Cu-V/$Al_2O_3$ catalyst at low temperature. *Environmental Engineering Science*. 26, 1429-1434.

17. Yue Jiao and Yuegang Zuo (2009) Ultrasonic extraction and HPLC determination of anthraquinones, aloe-emodine, emodine, rheine, chrysophanol, and physcione, in Radix Polygoni multiflori. *Phytochem. Anal.* 20, 272-278.

18. Yuegang Zuo, Chengjun Wang, Jiping Zhou, Amita Sachdeva and Vanessa C. Ruelos (2008) Simultaneous determination of creatinine and uric acid in human urine by high performance liquid chromatography. *Analytical Sciences* 24, 1589-1592.

19. Yuegang Zuo, Kai Zhang, Jingping Wu, Christopher Rego and John Fritz (2008) An accurate and non-destructive GC method for determination of cocaine on US paper currency. *J. Separation Sci.* 31, 2444-2450.

20. Yuegang Zuo, Chengjun Wang, Yuejuan Lin, Jinwen Guo and Yiwei Deng (2008) Simultaneous determination of anthraquinones in radix *Polygoni multiflori* by capillary gas chromatography coupled with flame ionization and mass spectrometric detection. *J. chromatogr. A* 1200, 43-48.

21. Lin Deng, Feng Wu, Nansheng Deng and Yuegang Zuo (2008) Photoreduction of mercury(II) in the presence of algae *Anabaena cylindrical*. *J. Photochem. Photobiol. B: Biology* 91, 117-124.

22. Yuegang Zuo and Yuejuan Lin (2007) Solvent effects on the silylation-gas chromatography-mass spectrometric determination of natural and synthetic estrogenic steroid hormones. *Chemosphere* 69, 1175-1176.

23. Johnathan Fritz and Yuegang Zuo (2007) Simultaneous determination of tetracycline, oxytetracycline, and 4-Epitetracycline in milk by high-performance liquid chromatography. *Food Chemistry* 105, 1297-1301.

24. Yuegang Zuo, Kai Zhang and Yuejuan Lin (2007) Microwave-accelerated derivatization for the simultaneous gas chromatography-mass spectrometric analysis of natural and synthetic estrogenic steroid hormones. *J. Chromatography A* 1148, 211-218.

25. Hao Chen and Yuegang Zuo (2007) Identification of flavonol glycosides in American cranberry fruit. *Food Chemistry* 101, 1374-1381.

26. Kai Zhang and Yuegang Zuo (2006) Natural phenolic antioxidants in human fluids: analytical approaches and antioxidant capacity studies. *Pak. J. Anal. & Envir. Chem.* 7, 39-47.

27. Yuegang Zuo, Chengjun Wang and Thuan Van (2006) Simultaneous determination of nitrite and nitrate in dew, rain, snow and lake water samples by ion-pair high-performance liquid chromatography. *Talanta* 70, 281-285.

28. Yiwei Deng, Hao Chen, Taixing Wu, Metthew Krzyaniak, Amina Wellons, Dawn Bolla, Kenneth Douglas and Yuegang Zuo (2006) Iron-catalyzed photochemical transformation of benzoic acid in atmospheric liquids: Product identification and reaction mechanisms. *Atmospheric Environment* 40, 3665-3676.

29. Yuegang Zuo, Kai Zhang and Yiwei Deng (2006) Occurrence and photochemical degradation of 17α-ethinylestradiol in Acushnet river estuary. *Chemosphere* 63, 1583-1590.

30. Yuegang Zuo and Ronald D. Jones (2006) Where is the Missing Sink for Photochemically Produced Carbon Monoxide in the Marine Surface Water. *In Water Pollution: New Research,* ed. by A.R.Burk, Nova Publishers, Hauppauge NY.

31. Yuegang Zuo, Taixing Wu and Jian Zhan (2006) Photochemical oxidation of hydroxymethanesulfonate in the presence of Fe-oxalato complexes (submitted).

32. Yuegang Zuo and Kai Zhang (2005) Discussion: Suitability of *N,O*-bis(trimethylsilyl)trifluoroacetamide as derivatization reagent for the determination of the estrogens estrone and 17 α-ethinylestradiol by gas chromatography-mass spectrometry. *J. of Chromatogr. A* 1095, 201-202.

33. Kai Zhang and Yuegang Zuo (2005) Pitfalls and solution for simultaneous determination of estrone and 17α-ethinylestradiol by gas chromatography – mass spectrometry after derivatization with N,O-bis(trimethylsilyl)trifluoroacetamide. *Anal. Chim. Acta* 554, 190-196.

34. Yuegang Zuo and Jian Zhan (2005) Effects of Oxalate on Fe-catalyzed photooxidation of Dissolved Sulfur Dioxide in Atmospheric Water. *Atmospheric Environment* 39, 27-37.

35. Yuegang Zuo, Jian Zhan and Taixing Wu (2005) Effects of Monochromatic UV-visible light and sunlight on Fe(III)-catalyzed oxidation of dissolved sulfur dioxide. J. Atmos. Chem. 50, 195-210.

36. Feng Wu, Lin Zhang, Nansheng Deng and Yuegang Zuo (2004) Quantitation for Photoinduced Formation of Hydroxyl Radicals in the Water-Containing Fe(III) and Oxalate Salts. *Fresenius Environmental Bulletin* 13,748-752.

37. Yuegang Zuo, Liliang Zhang, Jingping Wu, Johnathan W. Fritz, Suzanne Medeiros and Christopher Rego (2004) Ultrasonic Extraction and Capillary Gas Chromatography Determination of Nicotine in Pharmaceutical Formulations. *Analytica Chimica Acta* 526, 35-39.

38. Kai Zhang and Yuegang Zuo (2004) GC-MS Determination of Flavonoids and Phenolic and Benzoic Acids in Human Plasma after Consumption of Cranberry Juice. *J. Agriculture and Food Chemistry* 52, 222-227.

39. Yuegang Zuo and Hao Chen (2003) Determination of sulfite, sulfate and

hydroxymethanesulfonate in atmospheric water by ion-pair HPLC technique. *Talanta*, 59, 875-881.

40. Yuegang Zuo (2003) Light-induced formation of hydroxyl radicals in fog waters determined by an authentic fog constituent, hydroxymethanesulfonate. *Chemosphere* 51, 175-179.

41. Yuegang Zuo, Chengxia Wang and Jian Zhan (2002) Separation, characterization and quantitation of benzoate and phenolic antioxidants in American cranberry fruit by GC-MS. *J. Agriculture and Food Chemistry* 50, 4789-3794.

42. Yuegang Zuo, Hao Chen and Yiwei Deng (2002) Simultaneous determination of catechins, phenolic acids and caffeine in green, Oolong, black and pu-erh teas using HPLC with a photodiode array detector. *Talanta*, 57, 307-316.

43. Y. Zuo, Jian Zhan and Y. Deng (2001) Environmental application of chitin and chitosan extracted from seafood processing waste. In Advance in *Environmental Materials, Volume II Environmentally Preferred Materials*, pp 249-260, edited by Tim White and Julia A. Stegemann, (Material Research Society, Singapore).

44. D. Haan, Y. Zuo, V. Gros and C. A. M. Brenninkmeijer (2001) Photochemical production of carbon monoxide in snow. *Journal of Atmospheric Chemistry* 40 (3) 217-230.

45. Hao Chen, Yuegang Zuo and Yiwei Deng (2001) Separation and determination of flavanoids and other phenolic compounds in cranberry juice by high-performance liquid chromatography. *Journal of Chromatography A*, 913, 387-395.

46. Yuegang Zuo, Jian Zhan, Nuno Costa (2001) Use of shell chitin extracted from seafood processing waste in recycling of industrial wastewater. *Proceedings of SPIE: Environmentally Conscious Manufacturing*, Ed. by Surendra M. Gupta, Vol. 4193, pp 403-413.

47. J. Siegel and Y. Zuo (2000) Using seafood processing waste to clean up wastewater. *Biocycle* 41 (12): 34-34.

48. Yuegang Zuo and Yiwei Deng (1999) Evidence for lightning induced production of hydrogen peroxide during thunderstorms. *Geochimica et Cosmochimica Acta* 63, 3451-3455.

49. Fan Luo, Nansheng Deng, Feng Wu and Yuegang Zuo (1999) UV-light induced

discoloration of dye solutions in the presence of Fe(III) and humic acid. *Toxicological and Environmental Chemistry* 71, 125-134.

50. Feng Wu, Nansheng Deng and Yuegang Zuo (1999) Discoloration of dye solutions induced by solar photolysis of ferrioxalate in aqueous solutions. *Chemosphere* 39, 2079-2085.

51. Feng Wu, Nansheng Deng and Yuegang Zuo (1999) Photochemical properties of ferric-oxalate complexes and their effects on photodegradation of organic compounds in natural aqueous phase. *Advances in Environmental Science* 7, 78-91.

52. Y. Deng and Y. Zuo (1999) Factors Affecting the Levels of Hydrogen Peroxide in South Florida. *Atmospheric Environment* 33, 1469-1478.

53. Y. Zuo, M. A. Guerrero and R. D. Jones (1998) Reassessment of the Ocean-to-Atmosphere Flux of Carbon Monoxide. *Chemistry and Ecology* 14, 241-257.

54. Y. Zuo and Y. Deng (1998) The Near-UV Absorption Constants for Nitrite Ion in Aqueous Solution. *Chemosphere* 36, 181-188.

55. Y. Deng, X. Fan, A. Delgado, C. Nolan, K. Furton, Y. Zuo and R. D. Jones (1998) Separation and Determination of Aromatic Acids in Natural Water with Preconcentration by Capillary Zone Electrophoresis. *Journal of Chromatography A* 817, 145-152.

56. Y. Zuo and R. D. Jones (1997) Photochemistry of Natural Dissolved Organic Matter in Lake and Wetland Waters –Production of Carbon Monoxide. *Water Research* 31, 850-858.

57. Y. Zuo and Y. Deng (1997) Iron(II) Catalyzed Photolysis of Organic Compounds in Atmospheric Water. *Chemosphere* 35, 2051-2058.

58. Y. Zuo and R. D. Jones (1996) Photochemical Formation of Carbon Monoxide in Authentic Rain Waters. *Geophysical Research Letter* 23, 2769-2772.

59. Y. Zuo (1995) Kinetics of Photochemical/Chemical Cycling of Iron Coupled with Organic Substances in Cloud- and Fog-Droplets. *Geochimica et Cosmochimica Acta* 59, 3123-3130.

60. Y. Zuo and R. D. Jones (1995) Formation of Carbon Monoxide by Photolysis of Dissolved Organic Material in Seawater. *Naturwissenschaften* 82, 472-474.

61. Y. Zuo (1994) Light-induced Oxidation of Bisulfite-aldehyde Adducts in Real

Fogwater. *Naturwissenschaften* 81, 505-507.

62. Y. Zuo and J. Hoigné (1994) Photochemical Decomposition of Oxalic, Glyoxalic and Pyruvic Acid Catalyzed by Iron. *Atmospheric Environment* 28, 1231-1239.

63. Y. Zuo and J. Hoigné (1993) Evidence for Photochemical Formation of $H_2O_2$ and Oxidation of $SO_2$ in Authentic Fog Water. *Science* 260, 71-73.

64. J. Hoigné, Y. Zuo and L. Nowell (1993) Photochemical Reactions in Atmospheric Waters; Role of Dissolved Iron Species. *In Aquatic and Surface Photochemistry Chapter 4,* Edited by G. Helz, R. Zepp and D. Crosby (Lewis Publishers. Chelsea MI).

65. Y. Zuo and J. Hoigné (1992) Formation of Hydrogen Peroxide and Depletion of Oxalic Acid in Atmospheric Water by Photolysis of Iron(III)-Oxalato Complexes. *Environmental Science & Technology* 26, 1014-1022.

66. Y. Zuo and S. Pang (1985) Determination of Dialkyl Mercury Compounds by Reaction Gas Chromatography. *Analytical Chemistry* 13, 890-895.

67. Y. Zuo, and S. Pang (1985) Photochemical Methylation of Inorganic Mercury in the Presence of Sulfhydryl Compounds. *Acta Scientiae Circumstantiae* 5, 239-243.

68. Y. Zuo, L. Xu and S. Pang (1984) Micro-determination of Organic and Inorganic Mercury in Environmental Samples by Concentration of Sulfhydryl Cotton Fiber-combined Method of Thin Layer Chromatography and Thermolysis Technique, *Journal of Graduate School* 1, 205-213.