

3 . 誌上発表及び口頭発表

3.1 誌上発表（査読あり）

1. Aramaki, T., S. Nagao, Y. Nakamura, M. Uchida and Y. Shibata, Effects of rainfall on carbon isotopes of POC of the Teshio River, northern Japan, *Radiocarbon*, in press.
2. Aramaki, T., Y. Nojiri, H. Mukai, S. Kushibashi, M. Uchida and Y. Shibata, Preliminary results of radiocarbon monitoring in the surface waters of the North Pacific, *Nuclear Instruments and Methods in Physics Research section B*, in press, doi:10.1016/j.nimb.2009.10.138.
3. Naito, Y., Chikaraishi, Y., Ohkouchi N., Mukai, H., Shibata, Y., Honch, N.V., Dodoe, Y., Ishida, H., Amano, T., Ono, H., Yoneda, M., Dietary reconstruction of the Okhotsk Culture of Hokkaido, Japan, based on nitrogen isotopic composition of amino acids: implication for the correction of radiocarbon marine reservoir effects on human bones., *Radiocarbon*, in press.
4. Ishikawa, N., Uchida, M., Shibata, Y., Tayasu, I., Natural $\Delta^{14}\text{C}$ signature provides new aspects for stream food web studies: comparison with $\delta^{13}\text{C}$ signature of periphyton at multiple habitats in a stream reach, *Radiocarbon*, in press.
5. Toyota, A., Tayasu, I., Fujimaki, R., Kaneko, N., Uchida, M., Shibata, Y., Hiura, T., Effects of vegetation switch and subsequent change in soil invertebrate composition on soil carbon accumulation patterns, revealed by radiocarbon concentrations, *Radiocarbon*, in press.
6. Tsumune, D., J. Nishioka, A. Shimamoto, Y.W. Watanabe, T. Aramaki, Y. Nojiri, S. Takeda and A. Tsuda, Physical behaviors of iron fertilized patch in the SEEDS II, *Deep-Sea Research Part II*, 56, 2948-2957 (2009).
7. Aramaki, T., Y. Nojiri and K. Imai, Behavior of particulate materials during iron fertilization experiments in the western subarctic Pacific (SEEDS and SEEDS II), *Deep-Sea Research Part II*, 56, 2875-2888 (2009).
8. Yoshimura, T., H. Ogawa, T. Aramaki, Y. Nojiri, J. Nishioka, K. Imai and A. Tsuda, The dynamics of organic carbon, nitrogen and phosphorus during an iron enrichment experiment in the western subarctic Pacific (SEEDS-II), *Deep-Sea Research Part II*, 56, 2863-2874 (2009).
9. Saito, H., A. Tsuda, Y. Nojiri, T. Aramaki, H. Ogawa, T. Yoshimura, K. Imai, I Kudo, J. Nishioka, T. Ono, K. Suzuki and S. Takeda, Biogeochemical cycling of N and Si during the mesoscale iron-enrichment experiment in the western subarctic Pacific (SEEDS-II), *Deep-Sea Research Part II*, 56, 2852-2862 (2009).
10. Kudo, I., Y. Noiri, W.P. Cochlan, K. Suzuki, T. Aramaki, T. Ono and Y. Nojiri, Primary production, bacterial production and nitrogen assimilation dynamics during the SEEDS II experiment, *Deep-Sea Research Part II*, 56, 2755-2766 (2009).
11. Fujitani Y., Hirano S., Kobayashi S., Tanabe K., Suzuki A.K., Furuyama A., Kobayashi T. (2009) Characterization of dilution conditions for diesel nanoparticle inhalation studies, *Inhal.Toxicol.* 21(3),200-209
12. Hong Y.T., Hong B., Lin Q.H., Shibata Y., Zhu Y.X., Leng X.T., Wang Y. (2009) Synchronous climate anomalies in the western North Pacific and North Atlantic regions during the last 14,000 years, *Quat.Sci.Rev.*, 28 (9-10), 840-849, 2009
13. Iijima A., Sato K., Fujitani Y., Fujimori E., Saito Y., Tanabe K., Ohara T., Kozawa K., Furuta N. (2009) Clarification of the predominant emission sources of antimony in airborne particulate matter and estimation of their effects on the atmosphere in Japan. *Environ. Chem.*, 6 (2), 122-132
14. 峽戸孝也, 高木麻衣, 吉永淳, 田中敦, 瀬山春彦, 柴田康行 (2009) ハウスダスト中元素濃度の変動要因. *J. Environ. Chem.*, 19 (1), 87-94
15. Kurihara M.K., Kimura M., Narita Y., Ooki A., Eum Y.J., Tsuda A., Suzuki K., Tani Y., Yokouchi Y. et al. (2009) Distributions of short-lived iodocarbons and biogenic trace gases in the open ocean and atmosphere in the western North Pacific. *Mar. Chem.*, 118 (3-4), 156-170

16. Matsui H., Koike M., Takegawa N., Kondo Y., Griffin R.J., Miyazaki Y., Yokouchi Y., Ohara T. (2009) Secondary organic aerosol formation in urban air: Temporal variations and possible contributions from unidentified hydrocarbons. *J. Geophys. Res.*, 114, D04201
17. Mitsumori F., Watanabe M., Takaya N. (2009) Quantification of the regional non-heme iron in human brain in vivo through the apparent transverse relaxation rate of the tissue water at 4.7T. *Proc. Int. Soc. Magn. Reson. Med.*, 17, 4464
18. Mitsumori F., Watanabe H., Takaya N. (2009) Estimation of brain iron concentration in vivo using a linear relationship between regional iron and apparent transverse relaxation rate of the tissue water at 4.7T. *Magn. Reson. Med.*, 62 (5), 1326-1330
19. 三森文行 (2009) MRI はどこまで生体内鉄濃度定量を可能とするか. *分子細胞治療*, 8 (1), 32-36
20. Nakamiya K., Nakayama T., Ito H., Shibata Y., Morita M. (2009) Isolation and properties of a 2-chlorovinylarsonic acid-degrading microorganism. *J. Hazardous Mater.*, 165 (1-3), 388-393
21. Saito T., Kawamura K., Tsunogai U., Chen T.-Y., Matsueda H., Nakatsuka T., Gamo T., Uematsu M., Huebert B.J. (2009) Photochemical histories of nonmethane hydrocarbons inferred from their stable carbon isotope ratio measurements over east Asia. *J. Geophys. Res.*, 114, D11303
22. 斉藤拓也 (2009) (2008 年度日本地球化学会奨励賞受賞記念論文) 大気および氷床コア試料の精密分析に基づく揮発性有機化合物の地球化学的研究. *Chikyukagaku (Geochemistry)*, 43, 199-211
23. Schouten S., Hopmans E.C., Meer J., Mets A., Bard E., Bianchi T.S., Diefendorf A., Escala M., Freeman K.H., Uchida M. et al. (2009) An interlaboratory study of TEX86 and BIT analysis using high-performance liquid chromatography-mass spectrometry. *Geochem. Geophys. Geosyst.*, 10 (3), Q03012
24. Stohl A., Seibert P., Arduini A., Eckhardt S., Fraser P., Grealley B.R., Lunder C., Maione M., Saito T., Yokouchi Y. et al. (2009) An analytical inversion method for determining regional and global emissions of greenhouse gases: Sensitivity studies and application to halocarbons. *Atmos. Chem. Phys.*, 9, 1597-1620
25. Umezu T. (2009) Evidence for dopamine involvement in ambulation promoted by menthone in mice. *Pharmacol. Biochem. Behav.*, 91 (3), 315-320
26. 梅津豊司 (2009) 精油の中樞薬理作用の研究と最新動向. *Jpn. J. Aromatherapy*, 9 (1), 1-20
27. Watanabe H., Takaya N., Mitsumori F. (2009) T2 correction and quantitation method on highly resolved 2D constant time (1)H spectra in human brain using 2D FT of shared time domain data. *Proc. Int. Soc. Magn. Reson. Med.*, 17, 2388
28. Yamaguchi M., Mitsumori F., Watanabe H., Takaya N., Minami M. (2009) Visualization of seminiferous tubules in rat testes in normal and diseased conditions by high-resolution MRI. *Magn. Reson. Med.*, 62 (3), 637-644
29. 鳥山成一, 栗原由美, 村田康乃, 長元空大, 金山亮吾, 近藤隆之, 山崎敬久, 溝口俊明, 田中敦, 西川雅高, 他 (2009) 耐熱型煙道内排出ガス採取法によるガス状ホウ素化合物測定法の開発. *環境化学*, 19 (3), 381-388
30. Deguchi Y., Tanaka N., Tsuzaki M., Fushimi A., Kobayashi S., Tanabe K. (2008) Detection of components in nanoparticles by resonant ionisation and laser breakdown time-of-flight mass spectrometry. *Environ. Chem.*, 5 (6), 402-412
31. 伏見暁洋, 長谷川就一, 藤谷雄二, 高橋克行, 斉藤勝美, 田邊潔, 小林伸治 (2008) 加熱脱着 GC/MS によるディーゼル排気及び大気中ナノ粒子の有機成分分析. *Eurozoru Kenkyu*, 23 (3), 163-171 <日本エアロゾル学会 2009 年度論文賞受賞>
32. 伏見暁洋, 小林伸治, 近藤美則, 森口祐一, 若松伸司, 田邊潔 (2008) 自動車排出ガス測定における高反応性揮発性有機化合物の消失. *J. Environ. Chem.*, 18(1), 51-64
33. Hirabayashi M., Matsuo M., Hasegawa S., Kobayashi S., Tanabe K. (2008) Elemental analysis of airborne fine

particles collected at the roadside of an arterial road. *J.Radioanal.Nucl.Chem.*, 278 (2), 479-483

34. Ishibashi Y., Yoshinaga J., Tanaka A., Seyama H., Shibata Y. (2008) Lead and cadmium in indoor dust in Japanese houses-relationship with outdoor sources. *Indoor Environ.*, 11 (2), 93-101 <2009 年度室内環境学会論文賞 awarded>
35. Kobayashi S., Hasegawa S., Kondo Y., Fushimi A., Tanabe K. (2008) Nitrogen dioxide emission from diesel vehicles equipped with exhaust aftertreatment systems. *Rev.Automot.Eng.*, 29 (2), 229-235
36. 小林伸治, 長谷川就一, 近藤美則, 伏見暁洋, 田邊潔 (2008) 排気後処理付ディーゼル車からの NO₂ 排出特性. *Trans.Soc.Automot.Eng.Jpn.*, 38(6), 11-16
37. Kumamoto Y., Aramaki T., Watanabe S., Yoneda M., Shibata Y., Togawa O., Morita M., Shitashima K. (2008) Temporal and spatial variations of radiocarbon in Japan Sea bottom water. *J.Oceanogr.*, 64, 429-441
38. 中村有希, 高木麻衣, 吉永淳, 田中敦, 瀬山春彦, 柴田康行 (2008) 日本の室内塵の元素組成と鉛の起源. *Indoor Environ.*, 11 (1), 11-20
39. Ooki A., Yokouchi Y. (2008) Development of a silicone membrane tube equilibrator for measuring partial pressures of volatile organic compounds in natural water. *Environ.Sci.Technol.*, 42 (15), 5706-5711
40. Saito T., Yokouchi Y. (2008) Stable carbon isotope ratio of methyl chloride emitted from glasshouse-grown tropical plants and its implication for the global methyl chloride budget. *Geophys.Res.Lett.*, 35, L08807
41. Saito T., Yokouchi Y., Kosugi Y., Tani M., Philip E., Okuda T. (2008) Methyl chloride and isoprene emissions from tropical rain forest in Southeast Asia. *Geophys.Res.Lett.*, 35, L19812
42. Saitoh K., Ishikawa T., Iso H., Konishi T., Imaseki H., Hasegawa S., Fushimi A., Kobayashi S., Tanabe K. (2008) Development of sample preparation method for engine lubricating oil analysis using in-air PIXE. *Int.J.PIXE*, 18 ((1/2)), 47-52
43. Saitoh K., Sera K., Fushimi A., Fujitani Y., Hasegawa S., Takahashi K., Kobayashi S., Tanabe K. (2008) PIXE analysis of atmospheric nano- to micrometer-size particles in roadside atmosphere. *Int.J.PIXE*, 18 (3/4), 175-186
44. Seyama H., Tani Y., Miyata N., Soma M., Iwahori K. (2008) Characterization of pebble surfaces coated with biogenic manganese oxides by SIMS, XPS and SEM. *Appl.Surf.Sci.*, 255, 1509-1511
45. 高木麻衣, 田宮さやか, 吉永淳, 宇田川弘勝, 田中敦, 瀬山春彦, 柴田康行, 上松あゆ美, 加治正行 (2008) 同位体比分析に基づく日本人小児の鉛曝露源解析. *J.Environ.Chem.*, 18 (4), 521-531
46. Takazawa Y., Tanaka A., Shibata Y. (2008) Organochlorine pesticides in muscle of rainbow trout from a remote Japanese lake and their potential risk on human health. *Water Air Soil Pollut.*, 187(1/4), 31-40
47. 鳥山成一, 日吉真一郎, 山崎敬久, 水上昭弘, 奥村秀一, 藤崎進, 溝口俊明, 木戸瑞佳, 田中敦, 西川雅高他 (2008) 工場排出ガス中の昇華性を有するホウ素化合物測定法の比較. *J.Jpn.Soc.Atmos.Environ.*, 43 (2), 120-125
48. Watanabe H., Takaya N., Mitsumori F. (2008) Sensitivity improvements in peak detection of glutamate, GABA and glutamine in the human brain using ISIS CT-PRESS at 4.7T. *Proc.Int.Soc.Magn.Resonance Med.*, 16, 1610
49. Watanabe H., Takaya N., Mitsumori F. (2008) Simultaneous observation of glutamate, γ -aminobutyric acid, and glutamine in human brain at 4.7T using localized two-dimensional constant-time correlation spectroscopy. *NMR Biomed.*, 21 (5), 518-526
50. Yasukawa T., Nagamine K., Horiguchi Y., Shiku H., Koide M., Itayama T., Shiraishi F., Matsue T. (2008) Electrophoretic cell manipulation and electrochemical gene-function analysis based on a yeast two-hybrid system in a microfluidic device. *Anal.Chem.*, 80 (10), 3722-3727
51. Yokouchi Y., Osada K., Wada M., Hasebe F., Agama M., Murakami R., Mukai H., Nojiri Y., Inuzuka Y., Toom-Saunry D. et al. (2008) Global distribution and seasonal concentration change of methyl iodide in the

atmosphere. *J.Geophys.Res.*, 113, D18311

52. Nakatsubo T., Yoshitake S., Uchida M., Uchida M., Shibata Y., Koizumi H. (2008) Organic carbon and microbial biomass in a raised beach deposit under terrestrial vegetation in the High Arctic, Ny-Alesund, Svalbard. *Polar Res.*, 27, 23-28
53. Kato Y., Shinohara N., Yoshinaga J., Uchida M., Matsuda A., Yoneda M., Shibata Y. (2008) Determination of $(14)C/(12)C$ of acetaldehyde in indoor air by compound specific radiocarbon analysis. *Atmos. Environ.*, 42, 1049-1056
54. Peregón A., Uchida M., Shibata Y. (2008) Sphagnum peatland development at their southern climatic range in West Siberia: trends and peat accumulation patterns. *Environ.Res.Lett.*, 2, 045014
55. 石丸恵利子, 海野徹也, 米田穰, 柴田康行, 湯本貴和, 蛇安一郎 (2008) 海産魚類の産地同定からみた水産資源の流通の展開-中四国地方を中心とした魚類遺存体の炭素・窒素同位体分析の視角から-. *Kokogaku to Shizenkagaku*, 57, 1-20
56. Fushimi A., Hasegawa S., Takahashi K., Fujitani Y., Tanabe K., Kobayashi S. (2008) Atmospheric fate of nuclei-mode particles estimated from the number concentrations and chemical composition of particles measured at roadside and background sites. *Atmos. Environ.*, 42, 949-959
57. Kanaya Y., Cao R., Kato S., Miyakawa Y., Kajii Y., Tanimoto H., Yokouchi Y., Mochida M., Kawamura K., Akimoto H. (2008) Chemistry of OH and HO₂ radicals observed at Rishiri Island, Japan, in September 2003: Missing daytime sink of HO₂ and positive nighttime correlations with monoterpene. *J.Geophys.Res.*, 112, D11308
58. Hashimoto S., Takazawa Y., Fushimi A., Ito H., Tanabe K., Shibata Y., Ubukata M., Kusai A., Tanaka K., Otsuka H. et al. (2008) Quantification of polychlorinated dibenzo-p-dioxins and dibenzofurans by direct injection of sample extract into the comprehensive multidimensional gas chromatograph/high-resolution time-of-flight mass spectrometer. *J.Chromatogr.A*, 1178, 187-198
59. Kanaya Y., Fukuda M., Akimoto H., Takegawa N., Komazaki Y., Yokouchi Y., Koike M., Kondo Y. (2008) Urban photochemistry in central Tokyo: 2. Rates and regimes of oxidant (O₃+NO₂) production. *J.Geophys.Res.*, 113, D06301
60. Aramaki T., Senjyu T., Togawa O., Otsuka S., Suzuki T., Kitamura T., Amano H., Volkov Y.N. (2007) Circulation in the northern Japan Sea studied chiefly with radiocarbon. *Radiocarbon*, 49(2), 915-924
61. Fujitani Y., Ideno Y., Fushimi A., Tanabe K., Kobayashi S., Kobayashi T. (2007) Generation of nanoparticles of lubricating motor oil for inhalation studies. *Aerosol Sci. Technol.*, 41(1), 14-23
62. 藤谷雄二, 平野靖史郎, 小林伸治, 田邊潔, 鈴木明, 古山昭子, 小林隆弘 (2007) 国立環境研究所 ナノ粒子健康影響実験施設. *Engine Technol.*, 8(6), 34-39
63. Fushimi A., Tanabe K., Hasegawa S., Kobayashi S. (2007) Investigation of characterization method for nanoparticles in roadside atmosphere by thermal desorption-gas chromatography/mass spectrometry using a pyrolyzer. *Sci.Total Environ.*, 386, 83-92
64. Mitsumori F., Takaya N., Watanabe H. (2007) Sex difference and age dependence of the human brain structure delineated at the high magnetic field of 4.7T. *Proc.Int.Soc.Magn.Reson.Med.*, 15, 2066-2066
65. Mitsumori F., Watanabe H., Takaya N., Garwood M. (2007) The apparent transverse relaxation rate in human brain varies linearly with tissue iron concentration at 4.7 T. *Magn.Reson.Med.*, 58, 1054-1060
66. Miyata N., Sugiyama D., Tani Y., Tsuno H., Seyama H., Sakata M., Iwahori K. (2007) Production of biogenic manganese oxides by repeated-batch cultures of laboratory microcosms. *J.Biosci.Bioeng.*, 103(5), 432-439
67. 中宮邦近, 中山崇, 佐野友春, 高木博夫, 伊藤裕康, 柴田康行, Edmonds J.S., 森田昌敏 (2007) 分

析標準物質としての有機ヒ素化合物の合成. *J. Environ. Chem.*, 17(3), 355-361

68. Saito T., Yokouchi Y., Aoki S., Nakazawa T., Fujii Y., Watanabe O. (2007) Ice-core record of methyl chloride over the last glacial-Holocene climate change. *Geophys. Res. Lett.*, 34, L03801
69. Shirai T., Yokouchi Y., Blake D.R., Kita K., Izumi K., Koike M., Komazaki Y., Miyazaki Y., Fukuda M., Konso Y. (2007) Seasonal variations of atmospheric C2-C7 nonmethane hydrocarbons in Tokyo. *J. Geophys. Res.*, 112, D24305
70. Takaya N., Mitsumori F., Watanabe H. (2007) Sex differences in the mid-sagittal area of corpus callosum in the human brain image obtained at 4.7T. *Proc. Int. Soc. Magn. Reson. Med.*, 15, 2056-2056
71. Takazawa Y., Yoshikane M., Shibata Y. (2007) Toxaphene and other organochlorine compounds in pintails (*Anas acuta*) from Saitama Kamoba in Japan during Oct 2000-Feb 2002. *Bull. Environ. Contam. Toxicol.*, 79(1), 87-90
72. Tsuda A., Takeda S., Saito H., Nishioka J., Kudo I., Nojiri Y., Suzuki K., Uematsu M., Wells M.L., Aramaki T. et al. (2007) Evidence for the grazing hypothesis: grazing reduces phytoplankton responses of the HNLC ecosystem to iron enrichment in the western subarctic Pacific (SEEDS II). *J. Oceanogr.*, 63(6), 983-994
73. 宇田川弘勝, 高村典子 (2007) 霞ヶ浦における湖水白濁現象の原因物質の特定. *Jpn. J. Limnol.*, 68 (3), 425-432
74. Watanabe H., Takaya N., Mitsumori F. (2007) Quantitation of glutamate and GABA in the human brain in vivo using localized 2D constant time COSY at 4.7T. *Proc. Int. Soc. Magn. Reson. Med.*, 15, 201-201
75. Yamamoto T., Noma Y., Sakai S.-i., Shibata Y. (2007) Photodegradation of perfluorooctane sulfonate by UV Irradiation in water and alkaline 2-propanol. *Environ. Sci. Technol.*, 41, 5660-5665
76. Yokouchi Y., Saito T., Ishigaki C., Aramoto M. (2007) Identification of methyl chloride-emitting plants and atmospheric measurements on a subtropical island. *Chemosphere*, 69, 549-553
77. Nagao S., Kodama H., Aramaki T., Fujitake N., Yonebayashi K. (2007) Variations in $\Delta(14)C$ of humic substances in the Lake Biwa waters. *Nucl. Instrum. Methods Phys. Res., B*, B259, 552-557
78. Alam Md.J., Nagao S., Aramaki T., Shibata Y., Yoneda M. (2007) Transport of particulate organic matter in the Ishikari River, Japan during spring and summer. *Nucl. Instrum. Methods Phys. Res., B*, B259, 513-517
79. Nakamiya K., Nakayama T., Ito H., Edmonds J.S., Shibata Y., Morita M. (2007) Degradation of arylarsenic compounds by microorganisms. *FEMS Microbiol. Lett.*, 274, 184-188
80. Nara F., Imai A., Yoneda M., Matsushige K., Komatsu K., Nagai T., Shibata Y., Watanabe T. (2007) Seasonal variation in species of dissolved organic carbon in a lacustrine environment revealed by paired isotopic measurements ($\Delta(14)C$ and $\delta(13)C$). *Radiocarbon*, 49(2), 767-773
81. Sasaki K., Saito T., Lamsa M., Oksman-Caldentey K.M., Suzuki M., Ohya K., Muranaka T., Ohara K., Yazaki K. (2007) Plants utilize isoprene emission as a thermotolerance mechanism. *Plant Cell Physiol.*, 48(9), 1254-1262
82. 中西利典, 竹村恵二, 齋藤武士, 松山尚典, 柴田康行 (2007) 大分県別府浜脇地区の沖積層ボーリングコア解析-堆積層と炭素 14 年代値-. 大分県温泉調査研究会報告, (58), 11-19
83. Nakamiya K., Takagi H., Nakayama T., Ito H., Tsuruga H., Edmonds J.S., Morita M. (2007) Microbial production and vaporization of mono-(2-ethylhexyl) phthalate from di-(2-ethylhexyl) phthalate by microorganisms inside houses. *Arch. Environ. Occup. Health*, 60(6), 321-325
84. 鳥山成一, 島林誠, 松井あきえ, 米田京平, 山崎敬久, 溝口俊明, 木戸瑞佳, 中村篤博, 田中敦, 西川雅高 その他 (2007) 煙道内排出ガス採取法を用いたガス状ホウ素化合物測定におけるアルカリ含浸ろ紙の検討. *J. Environ. Chem.*, 17, 241-246
85. 鳥山成一, 水上昭弘, 日吉真一郎, 山崎敬久, 近藤隆之, 奥村秀一, 前崎進, 溝口俊明, 田中敦,

- 西川雅高 他 (2007) 人工植物曝露装置を用いた 1,500°C で発生させたガス状ホウ素化合物による各種植物への影響. 環境技術, 36(7), 509-517
86. 高岡路枝, 吉永淳, 田中敦 (2007) 都内公園土壤中重金属濃度の相関関係. *J. Environ. Chem.*, 17(4), 629-634
87. Ochiai N., Ieda T., Sasamoto K., Fushimi A., Hasegawa S., Tanabe K., Kobayashi S. (2007) Comprehensive two-dimensional gas chromatography coupled to high-resolution time-of-flight mass spectrometry and simultaneous nitrogen phosphorous and mass spectrometric detection for characterization of nanoparticles in roadside atmosphere. *J. Chromatogr. A*, 1150, 13-20
88. Yamamoto N., Muramoto A., Yoshinaga J., Shibata K., Endo M. Hirabayashi M., Tanabe K., Goto S., Yoneda M., Shibata Y. et al. (2007) Comparison of carbonaceous aerosols in Tokyo before and after implementation of diesel exhaust restrictions. *Environ. Sci. Technol.*, 41(18), 6357-6362
89. Kanaya Y., Tanimoto H., Matsumoto J., Furutani H., Hashimoto S., Komazaki Y., Tanaka S., Yokouchi Y., Kato S., Kajii Y. et al. (2007) Diurnal variations in H₂O₂, O₃, PAN, HNO₃ and aldehyde concentrations and NO/NO₂ ratios at Rishiri Island, Japan: Potential influence from iodine chemistry. *Sci. Total Environ.*, 376, 185-197
90. Takahashi K., Hirabayashi M., Tanabe K., Shibata Y., Nishikawa M., Sakamoto K. (2007) Radiocarbon content in urban atmospheric aerosols. *Water Air Soil Pollut.*, 185(1/4), 305-310
91. 姉崎克典, 山口勝透, 棗庄輔, 岩田理樹, 橋本俊次 (2007) 統計学的手法を用いるポリ塩化ビフェニルの汚染由来の推定. *Bunseki Kagaku*, 56(8), 639-648
92. 佐々木啓行, 山本央, 阿部圭恵, 吉岡秀俊, 飯村文成, 橋本俊次, 柏木宣久, 佐々木裕子 (2007) 環境大気中のダイオキシン類の濃度推移と Co-PCBs の汚染原因. *J. Environ. Chem.*, 17(1), 27-35
93. Yamaguchi M., Mitsumori F., Takaya N., Watanabe H., Minami M. (2007) 1H MRS assessment of spermatogenic activity in experimentally injured rat testes. *Proc. Int. Soc. Magn. Reson. Med.*, 15, 2738-2738
94. Kanaya Y., Cao R., Akimoto H., Fukuda M., Komazaki Y., Yokouchi Y., Koike M., Tanimoto H., Takegawa N., Kondo Y. (2007) Urban photochemistry in central Tokyo: 1. Observed and modeled OH and HO₂ radical concentrations during the winter and summer of 2004. *J. Geophys. Res.*, 112, D21312
95. 上野清一, 北村立実, 中村美樹, 大曾根圭子, 柴田康行, 石崎睦雄 (2006) 安定同位体標識化合物を利用する動植物中のジフェニルアルシン酸の高速液体クロマトグラフィー/タンデム質量分析法による定量. *分析化学*, 55, 41-44
96. Becker P.R., Gunter E.W., Schluter C., Shibata Y., Wise S.A. (2006) Environmental specimen banking. *J. Environ. Monit.*, 8, 776-778
97. Fujitani Y., Hasegawa S., Fushimi A., Kondo Y., Tanabe K., Kobayashi S., Kobayashi T. (2006) Collection characteristics of low-pressure impactors with various impaction substrate materials. *Atmos. Environ.*, 40, 3221-3229
98. Furukawa K., Noda N., Tsuneda S., Saitou T., Itayama T., Inamori Y. (2006) Highly sensitive real-time PCR assay for quantification of toxic cyanobacteria based on microcystin synthetase A gene. *J. Biosci. Bioeng.*, 102(2), 90-96
99. Harada N., Ahagon N., Sakamoto T., Uchida M., Ikehara M., Shibata Y. (2006) Rapid fluctuation of alkenone temperature in the southwestern Okhotsk Sea during the past 120 ky. *Global Planet. Change*, 53, 29-46
100. 長谷川就一, 若松伸司, 田邊潔, 小林伸治 (2006) 都市域におけるエアロゾル中炭素成分の実態. *エアロゾル研究*, 21(4), 312-321
101. Itayama T., Kiji M., Suetsugu A., Tanaka N., Saito T., Iwami N., Mizuochi M., Inamori Y. (2006) On site experiments of the slanted soil treatment systems for domestic gray water. *Water Sci. Technol.*, 53(9), 193-201
102. 小林伸治, 長谷川就一, 高橋克行, 伏見暁洋, 近藤美則, 田邊潔 (2006) ディーゼル車からの微小粒子の排出特性と道路沿道大気中における挙動. *エアロゾル研究*, 21(4), 305-311

103. 三森文行：4.7T MRIによる多核種スペクトル同時測定システムの構築, 日本生体磁気学会誌, 19, 20-21 (2006).
104. Mitsumori F., Watanabe H., Takaya N., Garwood M. (2006) T2 measurements in the human brain at 4.7T using an adiabatic multi-echo sequence -Correlation between T2 and the tissue iron content. Proc. Int. Soc. Magn. Reson. Med., 14, 2508
105. Miyata N., Maruo K., Tani Y., Tsuno H., Seyama H., Soma M., Iwahori K. (2006) Production of biogenic manganese oxides by anamorphic ascomycete fungi isolated from streambed pebbles. Geomicrobiol.J., 23, 63-73
106. Saito T., Yokouchi Y., Aoki S., Nakazawa T., Fujii Y., Watanabe O. (2006) A method for determination of methyl chloride concentration in air trapped in ice cores. Chemosphere, 63, 1209-1213
107. Saito T., Yokouchi Y. (2006) Diurnal variation in methyl halide emission rates from tropical ferns. Atmos. Environ., 40, 2806-2811
108. Takaoka M., Yoshinaga J., Tanaka A. (2006) Influence of paint chips on lead concentration in the soil of public playgrounds in Tokyo. J. Environ. Monit., 8, 393-398
109. Takaya N., Watanabe H., Mitsumori F. (2006) The size of Corpus Callosum normalized by the intracranial or brain parenchymal volume exhibits a significant difference between male and female brain. Proc. Int. Soc. Magn. Reson. Med., 14, 1606
110. Tomita M., Totsuka K., Ikari H., Ohara K., Mimura H., Watanabe H., Kume H., Matsumoto T. (2006) Observation of whispering gallery modes in cathode luminescence in TiO₂:Eu(3+) microspheres. Appl. Phys. Lett., 89, 061126
111. Umezu T., Nagano K., Ito H., Kosaka K., Sakaniwa M., Morita M. (2006) Anticonflict effects of lavender oil and identification of its active constituents. Pharmacol., Biochem. Behav., 85, 713-721
112. Watanabe H., Kume H., Mizuochi N., Yamasaki S., Kanno S., Okushi H. (2006) Nitrogen incorporation in homoepitaxial diamond thin film. Diam. Relat. Mater., 15, 554-558
113. 渡邊英宏 (2006) 磁気共鳴分光 VI. 磁気共鳴イメージング(MRI). 分光研究, 55(6), 408-419
114. Yamaguchi M., Mitsumori F., Takaya N., Watanabe H., Minami M. (2006) Visualization of seminiferous tubules by high resolution MR imaging in rat testes: the usefulness in the evaluation of spermatogenic activities. Proc. Int. Soc. Magn. Reson. Med., 14, 2118
115. Yamaguchi M., Mitsumori F., Watanabe H., Takaya N., Minami M. (2006) In vivo localized ¹H MR spectroscopy of rat testes: Stimulated echo acquisition mode (STEAM) combined with short TI inversion recovery (STIR) improves the detection of metabolite signals. Magn. Reson. Med., 55, 749-754
116. Yamamoto N., Takahashi Y., Yoshinaga J., Tanaka A., Shibata Y. (2006) Size distributions of soil particles adhered to Children's hands. Arch. Environ. Contam. Toxicol., 51, 157-163
117. Yamaoka Y., Carmona M.L., Oclarit J.M., Jin K., Shibata Y. (2006) Characterization of water-soluble organoarsenic compounds in marine sponges. Appl. Organometal. Chem., 20, 545-548
118. Yokouchi Y., Taguchi S., Saito T., Tohjima H., Tanimoto H., Mukai H. (2006) High frequency measurements of HFCs at a remote site in East Asia and their implications for Chinese emissions. Geophys. Res. Lett., 33, L21814
119. Yokouchi Y., Taguchi S., Saito T., Tohjima H., Tanimoto H., Mukai H. (2006) High frequency measurements of HFCs at a remote site in East Asia and their implications for Chinese emissions. Geophys. Res. Lett., 33, L21814
120. Kuroyanagi A., Kawahata H., Narita H., Ohkushi K., Aramaki T. (2006) Reconstruction of paleoenvironmental changes based on the planktonic foraminiferal assemblages off Shimokita (Japan) in the northwestern North Pacific. Global Planet. Change, 53, 92-107
121. Kumata H., Uchida M., Sakuma E., Uchida T., Fujiwara K., Tsuzuki M., Yoneda M., Shibata Y. (2006) Compound class specific ¹⁴C analysis of polycyclic aromatic hydrocarbons associated with PM₁₀ and PM_{1.1} aerosols from

residential areas of Suburban Tokyo. Environ.Sci.Technol., 40(11), 3474-3480 <Environmental Science 部門
First runner-up 賞 awarded>

122. Nakayama T., Edmonds J.S., Shibata Y., Morita M. (2006) The rate of oxidation of dimethylarsinous acid to dimethylarsinic acid is pH dependent: implications for the analysis and toxicology of arsenic metabolites in urine. J.Chem.Res., 2006(3), 185-187
123. Yoshikane M., Kay W.R., Shibata Y., Inoue M., Yanai T., Kamata R., Edmonds J.S., Morita M. (2006) Very high concentrations of DDE and toxaphene residues in crocodiles from the Ord River, Western Australia: an investigation into possible endocrine disruption. J. Environ. Monit., 8, 649-661
124. Oka M., Arai T., Shibata Y., Miyazaki N. (2006) Reproductive transfer of organochlorines in viviparous surfperch, *Ditrema temmincki*. Environ. Pollut, 142, 383-387
125. 鳥山成一, 日吉真一郎, 山崎敬久, 水上昭弘, 奥村秀一, 藤崎進, 溝口俊明, 木戸瑞佳, 田中敦, 西川雅高 (2006) 煙道内排出ガス採取法を用いた昇華性を有するホウ素化合物測定法の開発. 環境化学, 16(2), 213-218
126. 鈴木貴博, 山口晃, 茨木剛, 大野勝之, 村山等, 澁谷信雄, 橋本俊次, 柏木宣久, (2006) 関数関係解析によるケミカルマスバランス法を用いたダイオキシン類の発生源寄与率推定法に関する検討. 環境化学, 16(3), 437-448
127. 柏木宣久, 吉澤正, 茨木剛, 加藤謙一, 橋本俊次, 佐々木裕子, (2006) 環境汚染に対する未確認発生源の寄与率の推定. 統計数理, 54(1), 123-146
128. Kume G., Horiguchi T., Goto A., Shiraishi H., Shibata Y., Morita M., Shimizu M. (2006) Seasonal distribution, age, growth, and reproductive biology of marbled sole *Pleuronectes yokohamae* in Tokyo Bay, Japan. Fish.Sci., 72(2), 289-298
129. Isobe T., Serizawa S., Horiguchi T., Shibata Y., Managaki S., Takada H., Morita M., Shiraishi H. (2006) Horizontal distribution of steroid estrogens in surface sediments in Tokyo Bay. Environ.Pollut., 144, 632-638
130. Koizumi, I., R. Tada, H. Narita, T. Irino, T. Aramaki, T. Oba and H. Yamamoto, Paleoceanographic history around the Tsugaru Strait between the Japan Sea and the Northwest Pacific Ocean since 30 cal kyr BP., *Palaeogeography, Palaeoclimatology, Palaeoecology*, 232, 36-52 (2006).

3.2 誌上発表(査読なし; 一部のみ抜粋)

- 梅津豊司 (2010) 不安障害. アニテックス, 22 (1), 12-19
- 斉藤拓也 (2009) 熱帯林は汚染物質の排出源か?! 化学, 64 (5), 65
- 梅津豊司 (2009) 内分泌かく乱化学物質(環境ホルモン)の最近の研究動向. Aromatopia, 18 (2), 32-34
- 梅津豊司 (2009) ペパーミントの薬理作用. Medical Herb, 8, 4-5
- 伏見暁洋 (2008) 加熱脱着 GC/MS による自動車排気由来ナノ粒子の分析. ぶんせき, 386(2), 84-85
- Kuramata M., Shinohara N., Yoshinaga J., Yoneda M., Seyama H., Uchida M., Shibata Y. (2008) Radiocarbon analysis of aldehydes in indoor air for source apportionment. 10th Symp.Jpn.AMS Soc.Proc., 307-310
- Ooki A. (2008) Measurements of air-sea flux of volatile organic compounds in the subarctic Northwest Pacific in winter. Solas News, 7, 10-11
- 渡邊英宏 (2008) 超高磁場装置の現状と将来展望. 放射線撮影分科会会誌, 50, 57-59
- 三森文行 (2007) MRI を用いた脳形態画像の集積. 電気評論, 92(臨時増刊), 54-55
- 柴田康行, 内田昌男, 米田穰, 田中敦, 鈴木亮, 廣田正史, 鶴野光, 小林利行, 小林千明, 植弘崇嗣 (2007) ガスクロマトグラフと加速器質量分析計の組み合わせ(GC-AMS)による個々の化合物の放射性炭素年代測定. J.Vac.Soc.Jpn., 50(7), 480-485

- 三森文行 (2006) 超高磁場多核種 MRS を用いる脳機能発現の代謝機能の研究. *Innervision*, 21(7), 53
- 柴田康行, 堀口敏宏, 田中敦, 高澤嘉一, 植弘崇嗣, 廣田正史, 吉兼光葉 (2006) 野生生物保護と環境汚染の監視-環境モニタリングと環境スペシメンバンク-. *野生動物医学会誌*, 12(1), 19-26
- 高澤嘉一 (2006) 二次元ガスクロマトグラフィーの環境分析への応用. *ぶんせき*, 382, 528
- 渡邊英宏, 三森文行 (2006) 超高磁場 MRI による人脳内の興奮性及び抑制性神経伝達物質の無侵襲的同時計測法の研究. *Innervision*, 21(7), 40
- 横内陽子 (2006) 亜熱帯における塩化メチル放出植物の検索と塩化メチル放出量を支配する環境要因の解明. *Innervision*, 21(7), 40 国立環境研究所, 30p
- Yokouchi Y., Saito T., Okuda T., Phillip E. (2006) A preliminary study of volatile organic compounds emitted from tropical plants. In: Okuda T., Kondo T. eds., *Annu. Rep. NIES/FRIM/UPM Jt. Res. Proj. Tropical Ecology & Biodiversity 2005*, 37-43
- Nara Watanabe F., Imai A., Matsushige K., Komatsu K., Shibata Y. (2006) Application of (14)C measurements for isotopic characterization of dissolved organic carbon(DOC) in lake water. -, NIES, 31-43 東京大学大学院 AMS 研究協会, 140p

3.3 書籍

- 三森文行 (2010) MRI の原理と装置の構成. 日本磁気共鳴医学会安全性評価委員会監修, MRI 安全性の考え方, 学研メディカル秀潤社, 24-35
- Suzuki N., Shibata Y., Ogasawara K. (2009) Chapter 12 Monitoring and modeling the fate of mercury species in Japan. In: Pirrone N., Mason R. eds., *Mercury Fate and Transport in the Global Atmosphere: Emissions, Measurements and Models*, Springer, 381-390
- 三森文行 (2008) MRI イメージングの機器と解析法. 佐治英郎, 田畑泰彦編, ますます広がる分子イメージング技術, メディカルドゥ, 94-100
- 三森文行 (2008) 原理とハードウェアから MRI の安全性を考える. 日本磁気共鳴医学会安全性評価委員会編, MR の最近の進歩と安全性 改訂第 3 版, 日本磁気共鳴医学会, 3-13
- Shibata Y. (2008) Monitoring network on the marine pollution in the Asian Waters. In: Miyazaki N., Wattayakorn Geds., *ASEAN Int. Conf.*, Shinjusha, 112-119
- Iino F., Sebesvari Z., Renaud F., Kitsuwat T., Morita M., Shibata Y., Huang Y., Rajendran B.R., Syafrul H., Shim W.J. et al. (2008) POPs analysis and monitoring in the Asian coastal hydrosphere. In: *Persistent Organic Pollutants(POPs) Research in Asia*, 6-11
- Ishii K., Shibata Y., Hosoya T., Takeda T., Iwasaki N., Nakamagoe K., Itoh Y., Kaise T., Hirano S., Ishii K. et al. (2008) Central nervous effect of organoarsenic compound. In: *Persistent Organic Pollutants(POPs) Research in Asia*, 387-392
- Nakai K., Nakamura T., Shibata Y., Suzuki K., Kameo S., Saito Y., Hosokawa T., Okamura K., Murata K., Satoh H. (2008) The biological monitoring program of persistent organic pollutants in Japan: Concentration of dioxins, polychlorinated biphenyls and organochlorine pesticides in maternal blood, breast milk and cord blood. In: *Persistent Organic Pollutants(POPs) Research in Asia*, 405-410
- 瀬山春彦 (2007) 3.3.3 非破壊形態分析. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編, 丸善, 519p.), 367-372
- 横内陽子 (2007) 2.1.4 特殊起源物質の調査法 a. 植物起源揮発性有機化合物. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編, 丸善, 519p.), 70-71
- 横内陽子 (2007) 3.1.8 植物起源揮発性有機物質. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編, 丸善, 519p.), 213-217

- 柴田康行 (2007) 2.4.1 b 調査法の設計. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編,丸善,519p.), 161-165
- 柴田康行 (2007) 2.4.3 生物調査法. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編,丸善,519p.), 178-186
- 柴田康行 (2007) 1.4 化学物質と環境. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編,丸善,519p.), 42-48
- 柴田康行 (2007) 3.4.7 LC/ICP-MS による海洋生物のヒ素の分析. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編,丸善,519p.), 449-457
- 柴田康行, 伊藤安紀 (2007) 3.3.8 ヒ素汚染事例. 実験化学講座 20-2 環境化学(第 5 版)(日本化学会編,丸善,519p.), 395-401
- 三森文行 (2007) NMR の原理と画像化技術. 小川誠二,上野照剛監修, 非侵襲・可視化技術ハンドブック, エヌ・ティー・エス, 3-12
- 三森文行, 渡邊英宏 (2007) MRS による代謝解析. 小川誠二,上野照剛監修, 非侵襲・可視化技術ハンドブック, エヌ・ティー・エス, 85-96
- 三森文行 (2007) Coherence コンヒーレンス. 日本磁気共鳴医学会用語委員会編, MR 用語解説集, インナービジョン, 42-44
- 三森文行 (2007) Density matrix 密度行列. 日本磁気共鳴医学会用語委員会編, MR 用語解説集, インナービジョン, 42-44
- 三森文行 (2007) Diffusion 拡散. 日本磁気共鳴医学会用語委員会編, MR 用語解説集, インナービジョン, 64-65
- 三森文行 (2007) Product operator formalism 直積演算子法. 日本磁気共鳴医学会用語委員会編, MR 用語解説集, インナービジョン, 193-195
- 三森文行 (2007) Stimulated echo スティミュレイトドエコー. 日本磁気共鳴医学会用語委員会編, MR 用語解説集, インナービジョン, 258-259
- Shibata Y., Takasuga T. (2007) Persistent organic pollutants monitoring activities in Japan. In: Li A.,Tanabe S.,Jiang Geds., Persistent Organic Pollutants in Asia Sources,Distributions,Transport and Fate(Developments in Environmental Science Vol.7), Elsevier, 3-30
- 渡邊英宏 (2007) HMQC 異核種多量子遷移. 日本磁気共鳴医学会用語委員会編, MRI 用語解説集, インナービジョン, 114-115
- 渡邊英宏 (2007) HSQC 異核種一量子遷移. 日本磁気共鳴医学会用語委員会編, MRI 用語解説集, インナービジョン, 115
- 渡邊英宏 (2007) Polarization Transfer 分極移動. 日本磁気共鳴医学会用語委員会編, MRI 用語解説集, インナービジョン, 191-192
- Seyama H., Soma M., Theng B.K.G. (2006) X-Ray photoelectron spectroscopy. In: Handbook of Clay Science (Developments in Clay Science 1) (Bergaya F.,Theng B.K.G.,Lagaly G. eds., Elsevier, 1224p.), 865-878

3.4 口頭発表

国外： 88件

国内： 353件

招待講演

Shibata Y.. GMP and Effectiveness Evaluation of the Stockholm Convention - POPs and new POPs Monitoring in the Asia-Pacific -, Capacity Building on POPs Analysis in Core Media, 2010.1 (Bangkok)

三森文行： MRI を用いる生体鉄の無侵襲計測, 第 1 回日本安定同位体・生体ガス医学応用学会大会, 2009.10

(東京) .

Mitsumori F: Transverse relaxation of the tissue water in human brain is predominantly determined by iron and macromolecules, 2009 Minnesota Workshops on High Field MR Imaging and Spectroscopy, & Magnetic Resonance Imaging of Brain Function., 2009.10 (Minneapolis).

山口雅之、三森文行 : MR microscopy による精巣機能評価、第 35 回日本磁気共鳴医学会大会、2007.9 (神戸).

三森文行:4.7T MRI による多核種スペクトル同時測定システムの構築, 第 21 回日本生体磁気学会, 2006. 6 (東京).

三森文行 : 超高磁場 MRI を用いるヒト脳代謝の定量評価, 日本薬剤学会第 21 年会「システム薬理学～脳を科学する」シンポジウム, 2006.3 (金沢).

基調講演

Y. Shibata (2009) Environmental Monitoring and specimen banking – POPs / new POPs pollution in Japan and Asia-pacific, Dioxin2009 (Beijing, Aug 2009)

他

受賞等

横内陽子 2006 年 日本気象学会 堀内賞

柴田康行 2006 年 日本環境化学会 功績賞

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3.5 特許等

久米 博 : トータルエアロゾル分析装置、特許第 4 1 0 8 4 4 1 号