

2.1.10 誌上発表及び口頭発表

2.1.10.1 誌上発表(査読あり)

平成18年度

畠山史郎、高見昭憲、三好猛雄、王瑋：中国から東シナ海を経て沖縄まで輸送されるエアロゾル中の主要イオンの関係、*エアロゾル研究*、**21**、147-152、2006.

Hatakeyama, S.: Measurements of Aerosols Transported from the East Asia at Cape Hedo Atmosphere and Aerosol Monitoring Station (CHAAMS) in Okinawa, Proc. 8th International Symposium on Building and Urban Environmental Engineering (held in Tokyo July, 2006) , 21-24, 2006.

Hatakeyama, S., Takami, A., and Wang, W.: Aircraft Observations of Air Pollutants around Large Cities in China, Proc. 8th International Symposium on Building and Urban Environmental Engineering (held in Tokyo July, 2006) , 45-49, 2006.

Qi, B., Takami, A., and Hatakeyama, S.: A calibration method for measurement of small alkyl organic peroxy radicals by chemical amplifier, *Analyt. Sci.*, **22**, 1091-1093, 2006.

Qi, B., Sato, K., Imamura, T., Takami, A., Hatakeyama, S., and Ma, Y.: Production of the radicals in the ozonolysis of ethene: a chamber study by FT-IR and PERCA, *Chem. Phys. Lett.*, **427**, 461-465, 2006.

渡辺征春、奥村真一郎、鈴木睦、吉田重臣、川上修司、佐野琢己、柴崎和夫、畠山史郎、北和之、小川利紘：航空機搭載センサ“Airborne-OPUS”による二酸化硫黄ガスのリモートセンシング：アルゴリズム開発と検証実験、*日本リモートセンシング学会誌*、**26**、173-185、2006.

Wang, W., Liu, H., Yue, X., Li, H., Chen, J., Ren, L., Tang, D., Hatakeyama, S., and Takami, A.: Study on acidity and acidic buffering capacity of particulate matter over Chinese eastern coastal areas in spring, *J. Geophys. Res.*, **111**, D18207, doi:10.1029/2005JD006753, 2006.

Takami, A., Wang, W., Tang, D., and Hatakeyama, S.: Measurements of gas and aerosol for two weeks in northern China during the winter-spring period of 2000, 2001, and 2002, *Atmos. Res.*, **82**, 688-697, 2006.

高見昭憲、今井孝典、清水 厚、松井一郎、杉本伸夫、畠山史郎：沖縄辺戸で観測された人為起源エアロゾルと黄砂の輸送、*エアロゾル研究*、**21**、341-347、2006.

Arao, K., Nishikawa, M., Hatakeyama, S., Takami, A., Matsuyama, S., and Hayasaka, T.: Atmospheric turbid cinditions due to fine particles in recent years at Nagasaki, Japan, *J. Environ. Studies, Nagasaki University*, **9**, 23-30, 2006.

Takami, A., Wang, W., Tang, D., and Hatakeyama, S.: Measurements of gas and aerosol for two weeks in northern China during the winter-spring period of 2000, 2001 and 2002, *Atmos. Res.*, **82**, 688-697, 2006.

Kawamoto, K., T. Hayasaka, I. Uno, and T. Ohara: A correlative study on the relationship between modeled anthropogenic aerosol concentration and satellite-observed cloud properties over east Asia, *J. Geophys. Res.*, **111**, D19201, doi:10.1029/2005JD006919, 2006.

Hasegawa, S., Wakamatsu, S., Ohara, T., Itano, Y., Saitoh, K., Hayasaki, M., and Kobayashi, S.: Vertical profiles of nano- to micro-scale aerosols measured by aircraft over Osaka metropolitan area in Japan, *Atmospheric Environment*, **41**, 717-729, 2006.

Akimoto, H., Ohara, T., Kurokawa, J., and Horii, N: Verification of Energy Consumption in China during 1996-2003 by Using Satellite Observational Data, *Atmospheric Environment*, **40**, 7663-7667, 2006.

Yan, X., Ohara, T., and Akimoto, H.: Bottom-up estimates of biomass burning in mainland China, *Atmospheric Environment*, **40**, 5262-5273, 2006.

Hayasaki, M, Sugata, S., and Tanaka, H. L.: Interannual Variation in Cold Frontal Activity in Spring in Mongolia, *J. Meteor. Soc. Japan*, **84**, 463-475, 2006.

- Tanimoto, H., Mukai, H., Hashimoto, S., and Norris, J. E.: Intercomparison of ultraviolet photometry and gas-phase titration techniques for ozone reference standards at ambient levels, *J. Geophys. Res.*, **111**, D16313, doi:10.1029/2005JD006983, 2006.
- Viallon, J., P. Moussay, M. Esler, R. Wielgosz, W. Bremser, J. Novák, M. Vokoun, A. Botha, M.J. Van Rensburg, C. Zellweger, S. Goldthorp, A. Borowiak, F. Lagler, J. Walden, E. Malgeri, M.P. Sassi, P.M. Gomez, R.F. Patier, D.G. Madruga, J.C. Woo, Y.D. Kim, T. Macé, C. Sutour, A. Surget, B. Niederhauser, D. Schwaller, B. Frigy, I.G. Váraljai, S. Hashimoto, H. Mukai, H. Tanimoto, et al.: International Comparison CCQM-P28, Ozone at ambient level (Pilot study), *Metrologia*, **43**, Tech. Suppl., 08010, doi:10.1088/0026-1394/43/1A/08010, 2006.
- Koike, M., Jones, N. B., Palmer, P. I., Matsui, H., Zhao, Y., Kondo, Y., Matsumi, Y., and Tanimoto, H.: Seasonal variation of carbon monoxide in northern Japan: Fourier transform IR measurements and source-labeled model calculations, *J. Geophys. Res.*, **111**, D15306, doi:10.1029/2005JD006643, 2006.
- Yokouchi, Y., Taguchi, S., Saito, T., Tohjima, Y., Tanimoto, H., and Mukai, H.: High frequency measurements of HFCs at a remote site in east Asia and their implications for Chinese emissions, *Geophys. Res. Lett.*, **33**, L21814, doi:10.1029/2006GL026403, 2006.
- Arao, K., Ishizaka, J., Sugimoto, N., Matsui, I., Shimizu, A., Mori, I., Nishikawa, M., Aoki, K., Uchiyama, A., Yamazaki, A., Togawa, H., and Asano, J.: Yellow Sand Dust Event on 13 April 2003 over Western Kyushu, Japan, *SOLA*, **2**, 100-103, doi:10.2151/sola.2006-026, 2006.
- Arao, K., Nishikawa, M., Hatakeyama, S., Takami, A., Matsuyama, S., and Hayasaka, T.: Atmospheric Turbid Conditions due to Fine Particles in Recent Years at Nagasaki, Japan, *Journal of Environmental Studies, Nagasaki University*, **9**(1), 23-30, 2006.

平成19年度

- Primbs, T., Simonich, S. L., Schmedding, D., Wilson, G., Jaffe, D., Takami, A., Kato, S., Hatakeyama, S., and Kajii, Y.: Atmospheric Outflow of Anthropogenic Semi-Volatile Organic Compounds from East Asia in Spring 2004, *Environmental Science and Technology*, **41**(10), 3551, 2007.
- Wang, G., Kawamura, K., Hatakeyama, S., Takami, A., and Wang, W.: Aircraft Measurement of Organic Aerosols over China”, accepted in March 2007 *Environmental Science and Technology*, **41**(9), 3115, 2007.
- Wang, W., Bao, L. F., Liu, H. J., Yue, X., Chen, J. H., Li, H., Ren, L. H., Tang, D. G., Hatakeyama, S., and Takami, A., Vertical Profiles of Aerodynamic Size Distribution for Airborne Particles over Yangtze River Delta, *Chin. Phys.* **16**(9), 2818, 2007.
- Q. Zhang, Jimenez, J. L., Canagaratna, M. R., Allan, J. D., Coe, H., Ulbrich, I., Dzepina, K., Dunlea, E., Docherty, K., DeCarlo, P. F., Salcedo, D., Alfarra, M. R., Sun, Y. L., Onasch, T., Jayne, J. T., Takami, A., Miyoshi, T., Shimojo, A., Hatakeyama, S., Takegawa, N., Kondo, Y., Schneider, J., Drewnick, F., Weimer, S., Demerjian, K., Williams, P., Bower, K., Middlebrook, A. M., Bahreini, R., Cotrell, L., Griffin, R., Rautiainen, J., and Worsnop, D. R.: Oxygenated Species Dominate Organic Aerosols in Anthropogenically—Influenced Northern Hemisphere Mid-latitudes” accepted in May 2007 *Geophys. Res. Letter*, **34**, L13801, doi:10.1029/2007GL029979, 2007.
- Suthawaree, J., Kato, S., Takami, A., Hatakeyama, S., Kadena, H., Togushi, M., Tomoyose, N., Yogi, K., Jaffe, D., Swartzendruber, P., Prestbo, E., Kajii, Y.: Influence from long-range transport of Asian outflow during an intensive measurement campaign at Cape Hedo, Okinawa, in spring 2004, *大気環境学会誌*, **42**(6), 350-360, 2007.
- Narukawa, M., Matsumi, Y., Matsumoto, J., Takahashi, K., Yabushita, A., Sato, K., and Imamura, T.: Real-time analysis of secondary organic aerosol particles formed from cyclohexene ozonolysis using a laser-ionization single-particle aerosol mass spectrometer, *Analytical Sciences*, **23**(5), 507-511, 2007.
- Sato, K., Hatakeyama, S., and Imamura, T.: Secondary organic aerosol formation during the photooxidation of toluene: NOx dependence of chemical composition, *J. Phys. Chem. A*, **111**(39), 9796-9808, 2007.
- 佐藤圭、田中友里愛、李紅、小川志保、畠山史郎：沖縄辺戸岬における有機エアロゾル組成の組成と季節変化：2005-2006年に観測された多環芳香族炭化水素、*地球化学*, **41**(4), 125-133, 2007.

- Narukawa, M., Matsumi, Y., Matsumoto, J., Takahashi, K., Yabushita, A., Sato, K., and Imamura, T.: Single particle analysis of secondary organic aerosols formed from 1,4-cyclohexadiene ozonolysis using a laser-ionization single-particle aerosol mass spectrometer, *Bull. Chem. Soc. Jpn.*, **81**(1), 120-126, 2007.
- Ohara, T., Akimoto, H., Kurokawa, J., Horii, N., Yamaji, K., Yan, X., and Hayasaka, T.: An Asian emission inventory of anthropogenic emission sources for the period 1980–2020, *Atmospheric Chemistry and Physics*, **7**, 4419-4444, 2007.
- Uno, I., Uematsu, M., Hara, Y., He., Y., Ohara, T., Mori, A., Kamaya, T., Murano, K., Sadanaga, Y., and Bandow, H.: Numerical Study of the Atmospheric Input of Anthropogenic Total Nitrate to the Marginal Seas in the Western North Pacific Region, *Geophysical Research Letters*, **34**, L17817, doi:10.1029/2007GL030338, 2007.
- Uno, I., Ohara, T., Yamaji, K., and Kurokawa, J.: Recent Trends and projections in Asian Air Pollution, *Journal of Disaster Research*, **2**, 163-172, 2007.
- 栗林正俊, 大原利眞, 山地一代: 中国におけるオゾンによる稲作影響の現状評価と将来予測, *大気環境学会誌*, **43**, 55-66, 2008.
- Tanimoto, H., Aoki, N., Inomata, S., Hirokawa, J., and Sadanaga, Y.: Development of a PTR-TOFMS instrument for real-time measurements of volatile organic compounds in air, *Intern. J. Mass Spectrom.*, doi:10.1016/j.ijms.2007.01.009, **263**, 1-11, 2007.
- Tanimoto, T., Sawa, Y., Matsueda, H., Wada, A., Yonemura, S., Mukai, H., Wang, T., Poon, S., Wong, A., Lee, G., Jung, J. Y., Kim, K. R., Lee, M. H., Lin, N. H., Wang, J. L., Ou-Yang, C. F., and Wu, C. F.: Evaluation of standards and methods for continuous measurements of carbon monoxide at ground-based sites in Asia, *Pap. Met. Geophys.*, doi:10.2467/mripapers.58.85, **58**, 85-93, 2007.
- Tanimoto, H., Mukai, H., Sawa, Y., Matsueda, H., Yonemura, S., Wang, T., Poon, S., Wong, A., Lee, G., Jung, J. Y., Kim, K. R., Lee, M. H., Lin, N. H., Wang, J. L., Ou-Yang, C. F., Wu, C. F., Akimoto, H., Pochanart, P., Tsuboi, K., Doi, H., Zellweger, C., and Klausen, J.: Direct assessment of international consistency of standards for ground-level ozone: Strategy and implementation toward metrological traceability network in Asia, *J. Environ. Monit.*, doi:10.1039/b701230f, **9**, 1183-1193, 2007.
- Aoki, N., Inomata, S., and Tanimoto, H.: Detection of C1-C5 alkyl nitrates by proton transfer reaction time-of-flight mass spectrometry, *Intern. J. Mass Spectrom.*, doi:10.1016/j.ijms.2006.11.018, **263**, 12-21, 2007.
- Sawa, Y., Tanimoto, H., Yonemura, S., Matsueda, H., Wada, A., Taguchi, S., Hayasaka, T., Tsuruta, H., Tohjima, Y., Mukai, H., Kikuchi, N., Katagiri, S., and Tsuboi, K.: Widespread pollution events of carbon monoxide observed over the western North Pacific during the East Asian Regional Experiment (EAREX) 2005 campaign, *J. Geophys. Res.*, **112**, D22S26, doi:10.1029/2006JD008055, 2007.
- Kuwata, M., Kondo, Y., Miyazaki, Y., Komazaki, Y., Kim, J. H., Yum, S. S., Tanimoto, H., Matsueda, H.: Cloud condensation nuclei activity at Jeju Island, Korea in spring 2005, *Atmos. Chem. Phys. Discuss.*, **7**, 15805-15851, 2007.
- Matsumoto, K., Minami, H., Hayano, T., Uyama, Y., Tanimoto, H., and Uematsu, M.: Regional climatology of particulate carbonaceous substances in the northern area of the east Asian Pacific rim, *J. Geophys. Res.*, **112**, D24203, doi:10.1029/2007JD008607, 2007.
- Miyazaki, Y., Kondo, Y., Han, S., Koike, M., Kodama, D., Komazaki, Y., Tanimoto, H., and Matsueda, H.: Chemical characteristics of water-soluble organic carbon in the Asian outflow, *J. Geophys. Res.*, **112**, D22S30, doi:10.1029/2007JD009116, 2007.
- Nakajima, T., Yoon, S. C., Ramanathan, V., Shi, G. Y., Takemura, T., Higurashi, A., Takamura, T., Aoki, K., Sohn, B. J., Kim, S. W., Tsuruta, H., Sugimoto, N., Shimizu, A., Tanimoto, H., Sawa, Y., Lin, N. H., Lee, C. T., Goto, G.,

and Schutgens, N.: Overview of the Atmospheric Brown Cloud East Asian Regional Experiment 2005 and a study of the aerosol direct radiative forcing in east Asia, *J. Geophys. Res.*, **112**, D24S91, doi:10.1029/2007JD009009, 2007.

Inomata, S., Tanimoto, H., Kameyama, S., Tsunogai, U., Irie, H., Kanaya, Y., and Wang, Z.: Technical Note: Determination of formaldehyde mixing ratios in air with PTR-MS: Laboratory experiments and field measurements, *Atmos. Chem. Phys.*, **8**, 273-284, 2008.

Mochida, M., Miyakawa, T., Takegawa, N., Morino, Y., Kawamura, K., and Kondo, Y.: Significant alteration in the hygroscopic properties of urban aerosol particles by the secondary formation of organics, *Geophys. Res. Lett.*, **35**, L02804, doi:10.1029/2007GL031310, 2008.

Ochiai, N., Ieda, T., Sasamoto, K., Fushimi, A., Hasegawa, S., Tanabe, K., Kobayashi, S.: 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, *Journal of Chromatography A*, **1150**(1-2), 13-20, doi:10.1016/j.chroma.2007.02.001, 2007.

Fushimi, A., Tanabe, K., Hasegawa, S., Kobayashi, K.: Investigation of characterization method for nanoparticles in roadside atmosphere by thermal desorption-gas chromatography/mass spectrometry using a pyrolyzer, *Science of the Total Environment*, **386**(1-3), 83-92, doi:10.1016/j.scitotenv.2007.05.025, 2007

小林伸治, 長谷川就一, 近藤美則, 伏見暁洋, 田邊潔: 後処理装置付ディーゼル車からの NO₂ 排出特性, 自動車技術会論文集, 38(6), 11-16, 2007.

Shi, Z. B., Zhang, D. Z., Hasegawa, S., Hayashi, M., and Ji, H. Z.: Modification of soot by volatile species in an urban atmosphere, *Science of Total Environment*, 389(1), 195-201, doi:10.1016/j.scitotenv.2007.08.016, 2008.

Fushimi, A., Hasegawa, S., Takahashi, K., Fujitani, Y., Tanabe, K., Kobayashi, S.: 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**(5), 948-958, doi:10.1016/j.atmosenv.2007.10.019, 2008.

早崎将光, 菅田誠治, 大原利眞, 若松伸司, 宮下七恵: 1992 - 2004年度のSPM環境基準達成率に対する黄砂現象の影響, 大気環境学会誌, **42**(3), 188-199, 2007.

Adachi, S., Kimura, F., Sugata, S., Hayasaki, M., Kurosaki, Y., and Wakamatsu, S.: Dust transport along a cold front: A case study of a cyclone observed on 19 - 20 April 2000 in Northeast Asia, *J. Jpn. Soc. Atmos. Environ.*, **42**, 327-338, 2007.

Yanagisawa, R., Takano, H., Ichinose, T., Mizushima, K., Nishikawa, M., Mori, I., Inoue, K., Sadakane, K., and Yoshikawa, T.: Gene Expression Analysis of Murine Lungs Following Pulmonary Exposure to Asian Sand Dust Particles, *Exp Biol Med (Maywood)*, **232**(8), 1109-18, doi:10.3181/0612-RM-311, 2007.

Takahashi, K., Hirabayashi, M., Tanabe, K., Shibata, Y., Nishikawa, M., and Sakamoto, K.: Radiocarbon Content in Urban Atmospheric Aerosols, *Water Air Soil Pollut.*, **185**, 305-310, doi:10.1007/s11270-007-9454-5, 2007

平成20年度

Chand, D., Jaffe D., Prestbo E., Swartzendruber P. C., Hafner W., Weiss-Penzias P., Kato S., Takami A., Hatakeyama S., Kajii Y.: Reactive and particulate mercury in the Asian marine boundary layer, *Atmos. Environ.*, **42**, 7988-7996, 2008.

Chen X., Aoki M., Zhang S., Zhang J., Nozoe S., Komori D., Takami A., Hatakeyama S.: Observation of Hydrogen Peroxide Concentrations in a Japanese Red Pine Forest, *J. Atmos. Chem.*, **60**, 37-49, doi 10.1007/s10874-008-9107-0, 2008.

Shiraiwa M., Kondo Y., Moteki N., Takegawa N., Sahu L. K., Takami A., Hatakeyama S., Yonemura S., Blake D. R.: Radiative impact of mixing state of black carbon aerosol in Asian outflow, *J. Geophys. Res.*, **113**, D24210,

doi:10.1029/2008JD010546, 2008.

- 佐藤 圭, Klotz B., 畠山 史郎, 今村 隆史: 芳香族炭化水素の大気酸化による二次有機エアロゾル生成, エアロゾル研究, 23, 86-93, 2008.
- Sato K.: Detection of nitrooxypolyols in secondary organic aerosol formed from the photooxidation of conjugated dienes under high-NO_x conditions, *Atmos. Environ.*, 42, 6851-6861, doi: 10.1016/j.atmosenv.2008.05.010, 2008.
- 佐藤圭: 二次粒子の生成: イソプレン酸化に関する最近の研究, エアロゾル研究, 23, 172-180, 2008.
- 片山学, 大原利眞, 鶴野伊津志, 原宏: 日本の SO₄²⁻沈着量における経年変動のモデル解析, 大気環境学会誌, 43, 136-146, 2008.
- 早崎将光, 大原利眞, 黒川純一, 鶴野伊津志, 清水厚: 2007年5月8-9日に発生した広域的な光化学オゾン汚染: 観測データ解析, 大気環境学会誌, 43, 225-237, 2008.
- 大原利眞, 鶴野伊津志, 黒川純一, 早崎将光, 清水: 2007年5月8,9日に発生した広域的な光化学オゾン汚染 - オーバービュー -, 大気環境学会誌, 43, 198-208, 2008.
- 黒川純一, 大原利眞, 鶴野伊津志, 早崎将光: ネスト版RAMS/CMAQ連携モデルによる2007年5月8,9日に発生した広域的な光化学オゾン汚染の解析, 大気環境学会誌, 43, 209-224, 2008.
- Yamaji K., Ohara T., Uno I., Kurokawa J., Pochanart P., Akimoto H.: Future Prediction of Surface Ozone over East Asia using Models-3 Community Multiscale Air Quality Modeling System and Regional Emission Inventory in Asia, *J. Geophys. Res.*, 113, D8306, doi:10.1029/2007JD008663, 2008.
- Matsui H., Koike M., Takegawa N., Kondo Y., Griffin R., Miyazaki Y., Yokouchi Y., Ohara T.: Secondary Organic Aerosol Formation in Urban Air: Temporal Variations and Possible Contributions from Unidentified Hydrocarbons, *J. Geophys. Res.*, 114, D04201, doi:10.1029/2008JD010164, 2009.
- Kurokawa J., Yumimoto K., Uno I., Ohara T.: Adjoint inverse modeling of NO_x emissions over east China using satellite observations of NO₂ vertical column densities, *Atmos. Environ.*, 43, 1878-1887, 2009.
- Choi I-J., Kim S-W., Kim J., Yoon S-C., Kim M-H., Sugimoto N., Kondo Y., Miyazaki Y., Moon K-J., Han J-S.: Characteristics of the transport and vertical structure of aerosols during ABC-EAREX2005, *Atmospheric Environment* 42, 8513-8523, 2008.
- Hara Y., Yumimoto K., Uno I., Shimizu A., Sugimoto N., Liu Z., Winker D. M.: Asian dust outflow in the PBL and free atmosphere retrieved by NASA CALIPSO and an assimilated dust transport model, *Atmos. Chem. Phys. Discuss.*, 8, 8715-8742, 2008.
- Hara Y., Uno I., Yumimoto K., Tanaka M., Shimizu A., Sugimoto N., Liu Z.: Summertime Taklimakan Dust Structure, *GEOPHYSICAL RESEARCH LETTERS*, VOL. 35, L23801, doi:10.1029/2008GL035630, 2008.
- Jung J., Lee H., Kim Y-J., Liu X., Zhang Y., Hu M., Sugimoto N.(2008) Optical properties of atmospheric aerosols obtained by in situ and remote measurements during 2006 Campaign of Air Quality Research in Beijing (CAREBeijing-2006), *J. Geophys. Res.*, 114, D00G02, doi:10.1029/2008JD010337
- Lasserre F., Cautenet G., Bouet C., Dong X., Kim Y-J., Sugimoto N., Matsui I., Shimizu A.: A model tool for assessing real-time mixing of mineral and anthropogenic pollutants in East Asia: a case study of April 2005, *Atmos. Chem. Phys.*, 8, 3603-3622, 2008.
- Liu Z., Liu D., Huang J., Vaughan M., Uno I., Sugimoto N., Kittaka C., Trepte C., Wang Z., Hostetler C., Winker D.: Airborne dust distributions over the Tibetan Plateau and surrounding areas derived from the first year of CALIPSO lidar observations, *Atmos. Chem. Phys.*, 8, 5045-5060, 2008.
- Uno I., Yumimoto K., Shimizu A., Hara Y., Sugimoto N., Wang Z., Liu Z., Winker D. M.: 3D Structure of Asian Dust Transport revealed by CALIPSO and a 4DVAR Dust Model, *Geophys. Res. Lett.*, 35, L06803,

doi:10.1029/2007GL032329, 2008.

- Wehner B., Birmili W., Ditas F., Wu Z., Hu M., Liu X., Mao J., Sugimoto N., Wiedensohler A.: Relationships between submicrometer particulate air pollution and air mass history in Beijing, China, 2004-2006, *Atmos. Chem. Phys.*, 8, 6155-6168, 2008.
- Xie C., Nishizawa T., Sugimoto N., Matsui I., Wang Z.: Characteristics of aerosol optical properties in pollution and Asian dust episodes over Beijing, China, *APPLIED OPTICS*, 47, 27, 4945-4951, 2008.
- Yoon S-C., Kim S-W., Kim M-H., Shimizu A., Sugimoto N.: Ground-Based Mie-Scattering Lidar Measurements of Aerosol Extinction Profiles during ABC-EAREX2005: Comparisons of Instruments and Inversion Algorithms, *J. Meteorol. Soc. Japan*, 86, 2, 377-396, 2008.
- Yumimoto K., Uno I., Sugimoto N., Shimizu A.: MODIS AOT Based Inverse Modeling for Asian Dust, *SOLA*, 4, 089-092, doi:10.2151/sola.2008-023, 2008.
- Yumimoto K., Uno I., Sugimoto N., Shimizu A., Liu Z., Winker D. M.: Adjoint inversion modeling of Asian dust emission using lidar observations, *Atmos. Chem. Phys.*, 8, 2869-2884, 2008.
- Tanimoto H., Sawa Y., Yonemura S., Yumimoto K., Matsueda H., Uno I., Hayasaka T., Mukai H., Tohjima T., Tsuboi K., Zhang L.: Diagnosing recent CO emissions and ozone evolution in East Asia using coordinated surface observations, adjoint inverse modeling, and MOPITT satellite data, *Atmos. Chem. Phys.*, 8, 3867-3880, 2008.
- Tanimoto H., Matsumoto K., Uematsu M.: Ozone-CO correlations in Siberian wildfire plumes observed at Rishiri Island, *SOLA*, 4, 65-68, doi:10.2151/sola.2008-017, 2008.
- Tanimoto H., Sato K., Butler T., Lawrence N. G., Fisher J. A., Kopacz M., Yantosca R. M., Kanaya Y., Kato S., Okuda T., Tanaka S., Zeng J.: Exploring CO pollution episodes observed at Rishiri Island by chemical weather simulations and AIRS satellite measurements: Long-range transport of burning plumes and implications for emissions inventories, *Tellus B*, 61, 394-407, doi: 10.1111/j.1600-0889.2008.00407.x, 2009.
- Tanimoto H.: Increase in springtime tropospheric ozone at a mountainous site in Japan for the period 1998-2006, *Atmos. Environ.*, 43, 1358-1363, doi:10.1016/j.atmosenv.2008.12.006, 2009.
- Irie H., Kanaya Y., Akimoto H., Tanimoto H., Wang Z., Gleason J. F., Bucsela E. J.: Validation of OMI tropospheric NO₂ column data using MAX-DOAS measurements deep inside the North China Plain in June 2006: Mount Tai Experiment 2006, *Atmos. Chem. Phys.*, 8, 6577-6586, 2008.
- Kondo Y., Morino Y., Fukuda M., Kanaya Y., Miyazaki Y., Takegawa N., Tanimoto H., McKenzie R., Johnston P., Blake D. R., Murayama T., Koike M.: Formation and transport of oxidized reactive nitrogen, ozone, and secondary organic aerosol in Tokyo, *J. Geophys. Res.*, 113, D21310, doi:10.1029/2008JD010134, 2008.
- Akiyoshi H., Zhou L. B., Yamashita Y., Sakamoto K., Yoshiki M., Nagashima T., Takahashi M., Kurokawa J., Takigawa M., and Imamura T.: A CCM simulation of the breakup of the Antarctic polar vortex in the years 1980-2004 under the CCMVal scenarios, *J. Geophys. Res.*, 114, D03103, doi:10.1029/2007JD009261, 2009.

平成 21 年度

- Sato K., Li H., Tanaka H., Ogawa S., Iwasaki Y., Takami A., Hatakeyama S.: Long-range transport of particulate polycyclic aromatic hydrocarbons at Cape Hedo remote island site in the East China Sea between 2005 and 2008, *J. Atmos. Chem.*, 61, 243-257 (2008), DOI 10.1007/s10874-009-9135-4, 2009.
- Sato K., Takami A., Isozaki T., Hikida T., Shimono A., Imamura T.: Mass spectrometric study of secondary organic aerosol formed from the photo-oxidation of aromatic hydrocarbons, *Atmospheric Environment*, 44, 1080-1087, 2010.
- Takashima H., Irie H., Kanaya Y., Shimizu A., Aoki K., Akimoto H.: Atmospheric aerosol variations at Okinawa Island in Japan observed by MAX-DOAS using a new cloud-screening method. *J. Geophys. Res.*, 114, D18213, 2009.
- Sekiyama T. T., Tanaka T. Y., Shimizu A., Miyoshi T.: Data Assimilation of CALIPSO Aerosol Observations,

- Atmospheric Chemistry and Physics, 10, 39-49, 2010.
- Kim S-W., Yoon S-C, Kim J., Kang J-Y, and Sugimoto, N.: Asian dust event observed in Seoul, Korea, during 29-31 May 2008: Analysis of transport and vertical structure of dust particles from lidar and surface measurements, *Science of The Total Environment*, 408, 1707-1718, doi:10.1016/j.scitotenv.2009.12.018, 2010.
- Han S., Kondo Y., Oshima N., Takegawa N., Miyazaki Y., Hu M., Lin P., ZDeng Z., Zhao Y., Sugimoto N., and Wu Y.: Temporal variations of elemental carbon in Beijing, VOL. 114, D23202, doi:10.1029/2009JD012027, 2009.
- Yumimoto K., Eguchi K., Uno I., Takemura T., Liu Z., Shimizu A., and Sugimoto N.: Elevated large-scale dust veil originated in the Taklimakan Desert: intercontinental transport and 3-dimensional structure captured by CALIPSO and regional and global models, *Atmos. Chem. Phys.*, 9, 8545-8558, 2009.
- Sugimoto N., Liu X., Matsui I., Nishizawa T., Shimizu A., Zhang Y., Kim Y-J, Li R., and Liu J.: Continuous observations of aerosol profiles with a two-wavelength polarization lidar in Guangzhou in PRD2006, *J. Applied Meteorology and Climatology*, 48, 1822-1830, 2009.
- Xiao R., Takegawa N., Kondo Y., Miyazaki Y., Miyakawa T., Hu M., Shao M., Zeng L.M., Hofzumahaus A., Holland F., Lu K., Sugimoto N., Zhao Y., Zhang Y.H.: Formation of submicron sulfate and organic aerosols in the outflow from the urban region of the Pearl River Delta in China, *Atmospheric Environment*, 43, 3754-3763, 2009.
- Eguchi K., Uno I., Yumimoto K., Takemura T., Shimizu A., Sugimoto N., and Liu Z.: Trans-pacific dust transport: integrated analysis of NASA/CALIPSO and a global aerosol transport model, *Atmos. Chem. Phys.*, 9, 3137-3145, 2009.
- Uno I., Eguchi K., Yumimoto K., Takemura T., Shimizu A., Uematsu M., Liu Z., Wang Z., Hara Y., and Sugimoto N.: Asian dust transported one full circuit around the globe, *NATURE GEOSCIENCE*, PUBLISHED ONLINE: 20 JULY 2009 / DOI: 10.1038/NNGEO583, 2009.
- Wu Z., Cheng Y. F., Hu M., Wehner B., Sugimoto N., Wiedensohler A.: Dust events in Beijing, China (2004-2006): Comparison of ground based measurements and columnar integrated observations, *Atmos. Chem. Phys.*, 9, 6915-6932, 2009.
- Lin P., Hu M., Deng Z., Slanina J., Han S., Kondo Y., Takegawa N., Miyazaki Y., Zhao Y., and Sugimoto N.: Seasonal and diurnal variations of organic carbon in PM_{2.5} in Beijing and the estimation of secondary organic carbon, *J. Geophys. Res.*, 114:D00G11, 2009.
- Miyazaki Y., Kondo Y., Shiraiwa M., Takegawa N., Miyakawa T., Han S., Kita K., Hu M., Deng Z.Q., Sugimoto N., Blake D.R., and Weber R.J.: Chemical characterization of water-soluble organic carbon aerosols at a rural site in the Pearl River Delta, China, in summer, *J. Geophys. Res.*, 114:D14208, 2009.
- Tourpali K., Bais A. F., Kazantzidis A., Zerefos C. S., Akiyoshi H., Austin J., Brühl C., Butchart N., Chipperfield M. P., Dameris M., Deushi M., Eyring V., Giorgetta M. A., Kinnison D. E., Mancini E., Marsh D. R., Nagashima T., Pitari G., Plummer D. A., Rozanov E., Shibata K., and Tian W.: Clear sky UV simulations for the 21st century based on ozone and temperature projections from Chemistry-Climate Models, *Atmos. Chem. Phys.*, 9, 1165-1172, 2009.
- Shiogama H., Emori S., Takahashi K., Nagashima T., Ogura T., Nozawa T., and Takemura T.: Emission scenario dependency of precipitation on global warming in the MIROC3.2 model, *J. Climate*, doi: 10.1175/2009JCLI3428.1, early on-line release, 2009.
- Shiogama H., Hanasaki N., Masutomi Y., Nagashima T., Ogura T., Takahashi K., Hijioka Y., Takemura T., Nozawa T., and Emori S.: Emission scenario dependencies in climate change assessments of the hydrological cycle, *Clim. Change*, 99(1-2), doi:10.1007/s10584-009-9765-1, 2010.
- 谷本浩志, 橋本茂, 向井人史: 「技術調査報告」 大気レベルのオゾン標準に関する日本における進展と世界の動向, *大気環境学会誌*, 44(4), 222-226, 2009.

- Kanaya Y., Pochanart P., Liu Y., Li J., Tanimoto H., Kato S., Suthawaree J., Inomata S., Taketani F., Okuzawa K., Kawamura K., Akimoto H., and Wang Z. F.: Rates and regimes of photochemical ozone production over Central East China in June 2006: a box model analysis using comprehensive measurements of ozone precursors, *Atmos. Chem. Phys.*, 9, 7711-7723, 2009.
- Tanimoto H., Tohjima Y., Mukai H., Nara H., and Hashimoto S.: Anomalous geographical gap in carbon monoxide mixing ratios over Hokkaido (Japan) in summer 2004, *Geochem. J. (Express Letters)*, 43, e23-e29, 2009.
- Tanimoto H., Ohara T., and Uno I.: Asian anthropogenic emissions and decadal trends in springtime tropospheric ozone over Japan: 1998–2007, *Geophys. Res. Lett.*, 36, L23802, doi:10.1029/2009GL041382, 2009.
- 板橋秀一、弓本桂也、鶴野伊津志、大原利眞、黒川純一、清水厚、山本重一、大石興弘、岩本眞二: 2007年春季に発生した東アジア域スケールの広域的越境汚染の化学輸送モデル CMAQ による解析、*大気環境学会誌*, 44, 175-185, 2009.
- Osada K., Ohara T., Uno I., Kido M., and Iida H.: Impact of Chinese anthropogenic emissions on submicrometer aerosol concentration at Mt. Tateyama, Japan, *Atmospheric Chemistry and Physics*, 9, 9111-9120, 2009.
- Kurokawa J., Ohara T., Uno I., Hayasaki M., and Tanimoto H.: Influence of meteorological variability on interannual variations of the springtime boundary layer ozone over Japan during 1981-2005, *Atmospheric Chemistry and Physics*, 9, 6287-6304, 2009.
- Aikawa M., Ohara T., Hiraki T., Oishi O., Tsuji A., Yamagami M., Murano K., and Mukai H.: Significant geographic gradients in particulate sulfate over Japan determined from multiple site measurements and a chemical transport model: Impacts of transboundary pollution from the Asian continent, *Atmospheric Environment*, 44, 381-391, 2010.

2.1.10.2 誌上発表(査読なし)

平成18年度

- 今井孝典、高見昭憲、三好猛雄、下野彰夫、加藤俊吾、梶井克純、畠山史郎: 沖縄辺戸岬で観測したエアロゾル炭素組成の季節変動と気塊履歴依存性、第16回大気化学シンポジウム・プロシーディングス、120, 2006.
- 畠山史郎: 台湾のバックグラウンド大気観測ステーションの開所式に出席して、エアロゾル研究, 21, 182, 2006.
- 畠山史郎: 東アジアのABC (Atmospheric Brown Clouds)、OECC 会報、49, 3, 2006.
- 畠山史郎: 中国国内と日本におけるエアロゾルイオン成分濃度の比較、第17回大気化学シンポジウム・プロシーディングス、14, 2007.
- 倫小秀、高見昭憲、三好猛雄、畠山史郎: Long-range transport of organic aerosol from continental origin to Cape Hedo, Japan, 第17回大気化学シンポジウム・プロシーディングス、132, 2007.
- 滝口善洋、高見昭憲、定永靖宗、川上純一、坂東博、畠山史郎、沖縄辺戸岬における大気エアロゾル中に含まれる硝酸塩の季節変動、第17回大気化学シンポジウム・プロシーディングス、135, 2007.
- 早崎将光、黒崎泰典、樋口篤志、足立幸穂、菅田誠治、西川雅高、大原利眞、若松伸司: MODIS 可視画像とSPM時間値で捉えた2006年4月8日の帯状黄砂、*天気*, 53, 843-844, 2006.
- 谷本浩志、猪俣敏: 揮発性有機化合物リアルタイム測定装置の開発と今後の展開 - プロトン移動反応イオン化-飛行時間型質量分析計 (PTR-TOFMS) -, *資源環境対策*, 42(8), 61-66, 2006.
- 谷本浩志、松本潔: 入門講座 失敗から学ぶ分析技術のコツ-分析試料に関するトピックス: 大気関連試料一、*ぶんせき*, 2007.

平成19年度

大原利眞：日本における光化学オゾンの上昇 - アジアにおける排出量の増加と越境汚染の影響 -, 生活と環境, **52**, 5, 90-95, 2007.

大原利眞：越境大気汚染の日本への影響, 伝熱, **46**, 197, 7-11, 2007.

大原利眞：中国の大気汚染と日本への影響, エコノミスト, **2007. 12. 17**, 104-107, 2007.

Tanimoto, H., Inomata, S., Aoki, N., Sadanaga, Y., and Hirokawa, J.: The NIES PTR-TOFMS Instrument: Design, Performance, and Application, 3rd International Conference on Proton Transfer Reaction Mass Spectrometry and Its Applications, edited by A. Hansel and T.D. Märk, Innsbruck University Press, Innsbruck, ISBN-10: 3-902571-03-9, ISBN-13: 978-3-902571-03-8, 2007.

Inomata, S., Tanimoto, H., and Aoki, N.: Development of new PTR ion sources for soft and selective ionization, 3rd International Conference on Proton Transfer Reaction Mass Spectrometry and Its Applications, edited by A. Hansel and T.D. Märk, Innsbruck University Press, Innsbruck, ISBN-10: 3-902571-03-9, ISBN-13: 978-3-902571-03-8, 2007.

谷本浩志：大気汚染物質の半球規模輸送に関するタスクフォース会議報告, 国立環境研究所地球環境研究センターニュース, **17**(12), 9-11, 2007.

谷本浩志：地球環境問題としてのオゾン汚染, 資源環境対策, **43**(7), 21-27, 2007.

谷本浩志, 向井人史：日本におけるオゾン観測の現状と課題および展望, 資源環境対策, **43**(7), 42-48, 2007.

平成20年度

大原利眞：越境大気汚染と日本への影響, 地理・地図資料 (帝国書院発行), 2008年4月号, 4-6, 2008.

大原利眞：中国からの越境大気汚染の日本への影響, 季刊 環境研究, **149**, 41-46, 2008.

大原利眞：アジアで増えるNO_xと光化学オゾン, 科学, **78**, 727-728, 2008.

谷本浩志：対流圏オゾン濃度の増加および悪影響の現状と課題, 化学物質と環境 (エコケミストリー研究会誌), **89**(2008. 5), 1-3, 2008.

谷本浩志, 猪俣敏：大気中揮発性有機化合物の多成分同時計測手法の開発, 季刊環境研究, **151**, 9-15, 2008.

平成21年度

桜井博, 佐藤圭, 高畑圭二, 濱尚矢, 遠藤有紀：アメリカエアロゾル学会第28回年会, エアロゾル研究, **24**(4), 64-66, 2009年12月, 2009.

清水厚：ライダーネットワークによる黄砂の3次元構造と輸送状態の把握, グローバルネット, **221**, 22-23, 2009.

杉本伸夫：コラム「ライダー研究30年」, 大気環境学会誌, **44**, 367, 2009.

西澤智明, 杉本伸夫：能動型測器「ライダー」を用いたエアロゾルの観測研究, エアロゾル研究, **24**, 242-249, 2009.

大原利眞：越境大気汚染 - 広域的な光化学オゾン汚染の現状と要因, グローバルネット, **222**, 18-19, 2009.

大原利眞：光化学大気汚染 - 越境大気汚染問題としての広域移流の最近研究から -, 資源環境対策, **45**, 75-80, 2009.

2.1.10.3 書籍

平成18年度

Hatakeyama S.: Chapter 3 “Long-range Transport of Air-pollutants in the East Asian Pacific Rim region” in “Effects of Pollutants on Atmospheric Environment” Edited by Y. Ishizaka and T. Kitada, United Nations Educational Scientific and Cultural Organization, Nagoya, 55-81, 2006.

畠山史郎: 3. 1. 3 「二酸化硫黄」、鷺田伸明編集 第5版実験化学講座 20-2「環境化学」、丸善、p197-200, 2007.

畠山史郎: 3. 1. 13 「酸化性物質」、鷺田伸明編集 第5版実験化学講座 20-2「環境化学」、丸善、p241-247, 2007.

畠山史郎: 4 および 4. 1 「エアロゾルおよびその前駆体の航空機観測」、笠原三紀夫・東野達、編 「エアロゾルの大気環境影響」、京都大学学術出版会、113-119, 2007.

大原利眞: 東アジア域におけるエアロゾルのシミュレーション、「エアロゾルの大気環境影響」(笠原三紀夫、東野達編)、京都大学学術出版会、pp. 259-262, 292-300, 2007.

谷本浩志: 第3章環境測定の実例, 3. 1 大気汚染物質, 3. 1. 2 オゾン・PAN, 第5版実験化学講座(20-2)「環境化学」, 丸善, 東京, 2007.

西川雅高、森 育子: 3. 1. 11 黄砂、p. 231-234、日本化学会編、第5版 実験化学講座 20-2—環境化学—、丸善株式会社、東京、pp. 519, 2007.

杉本伸夫: 4. 3 ライダーによる空間分布の観測、笠原 三紀夫、東野 達 編、エアロゾルの大気環境影響、P. 152-172, 京都大学学術出版会, 2007.

Sugimoto N.: Observation of aerosol particle in the east asia using lidars, Ishizaka Y., Kitada T. eds., Effects of Pollutants on Atmospheric Environment, P.83-101, HyARC Nagoya Univ, UNESCO, 2006.

杉本伸夫: 「実験化学講座 20-2 環境科学」、2. 1. 4d 黄砂の項、pp. 77-79, 日本化学会編, 丸善 ISBN978-4-621-07806-8 C3343, 2007.

平成19年度

大原利眞: 7. 1 シミュレーションの概要, 7. 4 酸性雨・酸性沈着のシミュレーション, エアロゾルの大気環境影響 (笠原三紀夫, 東野達編), 京都大学学術出版会, 259-262, 292-300, 2007.

大原利眞: 光化学オキシダント, 浮遊粒子状物質 (6編 電力と環境, 2. 3. 1 大気質), 現代 電力技術便覧 (財団法人 電気科学技術奨励会編), オーム社, 1100-1103, 2007.

大原利眞: 大気環境年表, 7. 2 大気環境保全対策の変遷と展開, 環境工学の新世紀 (土木学会編), 技報堂出版, 206-208, 220-232, 2008.

Tanimoto, H., Mukai, H., Ohara, T., and Uno, I.: Impact of changing climate and emissions on surface ozone distributions and evolution, Regional climate variability and its impacts in the Mediterranean area, edited by A. Mellouki and A.R. Ravishankara, NATO Science Series IV. Earth and Environmental Sciences – Vol. 79, 113-127, ISBN: 978-1-4020-6428-9, Springer Verlag GmbH, 2007.

谷本浩志, 猪俣敏: 「各種手法による有機物の分解技術」, 第1章第4節 VOCの多成分リアルタイム測定装置の開発, 情報機構, 東京, ISBN: 978-4-901677-80-6, 38-49, 2007.

杉本伸夫: 大気と微粒子の話-エアロゾルと地球環境、学術選書 033、監修: 笠原三紀夫、東野達、4章5節、ライダーの項、126-130、京都大学出版会、2008.

平成20年度

Ohara T., Yamaji K., Uno I., Tanimoto H., Sugata S., Nagashima T., Kurokawa J., Horii N., Akimoto H.: Long-Term simulations of surface ozone in East Asia during 1980-2020 with CMAQ. In: Borrego C. and A.I. Miranda A. I. ed., NATO Science for peace and security series - C: Environmental Security, Air Pollution Modelling and its Application XIX, 136-144, Springer, 2008.

Sugimoto N. and Uno I.: Observation of Asian dust and air-pollution aerosols using a network of ground-based lidars (ADNet): Realtime data processing for validation/assimilation of chemical transport models, IOP Conference Series: Earth and Environmental Science: WMO/GEO EXPERT MEETING ON AN INTERNATIONAL SAND AND DUST STORM WARNING SYSTEM, 2009.

平成21年度

森育子, 西川雅高: 4.2.1 黄砂の捕集と化学分析, p.76-81, 岩坂泰信, 西川雅高, 山田丸, 洪天祥編, 黄砂, 古今書院, 東京, pp.342+, ISBN:978-4-7722-3125-1 C3040, 2009.

西川雅高, 森淳子: 5.4 日本での黄砂観測, p.183-198, 岩坂泰信, 西川雅高, 山田丸, 洪天祥編, 黄砂, 古今書院, 東京, pp.342+, ISBN:978-4-7722-3125-1 C3040, 2009.

西川雅高, 森育子: 7.2.3 黄砂と無機酸性イオン成分, p.282-285, 岩坂泰信, 西川雅高, 山田丸, 洪天祥編, 黄砂, 古今書院, 東京, pp.342+, ISBN:978-4-7722-3125-1 C3040, 2009.

杉本伸夫: 4.3.5, ライダーネットワーク観測, p.-, 岩坂泰信, 西川雅高, 山田丸, 洪天祥編, 黄砂, 古今書院, 東京, pp.342+, ISBN:978-4-7722-3125-1 C3040, 2009.

杉本伸夫: ライダー、「光科学研究の最前線2」(強光子場科学研究懇談会2009), 2009.

2.1.10.4. 口頭発表(370件)

国外: 96件

国内: 274件

招待講演

清水厚, 松井一郎, 杉本伸夫 (2009) アジア域ライダーネットワークによる雲・黄砂・汚染粒子の広域立体分布モニタリング. 第44回光波センシング技術研究会, 同予稿集, 49-54

日置正, 紀本岳志, 長谷川就一, 大原利眞, 向井人史, 若松伸司 (2008) 松山, 大阪, つくばで同時観測した浮遊粉じん中金属元素濃度比による長距離輸送と地域汚染の解析. 第25回エアロゾル科学・技術研究討論会, 同予稿集, 131-132

大原利眞 (2008) 東アジアの越境大気汚染. 大気環境学会植物分科会講演会「東アジアの越境大気汚染と植物影響」

大原利眞 (2008) 排出インベントリ REAS: アジア域における1980~2020年の大気汚染排出量の変化. 大気環境学会都市大気環境モデリング/発生源対策分科会講演会「国内外排出量インベントリの現状とその評価」

大原利眞 (2008) 東アジア地域から日本への越境大気汚染. 大気環境学会シンポジウム「東アジア地域における国際的な環境負荷の移転と日本の役割」, なし

Ohara T. (2008) Integrated approach to air quality Management-Development of research tools in East Asia. 9th Senior Tech.Managers Meet.Acid Deposition Monit.Network East Asia(EANET/STM 9)

Ohara T. (2008) Trend and future projection of Nox and VOC emissions in East Asia. Tripartite Workshop Sci.Res.Photochem.Ozone

Ohara T. (2008) Historical trend and future projection of anthropogenic emissions in East Asia. Task Force on Hemispheric Transport of Air Pollution(TF-HTAP), Abstracts

大原利眞 (2008) 国境を越える大気汚染. 第67回日本公衆衛生学会総会サテライトシンポジウム1「極東アジア地域の環境汚染拡大の現状と対策の国際共同化にむけて」, 同抄録集, 10, 58

Ohara T. (2006) Emission and transport of air pollutants in East Asia. Tsukuba Workshop
Appl.Multimedia Models Identification Pres.Org.Pollut.East Asian Ctry., Program

Ohara T. (2006) Development of Asian emission inventory from 1980 to 2020. Developing Improved
Regional Emission Inventories for China, -

大原利真 (2008) 光化学オキシダント・対流圏オゾン濃度の上昇トレンドの要因について. 第 29 回酸性雨問
題研究会シジウムポム「対流圏オゾンを巡る大気環境研究の現状」, 同予稿集, 19-24

Sugimoto N., Matsui I., Shimizu A., Nishizawa T. (2008) Lidar network for monitoring Asian dust and
air pollution aerosols. Int.Geosci.Remote Sensing Symp.(IGARSS 2008), Abstracts

2.1.10.5 特許等

谷本浩志, 猪俣敏, 青木伸行, 有機化合物の測定装置及びその測定方法, 特許第 3912688 号, 2007.