

A-1. 著書 (Books)

- [1] K. Tsuji, "Micro-X-ray Fluorescence" in Encyclopedia of Analytical Chemistry, Supplementary vol. S1-S3, eds. R.A. Meyers, John Wiley & Sons, Ltd. Chichester, UK, p.1949-1972 (2011).
- [2] 辻 幸一、「固体試料の内部を探索世界最高レベルの 3 次元蛍光 X 線分析法の開発」、「共創・協奏ー産学連携成功のキーワードー」、丸善、p.271-282 (2011).
- [3] 辻 幸一、「分析化学用語辞典」社団法人日本分析化学会編 (X 線関連の用語解説を分担執筆)、オーム社出版局、(2011).
- [4] 辻 幸一、中野 和彦、「実験室における微小部高感度蛍光 X 線分析」、「ナノイメージング」、エヌ・ティー・エス、p.305-320 (2008).
- [5] 中野 和彦、辻 幸一、「共焦点三次元蛍光 X 線分析」、「ナノイメージング」、エヌ・ティー・エス、p.450-457 (2008).
- [6] K. Tsuji, "X-ray Technology", in Kirk-Othmer Encyclopedia of Chemical Technology, 5th ed., ed. A. Seidel, John Wiley & Sons, Inc., Vol. 26, p.411-444 (2007).
- [7] 辻 幸一、「蛍光 X 線法」(分担執筆)、「表面物性工学ハンドブック 第2版」、丸善、p.184-188 (2007).
- [8] 辻 幸一、「斜出射蛍光 X 線分析」(分担執筆)、「蛍光 X 線分析の実際」、朝倉書店、p.206-207 (2005).
- [9] 辻 幸一、「分析電子顕微鏡」(分担執筆)、「機器分析の事典」、朝倉書店、p.239-241 (2005).
- [10] 辻 幸一、「蛍光 X 線分析」(分担執筆)、「放射光科学入門」、東北大学出版会、p.274-279 (2004).
- [11] 辻 幸一、「全反射蛍光 X 線分析」(分担執筆)、「新訂版・表面科学の基礎と応用」、日本表面科学会編、エヌ・ティー・エス、p. 709-715 (2004).
- [12] K. Tsuji, Grazing-Exit X-Ray Spectrometry (分担執筆), "X-Ray Spectrometry: Recent Technological Advances", edited by K. Tsuji, J. Injuk, R. E. Van Grieken, John Wiley & Sons, Ltd, p. 293-305 (2004).
- [13] "X-Ray Spectrometry: Recent Technological Advances", edited by K. Tsuji, J. Injuk, R. E. Van Grieken, John Wiley & Sons, Ltd, の編集 (2004).
- [14] 辻 幸一、広川 吉之助、「全反射現象を利用した蛍光 X 線表面分析法」(分担執筆)、「材料工学の先端実験技術」、日本金属学会、pp.111-116 (1998) .

A-2 総説記事 (Review articles)

- [1] 辻 幸一、「蛍光 X 線イメージング」(総説記事)、*分光研究*、**62** (2013) 119-127.
- [2] K. Tsuji, K. Nakano, Y. Takahashi, K. Hayashi, C.-U. Ro, X-ray Spectrometry, *Anal. Chem.*, **84** (2012) 636-668.
- [3] 中澤 隆、中野 和彦、辻 幸一、「微小部蛍光 X 線分析と元素イメージング」(進歩総説)、*ぶんせき*、**11**, 654-661 (2011).
- [4] 辻 幸一、「蛍光 X 線分析法による表面界面元素分析」(総説記事)、*日本接着学会誌*、**47**, 444-452 (2011).
- [5] K. Tsuji, K. Nakano, Y. Takahashi, K. Hayashi, C.-U. Ro, X-ray Spectrometry, *Anal. Chem.*, **82**

(2010) 4950-4987.

- [6] K. Tsujii, K. Nakano, H. Hayashi, C. U. Ro, X-Ray Spectrometry, *Anal. Chem.*, **80**, 4421-4454 (2008).
- [7] 石井 真史、栗崎 敏、高山 透、辻 幸一、沼子 千弥、林 久史、前尾 修司、松尾 修司、村松康司、森 良弘、横溝 臣智、渡部 孝、「2007年X線分析関連文献総合報告」、*X線分析の進歩*, **39**, 27-46 (2008).
- [8] 辻 幸一、「X線発光分光」、*分光研究*, **57**, 29-41 (2008).
- [9] 桜井 健次、辻 幸一、中野 和彦、林 久史、松尾 修司、森 良弘、渡部 孝、「2006年X線分析関連文献総合報告」、*X線分析の進歩*, **38**, 67-88 (2007).
- [10] 河合 潤、桜井 健次、辻 幸一、林 久史、松尾 修司、森 良弘、渡部 孝、「2005年X線分析関連文献総合報告」、*X線分析の進歩*, **37**, 25-44 (2006).
- [11] 辻 幸一、「ポリキャピラリーX線レンズの基礎と応用」、*ぶんせき「解説記事」*、8月号, 378-382 (2006).
- [12] 辻 幸一、「蛍光X線測定による非破壊的な深さ方向元素分析」、*放射線と産業*、112号, 14-19 (2006) .
- [13] K. Tsujii, “Grazing-Exit Electron Probe Microanalysis (GE-EPMA)”, *JEOL NEWS*, **39**, 52-55 (2004).
- [14] 辻 幸一、「蛍光X線分析における近年の要素技術の進歩と特殊な測定方法」、*X線分析の進歩*, **36**, 63-74 (2005).
- [15] 辻 幸一、「斜出射配置における電子線プローブマイクロアナリシス」、*日本電子NEWS*, **36**, 16-19 (2004).
- [16] 辻 幸一、「斜出射X線分析—EPMAとXRFへの応用」、*ぶんせき*, **338**, 83-88 (2003).
- [17] 辻 幸一、「斜出射X線測定とSTMによる局所表面分析」、*分析化学*, **51**, 605-612 (2002).
- [18] 辻 幸一、「斜出射X線分析のEPMAへの応用」、日本電子(株)EPMA・表面分析ユーザーズミーティング解説書、(2002) .
- [19] 辻 幸一、「斜出射X線測定型の電子線プローブマイクロアナリシス」、*X線分析の進歩* (アグネ技術センター) **32**集, 25-44 (2001).
- [20] 辻 幸一、「斜出射X線測定による微小領域の表面分析と微粒子分析」、*まてりあ*(最近の研究), **39**, 586-593 (2000).
- [21] 辻 幸一、我妻 和明、杉山 和正、長谷川 幸雄、「元素の識別—X線照射による元素分析型STMの試み—」、*Boundary*, **1999-8**, 10-13 (1999).
- [22] 辻 幸一、「走査型プローブ顕微鏡による元素識別」、*ぶんせき*, **1997**, 665 (1997).
- [23] 辻 幸一、広川 吉之助、「全反射現象を利用した蛍光X線表面分析法」、*まてりあ* (先端実験技術シリーズ), **35**, 1333-1338 (1996).
- [24] 辻 幸一、蛍光X線分析法による薄膜材料の新しい分析・評価法、*日本金属学会会報*, **32**, 180 (1993).

B. 原著論文 (Original papers)

B-1: 全反射現象を利用した蛍光X線分析 (TXRF)

- [1] 吉岡達史、今西由紀子、辻 幸一、高部秀樹、秋岡幸司、土井教史、荒井正浩、「海水試料の全反射

- 蛍光 X 線分析における試料準備方法の検討」、*X線分析の進歩*, **43** (2012) 211-221.
- [2] 川又 誠也、今西 由紀子、中野 和彦、辻 幸一、「プラスチック試料からの溶出液中金属元素の全反射蛍光 X 線分析法」、*X線分析の進歩*, **41** (2010) 185-193.
- [3] 中村 卓也、松井 宏、川又 誠也、中野 和彦、片山 貴子、日野 雅之、鰐淵 英機、荒波 一史、山田 隆、辻 幸一、「血液中金属元素の全反射蛍光 X 線分析」、*X線分析の進歩*, **40**, 249-257 (2009).
- [4] K. Nakano, K. Tanaka, X. Ding, K. Tsuji, Development of a New TXRF Instrument using Polycapillary X-ray Lens, *Spectrochim. Acta B*, **61**, 1105-1109 (2006).
- [5] A. Okhrimovskyy, K. Saito, K. Tsuji, Theoretical characterization of reflector-assisted TXRF analysis, *e-Journal of Surface Science and Nanotechnology*, **4**, 579-583 (2006).
- [6] K. Tsuji, Y. Hanaoka, A. Hibara, M. Tokeshi, T. Kitamori, Total reflection X-ray fluorescence analysis with chemical microchip, *Spectrochim. Acta B*, **61**, 389-392 (2006).
- [7] K. Tsuji, M. Kawamata, Y. Nishida, K. Nakano, K. Sasaki, Micro Total Reflection X-ray Fluorescence (Micro-TXRF) Analysis, *X-ray Spectrometry*, **35**, 375-378 (2006).
- [8] 松岡 代志子、細川 好則、日野 雅之、辻 幸一、全反射蛍光 X 線分析のための血液試料サンプリング方法の検討、*分析化学*, **54**, 749-754 (2005).
- [9] 中田 宗寛、辻 幸一、全反射蛍光 X 線分析のためのグロー放電スパッタリングによる試料作製、*J. Surf. Anal.*, **12**, 303-307 (2005).
- [10] K. Tsuji, F. Delalieux, Characterization of X-rays emerging from between reflector and sample carrier in reflector-assisted TXRF analysis, *X-Ray Spectrom.*, **33**, 281-284 (2004).
- [11] 辻 幸一、反射板を利用した全反射蛍光 X 線分析の基礎検討、*X線分析の進歩*, **35**, 193-200 (2004).
- [12] J. Injuk, J. Osán, R. Van Grieken, K. Tsuji, Airborne particles in the Miyagi Museum of Art in Sendai, Japan, Studied by Electron Probe X-Ray Microanalysis and Energy Dispersive X-Ray Fluorescence Analysis, *Anal. Sci.* **18**, 561-566 (2002).
- [13] K. Tsuji, K. Wagatsuma, Enhancement of TXRF Intensity by Using a Reflector, *X-Ray Spectrom.* **31**, 358-362 (2002).
- [14] K. Tsuji, K. Wagatsuma and T. Oku, Glancing-Incidence and Glancing-Takeoff X-Ray Fluorescence Analysis of Ni-GaAs Interface-Reactions, *X-Ray Spectrometry*, **29**, 155-160 (2000).
- [15] K. Tsuji, T. Sato, K. Wagatsuma, M. Claes, and R. Van Grieken, Preliminary experiment of total reflection x-ray fluorescence using two glancing x-ray beams excitation, *Rev. Sci. Instrum.*, **70**, 1621-1623 (1999).
- [16] K. Tsuji, H. Takenaka, K. Wagatsuma, P. K. de Bokx and R. E. Van Grieken, Enhancement of X-ray fluorescence intensity from ultra-thin Ni layer sandwiched with carbon layers at grazing-emission angles, *Spectrochim. Acta B*, **54**, 1881-1888 (1999).
- [17] K. Tsuji, T. Sato and K. Wagatsuma, X-ray fluorescence analysis by multiple-glancing x-ray beam excitation, *Jpn. J. Appl. Phys.*, **37**, 5821-5822 (1998).
- [18] K. Tsuji, K. Wagatsuma and K. Hirokawa, Takeoff angle-dependent x-ray fluorescence analysis of thin films on acrylic substrate, *Journal of Trace and Microprobe Techniques*, **15**, 1-11 (1997).
- [19] K. Tsuji, K. Wagatsuma and K. Oku, Experimental evaluation of the Mo K α x-ray penetration depth for a GaAs wafer in a total reflection x-ray fluorescence analysis, *Anal. Sci.*, **13**, 351-354

(1997).

- [20] K. Tsuji, K. Wagatsuma, K. Hirokawa, T. Yamada, and T. Utaka, Development of the glancing-incidence and -takeoff x-ray fluorescence analysis, *Spectrochim. Acta B*, **52**, 841-846 (1997).
- [21] 辻 幸一、我妻 和明、全反射X線侵入深さの評価、*表面科学*, **18**, 424-428 (1997).
- [22] S. Sato, K. Tsuji, and K. Hirokawa, Evaluation of Ni/Mn multilayer samples with glancing-incidence and -takeoff x-ray fluorescence analysis, *Appl. Phys. A*, **62**, 87-93 (1996).
- [23] 辻 幸一、広川 吉之助、斜入射・斜出射-蛍光X線分析法による表面反応の評価、*表面科学*, **17**, 346-351 (1996).
- [24] K. Tsuji, S. Sato, and K. Hirokawa, Glancing-incidence and glancing-takeoff x-ray fluorescence analysis of a Mn ultrathin film on an Au layer, *Thin Solid Films*, **274**, 18-22 (1996).
- [25] K. Tsuji and K. Wagatsuma, Solid surface density determination using the glancing-takeoff x-ray fluorescence method, *Jpn. J. Appl. Phys.*, **35**, L1535-L1537 (1996).
- [26] K. Tsuji and K. Hirokawa, Nondestructive depth profiling of oxidized Fe-Cr alloy by the glancing-incidence and -takeoff x-ray fluorescence method, *Appl. Surf. Sci.*, **103**, 451-458 (1996).
- [27] 辻 幸一、水戸瀬 賢悟、広川 吉之助、斜入射条件下における取り出し角依存-蛍光X線分析法による真空蒸着薄膜および溶液滴下-乾燥薄膜の分析、*X線分析の進歩*, **26**, 59-74 (1995).
- [28] K. Tsuji, T. Yamada, T. Utaka, and K. Hirokawa, The effects of surface roughness on the angle-dependent total-reflection x-ray fluorescence of ultrathin films, *J. Appl. Phys.*, **78**, 969-973 (1995).
- [29] K. Tsuji, S. Sato, and K. Hirokawa, Depth profiling using the glancing-incidence and -takeoff x-ray fluorescence method, *Rev. Sci. Instrum.*, **66**, 4847-4852 (1995).
- [30] K. Tsuji and K. Hirokawa, Takeoff angle-dependent x-ray fluorescence of layered materials using a glancing incident x-ray beam, *J. Appl. Phys.*, **75**, 7189-7194 (1994).
- [31] K. Tsuji, S. Sato, and K. Hirokawa, Characterization of Au thin film by Glancing-Incidence and -Takeoff X-Ray Fluorescence Spectroscopy, *Jpn. J. Appl. Phys.*, **33**, L1277-L1279 (1994).
- [32] K. Tsuji, A. Sasaki, and K. Hirokawa, Effect of surface roughness on takeoff-angle-dependent x-ray fluorescence of ultrathin films at glancing incidence, *Jpn. J. Appl. Phys.*, **33**, 6316-6319 (1994).
- [33] K. Tsuji, S. Sato, and K. Hirokawa, Surface-sensitive x-ray fluorescence analysis at glancing incident and takeoff angles, *J. Appl. Phys.*, **76**, 7860-7863 (1994).
- [34] 辻 幸一、佐藤 成男、広川 吉之助、斜入射・斜出射-蛍光X線分析法による表面・薄膜分析、*表面科学*, **15**, 668-674 (1994).
- [35] K. Tsuji and K. Hirokawa, Take-off angle-dependent x-ray fluorescence of thin films at glancing incidence, *Spectrochim. Acta. B*, **48**, 1471-1480 (1993).

B-2: X線照射-SPMに関する研究 (X-ray SPM)

- [1] Y. Hasegawa, K. Tsuji, K. Nakayama, K. Wagatsuma, T. Sakurai, X-ray source combined ultrahigh-vacuum scanning tunneling microscopy for elemental analysis, *J. Vac. Sci. Tech.*

B., **18**, 2676-2680 (2000).

- [2] K. Tsuji, K. Wagatsuma, K. Sugiyama, K. Hiraga, Y. Waseda, EXAFS- and XANES-like spectra obtained by x-ray excited scanning tunneling microscope tip current measurement, *Surf. Interface Anal.*, **27**, 132-135 (1999).
- [3] K. Tsuji, T. Nagamura, and K. Wagatsuma, Scanning tunneling microscope tip current excited by modulated x-rays, *Jpn. J. Appl. Phys.*, **37**, 2028-2032 (1998).
- [4] K. Tsuji, Y. Hasegawa, K. Wagatsuma and T. Sakurai, Detection of x-ray induced current using a scanning tunneling microscope and its spatial mapping for elemental analysis, *Jpn. J. Appl. Phys.*, **37**, L1271-L1273 (1998).
- [5] 辻 幸一、我妻 和明、X線照射下でのSTM観察と探針電流の測定、*X線分析の進歩*, **28**, 289-300 (1997).
- [6] K. Tsuji and K. Wagatsuma, Optimum gaseous pressure for the measurement of the x-ray excited scanning tunneling microscope tip current, *Jpn. J. Appl. Phys.*, **36**, 1264-1267 (1997).
- [7] K. Tsuji, K. Wagatsuma and K. Hirokawa, Characteristics of total reflection x-ray excited current detected with the tip of scanning tunneling microscope, *Spectrochim. Acta B*, **52**, 855-860 (1997).
- [8] K. Tsuji and K. Hirokawa, Glancing-incidence and takeoff x-ray fluorescence and scanning tunneling microscopy of thin films under x-ray irradiation, *Surf. Interface Anal.*, **24**, 286-289 (1996).
- [9] 辻 幸一、広川 吉之助、STM装置を用いたX線励起電流の測定、*表面科学*, **17**, 161-166 (1996).
- [10] K. Tsuji and K. Hirokawa, Characteristics of an x-ray-excited current detected with an STM tip, *Rev. Sci. Instrum.*, **67**, 3573-3577 (1996).
- [11] K. Tsuji and K. Hirokawa, X-ray excited current detected with scanning tunneling microscope equipment, *Jpn. J. Appl. Phys.*, **34**, L1506-L1508 (1995).

B-3: 斜出射 EPMA と斜出射 PIXE に関する研究 (Grazing-exit XRS)

- [1] T. Awane, S. Fukuoka, K. Nakamachi, K. Tsuji, Grazing Exit Micro X-ray Fluorescence Analysis of Hazardous Metal Attached to a Plant Leaf Surface Using an X-ray Absorber Method, *Anal. Chem.*, **81** (2009) 3356-3364.
- [2] J. Yang, K. Tsuji, X. Lin, D. Han, X. Ding, A micro x-ray fluorescence analysis method using polycapillary x-ray optics and grazing exit geometry, *Thin Solid Films*, **517** (2009) 3357-3361.
- [3] T. Awane, K. Nakamachi, K. Tsuji, Effects of an X-ray absorber in grazing exit micro x-ray fluorescence analysis of arsenic attached to an aqueous leaf of *Cammelia hiemalis*, *e-Journal of Surface Science and Nanotechnology*, **7** (2009) 841-846.
- [4] J. Yang, K. Tsuji, D. Han, and X. Ding, GE-MXRF analysis of multilayer films, *X-Ray Spectrom.*, **37**, 625-628 (2008).
- [5] T. Tetsuoka, T. Nagamura, K. Tsuji, Improvement of reproducibility in grazing-exit EPMA (GE-EPMA), *X-Ray Spectrom.*, **35**, 89-92 (2006).
- [6] A. Okhrimovskyy, K. Tsuji, Numerical approach for depth profiling with GE-XRF, *X-Ray Spectrom.*, **35**, 305-311 (2006).

- [7] K. Tsuji, Grazing-exit electron probe x-ray microanalysis (GE-EPMA): Fundamental and applications (**Review article**), *Spectrochim. Acta, B*, **60**, 1381-1391 (2005).
- [8] Z. Spolnik, K. Tsuji, R. Van Grieken, Grazing-exit electron probe x-ray micro analysis of light elements, *X-Ray Spectrom.*, **33**, 16-20 (2004).
- [9] K. Tsuji, K. Tetsuoka, F. Delalieux, S. Sato, Calculation of electron-induced x-ray intensities under grazing-exit conditions, *e-Journal of Surface Science and Nanotechnology* **1**, 111-115 (2003).
- [10] Z. Spolnik, K. Tsuji, K. Saito, K. Asami, K. Wagatsuma, Quantitative analysis of metallic ultra-thin films by grazing-exit electron probe x-ray microanalysis, *X-Ray Spectrometry*, **31**, 178-183 (2002).
- [11] Z. Spolnik, J. Zhang, K. Wagatsuma, K. Tsuji, Grazing-exit electron probe x-ray microanalysis of ultra-thin films and single particles, *Anal. Chim. Acta.* **455**, 245-252 (2002).
- [12] K. Tsuji, K. Saito, K. Asami, K. Wagatsuma, F. Delalieux, Z. Spolnik, Localized Thin-Film Analysis by Grazing-Exit EPMA (GE-EPMA), *Spectrochim. Acta. B* **57**, 897-906 (2002).
- [13] K. Tsuji, Y. Murakami, K. Wagatsuma, G. Love, Surface Studies by Grazing-Exit Electron Probe Microanalysis (GE-EPMA), *X-Ray Spectrometry*, **30**, 123-126 (2001).
- [14] K. Tsuji, Z. Spolnik, K. Wagatsuma, S. Nagata, I. Satoh, Grazing-Exit X-Ray Spectrometry for Surface and Thin-Film Analyses, *Anal. Sci.* **17**, 145-148 (2001).
- [15] K. Tsuji, Z. Spolnik, and T. Ashino, New experimental equipment for grazing-exit electron probe microanalysis (GE-EPMA), *Rev. Sci. Instrum.*, **72**, 3933-3936 (2001).
- [16] K. Tsuji, Z. Spolnik, K. Wagatsuma, Continuous x-ray background in grazing-exit electron probe x-ray microanalysis, *Spectrochim. Acta B*, **56**, 2497-2504 (2001).
- [17] K. Tsuji, M. Huisman, Z. Spolnik, K. Wagatsuma, Y. Mori, R. E. Van Grieken, R. D. Vis, Comparison of grazing-exit particle-induced X-ray emission with other related methods, *Spectrochim. Acta B*, **55**, 1009-1016 (2000).
- [18] K. Tsuji, K. Wagatsuma, R. Nullens, and R. Van Grieken, Grazing-exit electron probe microanalysis for surface and particle analysis, *Anal. Chem.*, **71**, 2497-2501 (1999).
- [19] K. Tsuji, Z. Spolnik, K. Wagatsuma, J. Zhang, and R. Van Grieken, Enhancement of electron-induced X-ray intensity for single particles under grazing-exit conditions, *Spectrochim. Acta B*, **54**, 1243-1251 (1999).
- [20] K. Tsuji, Z. Spolnik, K. Wagatsuma, R. E. Van Grieken, R. D. Vis, Grazing-exit particle-induced X-ray emission analysis with extremely low background, *Anal. Chem.* **71**, 5033-5036 (1999).
- [21] K. Tsuji, K. Wagatsuma, R. Nullens, and R. Van Grieken, Elemental X-ray images obtained by grazing-exit electron probe microanalysis (GE-EPMA), *J. Anal. At. Spectrom.*, **14**, 1711-1713 (1999).

B-4: グロー放電プラズマの機器分析における応用 (Glow discharges)

- [1] K. Tsuji and K. Shimizu, SEM Observation of Inclusions in Steel Samples after Fast Surface Cleaning by Glow Discharge, *ISIJ International*, **53** (2013) 1936-1938.

- [2] F. Onoue and K. Tsuji, X-Ray Elemental Imaging in Depth by Combination of FE-SEM-EDS and Glow Discharge Sputtering, *ISIJ International*, **53** (2013) 1939-1942.
- [3] 辻 幸一, 松田 秀幸, 我妻 和明, 高電圧グロー放電からの X 線放射, *X 線分析の進歩*, **29**, 223-232 (1998).
- [4] K. Tsuji, T. Sato and K. Wagatsuma, Grimm glow discharge X-ray tube, *Spectrochim. Acta B*, **53**, 417-426(1998).
- [5] K. Tsuji, K. Wagatsuma, S. Yamaguchi, S. Nagata, and K. Hirokawa, X-ray measurement from the cathode surface of glow discharge tube used as a compact x-ray fluorescence instrument, *Spectrochim. Acta B*, **53**, 1669-1677 (1998).
- [6] K. Tsuji and K. Wagatsuma, Compact glow discharge x-ray tube, *Rev. Sci. Instrum.*, **69**, 4006-4007 (1998).
- [7] K. Tsuji, H. Matsuta and K. Wagatsuma, Fast electrons from Grimm glow discharge helium plasmas, *Jpn. J. Appl. Phys.*, **36**, L446-L448 (1997).
- [8] K. Tsuji, K. Wagatsuma and H. Matsuta, Characteristics of fast electrons from Grimm glow discharge He plasmas as an electron source, *Spectrochim. Acta B*, **52** 1587-1595 (1997).
- [9] 辻 幸一, 我妻 和明, 松田 秀幸, グリム型グロー放電プラズマからの高速電子放出現象と X 線元素分析への応用, *分析化学*, **46**, 863-867 (1997).
- [10] K. Tsuji and K. Hirokawa, Estimation of chemical sputtering rates of carbon in He-H₂ glow discharge plasmas by optical emission spectroscopy, *Jpn. J. Appl. Phys.*, **32**, 916-920 (1993).
- [11] K. Tsuji and K. Hirokawa, Studies on carbon deposition in Ar-CH₄ plasmas with optical emission spectroscopy and x-ray photoelectron spectroscopy, *Appl. Surf. Sci.*, **59**, 31-37 (1992).
- [12] K. Tsuji and K. Hirokawa, Conversion of sputtering time into depth in depth profiles of oxidized Cu-Ni alloys obtained by glow discharge spectroscopy, *Surf. Interface. Anal.*, **17**, 819-822 (1991).
- [13] K. Tsuji and K. Hirokawa, Studies on chemical sputtering of Si and C in Ar-H₂ glow discharge plasma by optical emission spectroscopy, *Thin Solid Films*, **205**, 6-12 (1991).
- [14] 辻 幸一, 広川 吉之助, グロー放電成膜現象の発光スペクトルによる評価, *日本化学会誌*, **1991**, 1379-1385 (1991).
- [15] K. Tsuji and K. Hirokawa, Depth profiling studies of oxidized alloy surfaces by glow discharge emission spectroscopy, *Surf. Interface. Anal.*, **15**, 223-228 (1990).

B-5: マイクロ X 線分析 (3次元 X 線分析法) (micro XRF, 3D-XRF, X-ray imaging)

- [1] 辻 幸一, 平野 新太郎, 八木 良太, 中澤 隆, 秋岡 幸司, 土井 教史, 「3次元蛍光 X 線分析法による鉄鋼試料表面近傍の元素分布の可視化」, *鉄と鋼*, **100** (2014) No. 7 掲載決定.
- [2] S. Smolek, T. Nakazawa, A. Tabe, K. Nakano, K. Tsuji, C. Streli, and P. Wobrauschek, Comparison of two confocal micro-XRF spectrometers with different design aspects, *X-Ray Spectrom.*, **43** (2014) 93-101.
- [3] S. Hirano, K. Akioka, T. Doi, M. Arai, and K. Tsuji, Elemental depth imaging of solutions for monitoring corrosion process of steel sheet by confocal micro-XRF, *X-Ray Spectrom.*, accepted.
- [4] K. Akioka, T. Nakazawa, T. Doi, M. Arai, and K. Tsuji, Underfilm corrosion of steel sheets

observed by confocal 3D-XRF technique, *Powder Diffraction*, accepted.

- [5] 江本 精二、辻 幸一、加藤 秀一、山田 隆、庄司 孝、「ストレートポリキャピラリーと二次元検出器を備えた波長分散型蛍光 X 線イメージング装置の開発と特性評価」、*X 線分析の進歩*, **45** (2014) 129-138.
- [6] 八木 良太、平野 新太郎、辻 幸一、Mareike Falk、Jurgen Janek、Ursula Fittschen、「共焦点型 3 次元蛍光 X 線分析法によるリチウムイオン二次電池の電極材料分析」、*X 線分析の進歩*, **45** (2014) 241-250.
- [7] K. Nakano, K. Akioka, T. Doi, M. Arai, H. Takabe, and K. Tsuji, Elemental Depth Analysis of Corroded Paint-Coated Steel by Confocal Micro-XRF Method, *ISIJ International*, **53** (2013) 1953-1957.
- [8] S. Komatani, K. Nakamachi, K. Nakano, S. Ohzawa, H. Uchihara, A. Bando, and K. Tsuji, Fundamental Characteristics of Hybrid X-ray Focusing Optics for Micro X-ray Fluorescence Analysis, *Nucl. Instrum. Methods Phys. Res., Sect. B*, **309** (2013) 260-263.
- [9] S. Komatani, S. Hirano, T. Aoyama, Y. Yokota, H. Ueda, and K. Tsuji, Micro X-ray Beam Produced with a Single Glass Capillary for XRF Analysis, *Advances in X-ray Analysis*, **55** (2013) 225-233.
- [10] S. Emoto, K. Otsuki, K. Nakano, and K. Tsuji, Elemental depth profiling of forensic samples by confocal 3D-XRF method, *Advances in X-ray Analysis*, **55** (2013) 217-224.
- [11] T. Ohmori, S. Kato, M. Doi, T. Shoji, and K. Tsuji, Wavelength dispersive X-ray fluorescence imaging using a high-sensitivity imaging sensor, *Spectrochim. Acta, Part B*, **83-84** (2013) 56-60.
- [12] T. Nakazawa and K. Tsuji, Depth-selective elemental imaging of microSD card by confocal micro-XRF analysis, *X-Ray Spectrom.*, **42** (2013) 123-127.
- [13] T. Nakazawa and K. Tsuji, Development of a high resolution confocal micro-XRF instrument equipped with a vacuum chamber, *X-Ray Spectrom.*, **42** (2013) 374-379.
- [14] 松矢 淳宣、辻 幸一、「複合型 X 線光学素子を備えた微小部蛍光 X 線分析装置の開発と評価」、*X 線分析の進歩*, **44** (2013) 111-119.
- [15] 中澤 隆、中野和彦、恩地啓実、浪田真由、矢持 進、辻 幸一、「微小部蛍光 X 線分析法によるアユの耳石中の Sr 分布解析」、*分析化学*, **61** (2012) 637-642.
- [16] 駒谷慎太郎、青山朋樹、大澤澄人、辻 幸一、「小型 X 線分析顕微鏡の開発」、*X 線分析の進歩*, **43** (2012) 241-247.
- [17] T. Ohmori, M. Hatayama, H. Takenaka, K. Tsuji, Development of 2d Dispersive Device for XRF Imaging Spectrometer, *Advances in X-ray Analysis*, **55** (2012) 228-233.
- [18] T. Ohmori, M. Hatayama, T. Ohchi, H. Ito, H. Takenaka, K. Tsuji, Development of X-ray 2D dispersive device for WD-XRF imaging spectrometer, *Powder Diffraction*, **27** (2012) 71-74.
- [19] K. Tsuji, T. Ohmori, M. Yamaguchi, Wavelength Dispersive X-ray Fluorescence Imaging, *Anal. Chem.*, **83**, 6389-6394 (2011).
- [20] K. Nakano, C. Nishi, K. Otsuki, Y. Nishiwaki, K. Tsuji, Depth Elemental Imaging of Forensic Samples by Confocal micro-XRF Method, *Anal. Chem.*, **83**, 3477-3483 (2011).
- [21] K. Tsuji, K. Nakano, Development of a new confocal 3D-XRF instrument with an X-ray tube, *J. Anal. At. Spectrom.*, **26**, 305-309 (2011).
- [22] T. Nakazawa, K. Nakano, M. Yoshida, K. Tsuji, Enhancement of XRF intensity by using Au-coated glass monicapillary, *Powder Diffraction*, **26**, 163-167 (2011).

- [23] T. Nakazawa, K. Nakano, M. Yoshida, K. Tsuji, Enhancement of XRF intensity by using Au coated glass-capillary, *Advances in X-ray Analysis*, **54**, 238-246 (2011).
- [24] 中野 和彦、辻 幸一、「走査型共焦点蛍光 X 線分析法による試料表面および表面近傍の三次元元素分析」、*表面科学*, **31**, 331-336 (2010).
- [25] T. Yonehara, M. Yamaguchi, K. Tsuji, X-ray fluorescence imaging with polycapillary X-ray optics, *Spectrochim. Acta Part B*, **65**, 441-444 (2010).
- [26] T. Yonehara, D. Orita, K. Nakano, S. Komatani, S. Ohzawa, A. Bando, H. Uchihara, K. Tsuji, Development of a transportable μ -XRF spectrometer with polycapillary half lens, *X-Ray Spectrom.*, **39**, 78-82 (2010).
- [27] K. Nakano, K. Tsuji, Development of Laboratory Confocal 3D-XRF Spectrometer and Nondestructive Depth Profiling, *J. Anal. At. Spectrom.*, **25**, 562-569 (2010).
- [28] K. Nakano, K. Tsuji, Nondestructive elemental depth profiling of Japanese lacquerware Tamamushi-nuri by confocal 3D-XRF analysis in comparison with micro GE-XRF, *X-Ray Spectrom.*, **38**, 446-450 (2009).
- [29] A. Matsuda, K. Nakano, S. Komatani, S. Ohzawa, H. Uchihara, K. Tsuji, Fundamental characteristics of polycapillary x-ray optics combined with glass conical pinhole for micro x-ray fluorescence spectrometry, *X-Ray Spectrom.*, **38**, 258-262 (2009).
- [30] K. Nakano, A. Matsuda, Y. Nodera, and K. Tsuji, Improvement of spatial resolution of μ -XRF by using a thin metal filter, *X-Ray Spectrom.*, **37**, 642-645 (2008).
- [31] K. Tsuji, K. Nakano, M. Yamaguchi, T. Yonehara, Micro and imaging x-ray analysis by using polycapillary x-ray optics, *Proc. SPIE*, **7077**, 70770W-1~8 (2008).
- [32] T. Yonehara, K. Tsuji, Development of a compact XRF probe using a ring-type secondary target, *X-Ray Spectrom.*, **37**, 503-507 (2008).
- [33] 米原 翼、辻 幸一、「照射・検出同軸型の微小部 XRF プローブの開発」、*X 線分析の進歩*, **39**, 95-104 (2008).
- [34] A. Matsuda, Y. Nodera, K. Nakano, K. Tsuji, X-ray energy distribution in X-ray microbeam produced by polycapillary x-ray lens, *Anal. Sci.*, **24**, 843-846 (2008).
- [35] K. Tsuji, T. Yonehara, K. Nakano, Application of confocal 3D micro XRF for solid/liquid interface analysis, *Anal. Sci.*, **24**, 99-103 (2008).
- [36] 辻 幸一、中野 和彦、「共焦点型 3D 蛍光 X 線分析装置による実験室での 3D 元素マッピング」、*まてりあ*, **46**, 833 (2007) 12 月号。
- [37] 辻 幸一、野寺 雄太、中野 和彦、共焦点型 3 次元蛍光 X 線分析装置の開発と微小部深さ方向分析への応用、*表面科学*, **28**, (2007) 447-452.
- [38] K. Tsuji, K. Nakano, X. Ding, Development of Confocal Micro-XRF Instrument using Two X-ray Beams, *Spectrochim. Acta B*, **62**, 549-553 (2007).
- [39] K. Tsuji, K. Nakano, Development of Confocal 3D micro XRF Spectrometer with Cr-Mo Dual Excitation, *X-Ray Spectrom.*, **36**, 145-149 (2007).
- [40] K. Tsuji, A. Matsuda, K. Nakano, A. Okhrimovskyy, X-ray fluorescence analysis of soft materials using needle-type collimators enabling greater tolerance in analysis depth, *Spectrochim. Acta B*, **61**, 460-464 (2006).

- [41] 中野 和彦, 辻 幸一, 共焦点型蛍光 X 線分析装置の開発と米試料の三次元元素分析, *分析化学*, **55**, 427-432 (2006).
- [42] 田中 啓太, 堤本 薫, 荒井 正浩, 辻 幸一, ポリキャピラリー X 線レンズの特性評価、X 線分析の進歩、**37**, 289-300 (2006) .
- [43] 松田 晃典, 辻 幸一, ニードル型コリメーターを用いた試料内部微小空間の蛍光 X 線分析、分析化学、**55**, 681-687 (2006).
- [44] 江本 哲也, 小西 洋太郎, X. Ding, 辻 幸一, キノア種子の X 線元素マッピングにおける自己吸収の影響の軽減、*X 線分析の進歩*, **36**, 267-274 (2005).
- [45] K. Tsuji, T. Emoto, Y. Matsuoka, Y. Miyatake, T. Nagamura, and X. Ding, Micro-XRF Instrument Developed in Combination with Atomic Force Microscope, *Powder Diffraction* **20**, 137-140 (2005).
- [46] K. Tsuji, T. Emoto, Y. Nishida, E. Tamaki, Y. Kikutani, A. Hibara, T. Kitamori, Grazing-exit micro x-ray fluorescence analyses for chemical microchip, *Anal. Sci.* **21**, 799-803 (2005).
- [47] T. Emoto, Y. Sato, Y. Konishi, X. Ding, K. Tsuji, Development and applications of a grazing exit micro x-ray fluorescence (GE- μ -XRF) instrument using a polycapillary x-ray lens, *Spectrochim. Acta B*, **59**, 1291-1294 (2004).
- [48] K. Tsuji and F. Delalieux, Feasibility study of 3 dimensional XRF spectrometry using μ -x-ray beam under grazing-exit conditions, *Spectrochim. Acta B*, **58**, 2233-2238 (2003).
- [49] K. Tsuji and F. Delalieux, Micro x-ray fluorescence using a pinhole aperture in quasi-contact mode, *J. Anal. At. Spectrom.* **17**, 1405-1407 (2002).

B-6 その他分析法 (蛍光 X 線定量分析、電子線分析など) (Other topics)

- [1] 浪田 真由, 恩地 啓実, 板谷 天馬, 中澤 隆, 辻 幸一, 矢持 進, 「微小部蛍光 X 線分析法を用いた都市河川大和川における天然アユ遡上数の推定」*環境アセスメント学会誌*, **12**(1) (2014) 101-108.
- [2] Y. Imanishi, A. Bando, S. Komatani, S. Wada, K. Tsuji, Experimental parameters for XRF analysis of soils, *Advances in X-ray Analysis*, **53** (2010) 248-255.
- [3] K. Nakano, K. Okubo, K. Tsuji, Preconcentration of environmental waters by agar for XRF analysis, *Powder Diffraction*, **24** (2009) 135-139.
- [4] 西田 洋介, 辻 幸一, 「粘着性テープを用いた蛍光 X 線分析用簡易サンプリング方法」、*X 線分析の進歩*, **39**, 179-187 (2008).
- [5] J. Liang, Z. Li, K. Tsuji, K. Nakano, M. J. R. Nout, R. J. Hamer, Milling characteristics and distribution of phytic acid and zinc in rice kernels, *Journal of Cereal Science*, **48**, 83-91 (2008).
- [6] 廣瀬 幸範, 本田 和仁, 前川 和義, 宮崎 博史, 上殿 明良, 辻 幸一, 合金シードを用いためっき Cu 薄膜のキャラクタリゼーション、*分析化学*, **56**, 465-470 (2007).
- [7] 堤本 薫, 辻 幸一, 固液界面用蛍光 X 線分析法の提案と化学めっき過程の観察、*分析化学*, **56**, 499-504 (2007).
- [8] K. Tsutsumimoto, K. Tsuji, Time-resolved X-ray fluorescence for monitoring the intake of mineral nutrients in living plants, *X-Ray Spectrom.*, **36**, 324-327 (2007).

C. 紀要や報告記事など (Reports)

- [1] 秋岡 幸司、辻 幸一、「第 62 回デンバーX 線会議報告」、X 線分析の進歩、**45** (2014) 341-344.
- [2] 辻 幸一、「第 49 回 X 線分析討論会および第 15 回全反射蛍光 X 線分析法 (TXRF2013) 国際会議合同会議報告」、X 線分析の進歩、**45** (2014) 349-357.
- [3] 平野 新太郎 (研究室 M1)、「第 61 回デンバーX 線会議 2012 報告」(国際会議報告)、X 線分析の進歩、**44** (2013) 327-330.
- [4] Y. Nishida, K. Tsuji, Liquid / Liquid Near Interface Analysis by Micro-XRF Using Needle-Type Collimators, *Memoirs of the Faculty of Engineering Osaka City University*, **53** (2012) 27-30.
- [5] 川又 誠也、中野 和彦、辻 幸一、「玩具の表面から溶出する微量な重金属をモニターする」、第 70 回分析化学討論会 展望とトピックス、(2009) 8.
- [6] 辻 幸一、「分析装置の解体」、日産アーク MONTHLY, **16**, No.10, p.3 (2007).
- [7] 辻 幸一、「境界領域から生まれる融合的な分析科学」、ぶんせき (ロータリー、談話室) 2007(5), 255.
- [8] 中野 和彦、辻 幸一、「コメ一粒における 3 次元の元素分布を可視化する」、第 67 回分析化学討論会、展望とトピックス、p.23 (2006).
- [9] A. Okhrimovskyy, T. Moriyama, and K. Tsuji, Investigation of Experimental Arrangements in X-ray Fluorescence Analysis Using Ultra-Thin Sample Carrier, *Memories of the Faculty of Engineering OCU*, **47**, 21-24 (2006).
- [10] 辻 慎一郎、廣瀬 由紀子、辻 幸一、リング状グロー放電 X 線管の試作、大阪市立大学工作技術センターレポート”Fabrica”、**18**, 21-26 (2006).
- [11] 辻 幸一、合志陽一先生の CSI2005 賞受賞記事、*分光研究*, **54** (6), 341 (2005).
- [12] 辻 幸一、早川 慎二郎、「微小部 X 線分析 –TXRF2003 サテライト会議での話題を中心に–」、理学電機ジャーナル、**35**, 13-17 (2004).
- [13] K. Tsuji, T. Sakai, S. Yamamoto, “Fundamental Research of Grazing-Exit PIXE”, *Japan Atomic Energy Research Institute, TIARA annual report, JAERI-Review 2004-025*, 272-273 (2004).
- [14] K. Tsuji, S. Hayakawa, T. Hari, K. Yamane, N. Kometani, Y. Yonezawa、Spring 8 User Experiment Report、No. 11 (2003A), 179 (2003).
- [15] 辻 幸一、早川 慎二郎、張 利広、山根 一真、米谷 紀嗣、米澤 義朗、「X 線マイクロビームを用いるナノメートルレベルでの深さ方向分析」、文部科学省 ナノテクノロジー総合支援プロジェクト Spring-8 研究成果報告書、vol. 2 2003 年 A, 151-152 (2003).
- [16] 辻 幸一、「斜出射 X 線測定型–微小部蛍光 X 線分析装置の開発」、大阪市立大学ナノサイエンス・ナノテクノロジーフォーラム報告書 (vol.2) 47-48 (2003).
- [17] 辻 幸一、「X 線分析関連の 3 つの国際会議報告」、ぶんせき、**2002**, 533 (2002).
- [18] 辻 幸一、「斜出射 EPMA 装置の試作と分析性能の評価」、*島津科学技術振興財団平成 11 年度最終報告書 (Annual Report of Shimadzu Science Foundation)*, 28-32 (2002).
- [19] 辻 幸一、「斜出射条件下での EPMA」、日本学術振興会製鋼第 19 委員会 製鋼計測化学研究会 予稿、19 委-11935, 1-19 (2001).
- [20] 辻 幸一、「斜出射 EPMA 装置の試作と分析性能の評価」、*島津科学技術振興財団平成 11 年度事業報告書 (Annual Report of Shimadzu Science Foundation)*, 19 (2000).
- [21] 辻 幸一、「1st Workshop on Environmental Analytical Artefacts」、ぶんせき、**1999**, 435 (1999).
- [22] 辻 幸一、「EMAS’99 European Workshop」、*表面科学*, **20**, 495 (1999).
- [23] 辻 幸一、「ベルギーのマイクロアナリシス研究集団」、*まてりあ*, **38**, 652 (1999).

D. 国際会議のプロシーディング (proceedings of international conferences)

- [1] K. Tsuji, K. Tsutsumimoto, K. Nakano, K. Tanaka, A. Okhrimovskyy, Y. Konishi, and X. Ding Time-Resolved μ -XRF and Elemental Mapping of Biological Materials, *Advances in X-Ray Analysis*, **49**, 296-301 (2006).
- [2] K. Nakano, K. Tsuji, M. Kozaki, K. Kakita, A. Ono, T. Nakamura, Development Plastic Certified Reference Material for XRF analysis (JSAC)containing Pb,Cd,Cr:Part1.Sample Preparation and Homogeneity test , *Advances in X-ray Analysis*, **49**, 280-286 (2006).
- [3] K. Tsuji, T. Emoto, Y. Matsuoka, Y. Miyatake, T. Nagamura, and X. Ding, Micro-XRF Instrument Developed in Combination with Atomic Force Microscope, *Advances in X-Ray Analysis*,**48**, 221-228 (2005).
- [4] K. Tsuji, K. Nakano, X. Ding, Micro X-ray Fluorescence Analysis at OCU, *Physics Testing and Chemical Analysis, Part B Chemical Analysis*, **141**, 20 (2005).
- [5] K. Tsuji, T. Emoto, Y. Nishida, K. Tsutsumimoto, K. Nakano, E. Tamaki, Y. Kikutani, A. Hibara, T. Kitamori, Application of X-ray fluorescence analysis for chemical microchips, Proceedings of μ -TAS 2005 conference, Vol. 2, 991-993(2005).
- [6] K. Tsuji, Micro-Trace X-ray Analysis –Development of Grazing-Exit-Micro X-Ray Fluorescence (GE- μ -XRF) in Combination with Atomic Force Microscope (AFM)-, The proceedings of the 12th Osaka City University, International Symposium, 27-29 October, 2004, p137-142 (2004).
- [7] K. Tsuji, Z. Spolnik, K. Wagatsuma, K. Saito, K. Asami, Characterization of thin-films at small region by grazing-exit electron probe microanalysis, *Mater. Trans. JIM*, **43**, 414-416(2002).
- [8] F. Delalieux, K. Tsuji, K. Wagatsuma, R. Van Grieken, Material analysis methods applied to the study of ancient monuments, works of art and artefacts, *Mater. Trans.* **43**, 2197-2200 (2002).
- [9] K. Tsuji, Z. Spolnik, K. Wagatsuma, R. Nullens, and R. Van Grieken, Detection limit of grazing-exit electron probe microanalysis (GE-EPMA) for particles analysis, *Mikrochim. Acta*, **132**, 357-360 (2000).
- [10] K. Tsuji, Z. Spolnik, K. Wagatsuma, R. Nullens, and R. Van Grieken, Preliminary experiments on grazing-exit electron probe microanalysis (GE-EPMA), *Electron Microscopy and Analysis 1999, proceedings of EMAG conference*, **161**, 119-122 (1999).
- [11] K. Tsuji, S. Sato, and K. Hirokawa, Nondestructive depth profiling by glancing-incidence and -takeoff x-ray fluorescence, *Mater. Trans. JIM*, **37**, 295-298 (1996).
- [12] K. Tsuji and K. Hirokawa, Surface analysis of Fe-Cr alloy by glancing-incidence and -takeoff x-ray fluorescence method, *Mater. Trans. JIM*, **37**, 1033-1036 (1996).
- [13] K. Tsuji, S. Sato, and K. Hirokawa, X-ray fluorescence analysis of thin films at glancing-incident and -takeoff angles, *Advances in X-Ray Chemical Analysis, JAPAN*, **26s**, 151-156 (1995).

E. 国際会議での招待講演 (Invited lectures at international conferences)

- [1] K. Tsuji, Workshop-organizer and instructor on “XRF imaging”, 63rd Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 28 July - 1 August 2014, Big Sky, Montana, USA.
- [2] K. Tsuji, Workshop-instructor on “Trace Analysis” , 63rd Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 28 July - 1 August 2014, Big Sky, Montana, USA.
- [3] K. Tsuji, Workshop-instructor on “Trace Analysis” Instructor, 62nd Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 5-9 August 2013, Westminster, Colorado, USA.
- [4] K. Tsuji, A. Tabe, T. Nakazawa, T. Awane, X-Ray Micro Analysis of Environmental and Painting Samples, in the special session “Prof. Rene Van Grieken: 40 years of international environmental chemistry” at the 37th edition of the International Symposium on Environmental Analytical Chemistry (ISEAC-37), 22-25 May 2012, Antwerp, Belgium.
- [5] K. Tsuji, T. Nakazawa, Development of a Vacuum Confocal Micro-XRF Instrument and Its Applications, 61st Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 6-10 August 2012, Denver, Colorado, USA.
- [6] K. Tsuji, S. Kaku, T. Ohmori, T. Yoshioka, TXRF Analysis of Environmental and Biological Samples, 61st Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 6-10 August 2012, Denver, Colorado, USA.
- [7] K. Tsuji, Workshop “Trace/TXRF Analysis” Instructor, 61st Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 6-10 August 2012, Denver, Colorado, USA.
- [8] K. Tsuji, T. Ohmori, T. Nakazawa, X-ray elemental imaging with scanning and projection modes in the laboratory, "Channeling 2012" 5th International Conference Charged and Neutral Particles Channeling Phenomena, 23-28 September 2012, Alghero, Italy.
- [9] K. Tsuji, T. Nakazawa, K. Akioka, T. Doi, M. Arai, Development of a vacuum confocal micro-XRF instrument and 3D-XRF analysis of layered materials, International symposium on "Recent advance in analytical techniques for steelmaking industry" (RATEC2012), 28-30 November 2012, National Museum of Emerging Science and Innovation (MIRAikan), Tokyo, Japan..
- [10] K. Tsuji, M. Yamaguchi, T. Ohmori, XRF imaging using total reflection in polycapillary optics and X-ray CCD detector, The 14th International Conference on Total Reflection X-ray Fluorescence and Related Methods, June 6-9, 2011, Dortmund, Germany.
- [11] K. Tsuji, C. Nishi, T. Nakazawa, K. Nakano, K. Otsuki, Y. Nishiwaki, H. Takenaka, 3D-XRF Analysis of Several Forensic and Industrial Samples, 60th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, August 1-5, 2011, Colorado Springs, Colorado, USA.
- [12] T. Nakazawa, K. Nakano, K. Tsuji, Chemical Depth Imaging by Confocal micro-XRF, The 38th FACSS conference, October 2-6, 2011, Reno, Nevada, USA.
- [13] 辻 幸一、郝 晶「全反射蛍光 X 線分析法による有害重金属元素分析」(ポスター出展)、2011 中国国際工業博覧会、2011 年 10 月 31 日－11 月 4 日 (上海市、中国) .
- [14] K. Tsuji, T. Nakazawa, 3D-XRF Analysis for Industrial Samples and Projection Type XRF Imaging, The Seminar on Characterization of Advanced Inorganic Materials with Different Methods, Shanghai Institute of Ceramics, November 3, 2011, Shanghai, China.
- [15] K. Tsuji, A few approaches for elemental imaging at OCU, TU Wien Seminar, 23 January 2012, TU Wien, Vienna, Austria.

- [16] K. Tsuji, GD-SEM observation and 3D-XRF analysis of industrial materials, Inha University Seminar, 1-5 February 2012, Inha University, Incheon, Korea.
- [17] K. Tsuji, Comparison of analytical performance of 3D-XRF instruments, China 2010 XRS Conference, 15-17, September, 2010, Shanghai, China.
- [18] K. Tsuji, K. Nakano, C. Nishi, T. Nakazawa, Nondestructive elemental depth profiling by confocal 3D-XRF method in the Laboratory, Workshop; National Research Center for Geoanalysis, 13-14, September, 2010, Beijing, China
- [19] K. Tsuji, Workshop “Standards and Advanced Sample Preparation for XRF Analysis” Organizer, 59th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 2-6, August, 2010, Denver, Colorado, USA.
- [20] K. Tsuji, X-ray Chemical Imaging in Scanning and Projection modes in the laboratory, 59th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 2-6, August, 2010, Denver, Colorado, USA.
- [21] K. Tsuji, K. Nakamachi, K. Nakano, Improvement of spatial resolution in 2D and 3D X-ray fluorescence analysis, 36th CSI, 31 Aug.- 3 Sep. 2009, Budapest, Hungary (Keynote lecture).
- [22] K. Tsuji, K. Nakano, Micro and Trace X-ray Fluorescence Analysis in Laboratory, FACSS2009, 18-22 October, 2009, Louisville, KY, USA .
- [23] K. Tsuji, Applications of Glow Discharge Plasma and Micro X-ray Fluorescence Analysis, The International Expert Meeting on GDS, 25 November, 2008, Keio University Hiyoshi Campus, Japan.
- [24] K. Tsuji, M. Yamaguchi, T. Yonehara, “Feasibility of X-ray Energy Filtering by using Polycapillary X-ray Optics”, 57st Workshop : “Channeling 2008“ Charged and Neutral Particles Channeling Phenomena, 25 October-1 November, 2008, Erice (Trapani), Italy.
- [25] K. Tsuji and K. Nakano, “Trace and Micro XRF analysis in the Laboratory”, The 7th Chinese X-Ray Spectrometry Conference, 20-25 October 2008, Sanya (Hainan Province), China.
- [26] K. Tsuji, “Special Configurations in X-ray Fluorescence for Environmental Analysis”, The 9th Asian Conference on Analytical Sciences (Asianalysis), 4-8 Nov. 2007, Jeju, Korea. **[Key Note Lecture]**
- [27] K. Tsuji, “Micro XRF studies at Osaka City University”, 9 Nov. 2007, Inha University, Incheon, Korea.
- [28] K. Tsuji, “Research Plan for Development of High Spatial Resolution XRF Instrument”, ICXOM 2007 Satellite meeting of Micro Area Analysis by X-ray in Laboratory, 15-16, Sep. 2007, Osaka, Japan.
- [29] K. Tsuji, “Micro-TXRF analysis with a pinhole aperture”, 18-22 June, 2007, Trento, Italy.
- [30] K. Tsuji, “Grazing-Exit and Micro Wavelength-Dispersive X-Ray Spectrometry (GE-WDXRS and μ -WDXRS)”, EXRS 2006, 19-23 June, 2006, Paris, France.
- [31] A. Von Bohlen, and K. Tsuji, “Improving the detection limits by TXRF and GEXRF”, 55th Denver X-ray Conference, 7-11 August, 2006, Denver, USA.
- [32] K. Tsuji, “Fundamental and New Trends of X-Ray Fluorescence Analysis”, 大阪市・上海市研究者交流事業による招待講演会、7 September 2006, Shanghai, China.
- [33] K. Tsuji, “TXRF analysis with chemical microchip and 3D XRF analysis of solid/liquid interfaces “, 8 December, 2006, ISAS (Institute for Analytical Sciences), Dortmund, Germany.
- [34] K. Tsuji, K. Tanaka, K. Nakano, A. Okhrimovskyy, Y. Konish, X. Ding, “Micro-XRF analysis of biological materials”, 54th Denver X-ray Conference, 1-5 August, 2005, Denver, USA.

- [35] K. Tsuji, K. Tsutsumimoto, K. Tanaka, K. Nakano, X. Ding, T. Nagamura, Micro-XRF Studies using Polycapillary X-ray Lens and AFM Instrument, 18th International Conference on X-ray Optics and Microanalysis (ICXOM 2005), Frascati (Rome), Italy, 25-30 September, 2005.
- [36] K. Tsuji, K. Nakano, “X-ray Fluorescence analysis of Food Materials”, National Research Center of Geoanalysis, Beijing, China, 17-23 October, 2005
- [37] K. Tsuji, K. Nakano, X. Ding, “Micro X-ray Fluorescence analysis at OCU”, 6th China XRF International Conference 24-28 October, 2005.
- [38] K. Tsuji, T. Emoto, Y. Matsuoka, Y. Miyatake, T. Nagamura, X. Ding, “Combination of Scanning Probe Microscope and X-ray Analysis”, Denver X-ray Conference, Denver, USA (2004).
- [39] K. Tsuji, Micro-Trace X-ray Analysis, the 12th Osaka City University, International Symposium, 27-29 October, 2004.
- [40] K. Tsuji, "Applications of micro x-ray fluorescence using a polycapillary x-ray lens", 北京師範大学, 2004年11月28日-12月2日.
- [41] K. Tsuji, “Grazing-Exit X-Ray Measurement and its Application to 3-D X-Ray Spectrometry”, Meeting at Beijing Normal University, 15 May, 2002, Beijing, China.
- [42] K. Tsuji, “Microscopic X-Ray Surface Analysis at Grazing-Exit Geometry”, 5th International Topical Meeting on Industrial Radioisotope and Radiation Measurement Applications (IRRMA-V), 9 -14 June 2002, Bologna, Italy.
- [43] K. Tsuji, “Grazing-Exit X-Ray Spectrometry Applied to Microscopic Surface Analysis”, 9th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2002), Funchal, Madeira, Portugal, 8 - 13 September 2002.
- [44] K. Tsuji, Z. Spolnik, “Grazing-Exit X-ray Spectrometry for EPMA and PIXE”, International Congress on Analytical Science (ICAS) 2001, 6-10 Aug. 2001, Waseda University, Japan.
- [45] R. Van Grieken, J. Injuk and K. Tsuji, “Trends in Grazing Emission X-ray Analysis Techniques”, 8th Total Reflection X-Ray Fluorescence Analysis and Related Methods, 25-29, Sep. 2000, Vienna, Austria.
- [46] K. Tsuji, Y. Hasegawa, K. Sugiyama, K. Wagatsuma and T. Sakurai, “STM experiments under X-ray irradiation”, Asia-Pacific Surface & International Analysis Conference, 23-26, October 2000, Beijing, China.
- [47] K. Tsuji, “Surface analysis with PIXE in a glancing exit geometry”, 16th CAARI 2000 (Conference on the Application of Accelerators in Research and Industry), 1-4 Nov. 2000, Denton, Texas, USA.
- [48] K. Tsuji, “Grazing-exit X-ray spectrometry for surface and particle analysis”, **[Plenary Lecture]** 7th Latin American Seminary of Analysis by X-ray Techniques, 19-24, Nov. 2000, Sao Pedro, Brazil.

F. 国内での招待(依頼)講演 (Invited lectures at domestic meetings in Japan)

- [1] 辻 幸一 「分光分析の基礎 - 可視紫外光～X線分光まで -」 2014年7月25日、2014年度「ぶんせ

- き講習会」(実践編)「第 61 回機器による分析化学講習会」(株式会社堀場製作所分析センター、京都)
- [2] 辻 幸一「全反射蛍光 X 線分析」2014 年 7 月 7-9 日、第 19 回 X 線分析講習会 蛍光 X 線分析の実際 (第 8 回) - 機能性材料、環境試料、食品中の有害元素の簡易迅速分析法 (東京理科大学記念講堂、東京)
- [3] 辻 幸一「機器分析における装置校正と標準物質」2014 年 5 月 16 日、2014 年度「ぶんせき講習会」(基礎編その 1)「分析における統計手法 - 統計の基礎と統計手法の実際について -」(大阪市立大学文化交流センター、大阪)
- [4] 辻 幸一「3 次元蛍光 X 線分析装置の開発とその応用研究」2014 年 1 月 27 日、ONSA 25 周年記念講演会 (大阪大学中之島センター、大阪)
- [5] 辻 幸一「3 次元蛍光 X 線分析法の基礎と高分子材料分析への応用」2013 年 9 月 19-20 日、日本分析化学会 第 18 回高分子分析討論会 (明治大学 駿河台キャンパス アカデミーコモン、東京)
- [6] 辻 幸一「全反射蛍光 X 線分光法 (TXRF) の国際標準化」2013 年 9 月 4 日、JASIS コンファレンス 表面化学分析技術国際標準化セミナー「表面・微小領域分析における国際標準化の現状」(幕張メッセ国際会議場 3 階 301 会議室、千葉)
- [7] 辻 幸一「蛍光 X 線分析法の新たな展開：-微量分析と元素イメージング-」2013 年 7 月 23 日、第 15 回テクノメイトコープ公開講演会 (道頓堀ホテル、大阪)
- [8] 辻 幸一「分光分析化学の基礎とその応用」2013 年 7 月 11 日、北摂三田高等学校「一日大学体験講座」(兵庫県立北摂三田高等学校、兵庫)
- [9] 辻 幸一「分光分析化学の基礎と現代社会における応用」2012 年 10 月 18 日、兵庫県立北摂三田高等学校 1 日大学体験講座 (兵庫県立北摂三田高等学校、兵庫)
- [10] 辻 幸一「全反射蛍光 X 線分光法 (TXRF) の国際標準化」2012 年 9 月 4 日、JASIS コンファレンス 表面化学分析国際標準化セミナー「表面分析における国際標準化の現状」(幕張メッセ国際会議場 2 階 201 会議室、千葉) .
- [11] 辻 幸一「蛍光 X 線微小部微量分析法の現状と展望」2012 年 7 月 6 日、第 121 回一水会分析管理研究会 (住友金属工業(株)総合技術研究所 1 号館、兵庫)
- [12] 辻 幸一「キャピラリー X 線集光素子を用いた蛍光 X 線元素イメージング」大阪市立大学大学院工学研究科 第 49 回オープン・ラボラトリー、2012 年 2 月 20 日 (大阪産業創造館、大阪)
- [13] 辻 幸一「蛍光 X 線元素イメージングの鑑識資料への応用」堀場製作所、2011 年 6 月 24 日 (堀場製作所、京都)
- [14] 辻 幸一 (企画)「法科学に有効な機器分析法」日本分析化学会近畿支部・近畿分析技術研究懇話会 平成 23 年度 第 1 回 提案公募型セミナー、2011 年 11 月 11 日 (大阪市立大学文化交流センター、大阪)
- [15] 辻 幸一「放射線発生装置の安全取扱い (エックス線、加速器) 及び研究における放射線の有用性」2010 年 4 月 16 日 平成 22 年度放射性同位元素等の取扱者に対する教育及び訓練 (大阪市立大学、大阪)
- [16] 辻 幸一「高空間分解能蛍光 X 線分析装置の開発」2010 年 6 月 3 日 平成 22 年度 JST イノベーションプラザ大阪成果報告会 (育成研究) (大阪国際会議場、大阪)
- [17] 辻 幸一「3 次元蛍光 X 線分析装置の開発と鑑識試料分析等への応用」2010 年 9 月 3 日 東京コンファレンス 2010 分析若手研究者企画「実際の材料解析」(幕張メッセ国際会議場、千葉)

- [18] 辻 幸一、「X線を利用した分析測定分野の先端技術と研究動向」、第2回 NEDO 光集積ラボラトリー公開セミナー、2009年4月17日(金) 13:15-16:30、(京都大学桂キャンパスローム記念館 3F セミナー室、京都市)
- [19] 辻 幸一、放射線発生装置の安全取扱についての講義、放射性同位元素等の取扱者に対する教育及び訓練、2009年4月17日(金) 9:00-12:00、(大阪市立大学学術情報総合センター10階 会議室L)
- [20] 辻 幸一、「元素識別可能な X 線イメージング」、大阪市立大学(OCU) ニューテックガイド 2009、2009年1月14日(水)、(大阪産業創造館、大阪市)
- [21] 辻 幸一、「新規で簡便な蛍光 X 線イメージング技術、装置の開発」、JST イノベーション・ジャパン 2009-大学見本市、2009年9月16日-18日(東京国際フォーラム)
- [22] 辻 幸一「微小部(3D) 蛍光 X 線分析装置の開発」2009年12月21-22日 東北大学金属材料研究所ワークショップ ワークショップ研究テーマ "新素材開発と工程制御・品質管理に向けた分析・解析技術の進展"(東北大学金属材料研究所2号館講堂、宮城)
- [23] 辻 幸一、「実験室における微小部・微量蛍光 X 線分析法」、第37回放射線科学研究会、2008年10月17日(金)(大阪住友クラブ、大阪市)
- [24] 辻 幸一、「血液中金属イオンの元素分析法」、メタルイオンスタディプロトコールミーティング、2008年9月6日(土) 14:00-16:00、(大阪市立大学医学部、大阪市)
- [25] 辻 幸一、「蛍光 X 線分析による環境試料中の有害元素の測定-RoHS、土壌汚染対策防止法への対応」、第3回大阪市立大学産学連携セミナー・エコロジー社会を創造するものづくり、2008年7月11日、(大阪産業創造館、大阪市)
- [26] 辻 幸一、「蛍光 X 線分析法の医学分野への適用可能性」、第2回インターキャンパス(杉本-阿倍野)研究交流会、2008年2月14日
- [27] 辻 幸一、「蛍光 X 線による微量元素分析技術」、第30回「オープン・ラボラトリー」、2007年11月12日
- [28] 辻 幸一、「大阪市立大学における産学官連携の取り組み」、第56回矯正教育研究会、2007年10月16日
- [29] 辻 幸一、「各種元素分析法の原理と特徴 -特に蛍光 X 線元素分析について-」、日本鉄鋼協会鉄鋼工学アドバンストセミナー、2007年10月29-31日(住金マネジメント(株)人材開発センター、鹿嶋、茨城)
- [30] 辻 幸一、「蛍光 X 線分析法の医療分野への適用可能性」2007年3月13日、第12回次世代医療システム産業化フォーラム 2006(大阪商工会議所7階国際会議ホール、大阪)
- [31] 辻 幸一、「X線分析機能を有する走査プローブ顕微鏡の開発」2007年1月19日、大阪市立大学ニューテックガイド 2007(大阪産業創造館、大阪)。
- [32] 辻 幸一、「水溶液中の X 線固体表面解析」2007年1月26日、表面科学技術研究会(神戸大学、神戸)。
- [33] 辻 幸一、「微小部蛍光 X 線分析研究の動向と鉄鋼材料への適用可能性」住友金属工業、2006年12月15日
- [34] 辻 幸一「鉄鋼試料の微小部 X 線分析」2006年7月28日、日本鉄鋼協会 評価・分析・解析部会セミナー、大阪市立大学。
- [35] 辻 幸一、「高感度3次元蛍光 X 線分析装置の開発へ向けた取り組み」2006年5月14-15日 日本分析化学会若手フォーラム in 秋田。

- [36] 辻 幸一、「EPMA, X 線による異物分析」、技術情報協会、2005 年 11 月 30 日.
- [37] 辻 幸一、「最近の X 線要素技術の発展と蛍光 X 線分析への応用」、(株)ルネサステクノロジ、2005 年 10 月 18 日.
- [38] 辻 幸一、「21 世紀の X 線分析、蛍光 X 線分析」、第 40 回 X 線分析討論会、2004 年 11 月 5-6 日
- [39] 辻 幸一、「斜入射もしくは斜出射配置による表面・局所蛍光 X 線分析」、日本学術振興会製鋼第 19 委員会製鋼計測化学研究会第 31 回会議、2004 年 6 月 2 日.
- [40] 辻 幸一、「全反射・斜出射 X 線測定による微量・単一粒子分析」、第 9 回「大阪市立大学オープンラボラトリー・材料化学とナノテクノロジー」、2004 年 5 月 28 日
- [41] 辻 幸一、「斜出射 X 線分析法の開発と応用」、住友金属工業、2004 年 5 月 19 日
- [42] 辻 幸一、「斜出射 X 線分析法の開発と応用」 表面分析研究会 第 23 回研究会（京都大学百周年時計台記念館） 2004 年 3 月 8 日
- [43] 辻 幸一、「最近の X 線元素分析の進展」 大阪市立大学 EMA 懇話会 2003 年 12 月 11 日
- [44] 辻 幸一、「局所・表面・微量 X 線分析を目標とする 2・3 の研究」 関西分析研究会、2003 年 10 月 27 日（コベルコ科研）
- [45] 辻 幸一、「斜出射 X 線分析の EPMA への応用」 2002 年度日本電子 EPMA・表面分析ユーザーズミーティング、平成 14 年 9 月 27 日
- [46] F. Delalieux、辻 幸一、我妻 和明、R. Van Grieken、”Material analysis of historical heritage” 日本金属学会 2002 年春期大会、平成 14 年 3 月 28-30 日
- [47] 辻 幸一、「古くて新しい X 線分析」日本分析化学会東北支部 50 周年記念講演会、平成 13 年 12 月 8 日
- [48] 辻 幸一、「斜出射条件下での電子プローブマイクロアナリシス」日本学術振興会製鋼第 19 委員会製鋼計測化学研究会、平成 13 年 10 月 22 日
- [49] 辻 幸一、「全反射 X 線励起過程の解明と微小表面分析への応用」日本分析化学会第 46 年会、平成 9 年 10 月 7 日
- [50] 辻 幸一、「斜入射・斜出射 X 線分析法による表面分析」第 176 回 X 線分析研究懇談会、平成 7 年 9 月 19 日
- [51] 辻 幸一、「斜入射・斜出射-蛍光 X 線分析法による表面・薄膜分析」第 15 回日本表面科学会講演大会、平成 7 年 11 月 29 日
- [52] 辻 幸一、広川 吉之助、「斜入射・斜出射-蛍光 X 線分析法による表面近傍の分析」東北大学金属材料研究所 ワークショップ“全反射現象を利用した各種分光法による表面・界面分析”、平成 7 年 9 月 1 日

G. 国際会議での発表 (presentations at international conferences)

- [1] K. Tsuji, M. Yamanashi, S. Kato, T. Yamada, and T. Shoji, Wavelength dispersive XRF imaging spectrometer using polycapillary angular filter and 2D X-ray detector, 63rd Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 28 July - 1 August 2014, Big Sky, Montana, USA (oral).
- [2] K. Tsuji, Y. Tabuchi, Y. Shimizu, and T. Yamada, TXRF analysis of halogen in Japanese soy sauce and other liquid samples, 63rd Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 28 July - 1 August 2014, Big Sky, Montana, USA (oral).
- [3] R. Dalipi, L. Borgese, A. Zacco, K. Tsuji, E. Bontempi, and L.E. Depero, Trace elements determination in Italian wines using total reflection X-ray fluorescence, 38th International Symposium on Environmental

Analytical Chemistry (ISEAC38), 17-20 June 2014, Lausanne, Switzerland.

- [4] Kouichi Tsuji, Jigi Chin, Shintaro Hirano, Observation of chemical reactions in solution by confocal micro XRF technique, European Conference on X-Ray Spectrometry (EXRS2014), 15-20 June 2014, Bologna, Italy (oral).
- [5] Ryota Yagi, Shintaro Hirano, Mareike Falk, Jürgen Janek, Ursula Fittschen, Kouichi Tsuji, Confocal micro-XRF analysis of electrode materials of Li-ion battery, European Conference on X-Ray Spectrometry (EXRS2014), 15-20 June 2014, Bologna, Italy (poster).
- [6] Ryota Yagi, Kouichi Tsuji, Low-Z element analysis by confocal micro-XRF instrument, European Conference on X-Ray Spectrometry (EXRS2014), 15-20 June 2014, Bologna, Italy (poster).
- [7] Yuri Tabuchi, Masaki Yamanashi, Yuichiro Shimizu, Takashi Yamada, Kouichi Tsuji, Total reflection X-ray fluorescence analysis of halogen in liquid samples, European Conference on X-Ray Spectrometry (EXRS2014), 15-20 June 2014, Bologna, Italy (poster).
- [8] Masaki Yamanashi, Seiji Emoto, Shuichi Kato, Takashi Yamada, Takashi Shoji, Kouichi Tsuji, Wavelength-dispersive X-ray fluorescence imaging spectrometer with grazing incidence configuration, European Conference on X-Ray Spectrometry (EXRS2014), 15-20 June 2014, Bologna, Italy (poster).
- [9] Rogerta Dalipi, Laura Borgese, Andrea Casaroli, Marco Boniardi, Ursula Fittschen, Kouichi Tsuji, and Laura E. Depero, A TXRF study of metal release from AISI 304 in simulated food contact, European Conference on X-Ray Spectrometry (EXRS2014), 15-20 June 2014, Bologna, Italy.
- [10] Seiji Emoto, Masaki Yamanashi, Takashi Shouji, Shuichi Kato, Takashi Yamada, and Kouichi Tsuji, Analytical characteristics of wavelength dispersive XRF imaging with polycapillary optics and 2D detector, 15th International Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2013), and the 49th Annual Conference on X-Ray Chemical Analysis, September 23-27, 2013, Osaka City University, Osaka, Japan (poster).
- [11] Yuri Tabuchi, Sho Kaku, and Kouichi Tsuji TXRF analysis of halogen in environmental and biological samples, 15th International Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2013), and the 49th Annual Conference on X-Ray Chemical Analysis, September 23-27, 2013, Osaka City University, Osaka, Japan (poster).
- [12] Ryota Yagi, Jigi Chin, Koji Akioka, Masahiro Arai, Takashi Doi, Kouichi Tsuji, 3DXRF analysis for observing corrosion process of painted coating layer on steel samples, 15th International Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2013), and the 49th Annual Conference on X-Ray Chemical Analysis, September 23-27, 2013, Osaka City University, Osaka, Japan (poster).
- [13] Shintaro Hirano, Yuta Kitado, Koji Akioka, Takashi Doi, Masahiro Arai, and Kouichi Tsuji, In situ 3DXRF monitoring of metal-corrosion and deposition processes near liquid/solid interface, 15th International Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2013), and the 49th Annual Conference on X-Ray Chemical Analysis, September 23-27, 2013, Osaka City University, Osaka, Japan (poster).
- [14] Takafumi Ashida, Tsuyoshi Sawamura, and Kouichi Tsuji, Development of a compact GE-XRF spectrometer for fast trace elemental analysis, 15th International Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2013), and the 49th Annual Conference on X-Ray Chemical Analysis, September 23-27, 2013, Osaka City University, Osaka, Japan (poster).
- [15] Shintaro Komatani, Aoyama Tomoki, and Kouichi Tsuji, 3DXRF analysis of industrial device in comparison with SEM-EDS and conventional micro-XRF, 15th International Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2013), and the 49th Annual Conference on X-Ray Chemical Analysis, September 23-27, 2013, Osaka City University, Osaka, Japan (poster).
- [16] T. Ohmori, S. Emoto, S. Kato, M. Doi, T. Shoji, and K. Tsuji, Fast Elemental Imaging by Wavelength Dispersive X-ray Fluorescence Imaging Spectrometer, 62nd Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 5-9 August 2013, Westminster, Colorado, USA (poster).
- [17] K. Akioka, T. Doi, M. Arai, T. Nakazawa, K. Tsuji, Under Film Corrosion Process of Steel Sheets Observed by Confocal Micro XRF Technique, 62nd Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 5-9 August 2013, Westminster, Colorado, USA (poster).
- [18] S. Smolek, T. Nakazawa, K. Nakano, K. Tsuji, C. Strelj, P. Wobrauschek, Forensic Investigations with Different Confocal Micro-XRF Spectrometers, 62nd Annual Conference on Applications of X-ray Analysis

Denver X-ray Conference, 5-9 August 2013, Westminster, Colorado, USA (poster).

- [19] F. Onoue, T. Nakamura, K. Tsuji, Elemental X-ray imaging combined with glow discharge sputtering, International symposium on "Recent advance in analytical techniques for steelmaking industry" (RATEC2012), 28-30 November 2012, National Museum of Emerging Science and Innovation (MIRAikan), Tokyo, Japan (poster).
- [20] H. Oka, T. Sawamura, K. Tsuji, Development of a portable grazing-exit XRF analyzer, International symposium on "Recent advance in analytical techniques for steelmaking industry" (RATEC2012), 28-30 November 2012, National Museum of Emerging Science and Innovation (MIRAikan), Tokyo, Japan (poster).
- [21] M. A. Malek, T. Nakazawa, H.-W. Kang, K. Tsuji, C.-U. Ro, Characterization of layered materials related to forensic investigation by confocal micro-X-ray fluorescence and attenuated total reflectance FT-IR imaging, 2012 Asia-Pacific Winter Conference on Plasma Spectrochemistry (2012APWC), 26-29 August 2012, Jeju Island, Korea (poster).
- [22] S. Hirano, T. Yoshioka, A. Tabe, T. Nakazawa, K. Tsuji, Application of Confocal Micro-XRF to Solid-Liquid Interface Analysis and Ancient Chinese Ceramics, 61st Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 6-10 August 2012, Denver, Colorado, USA (poster).
- [23] T. Nakazawa, M. A. Malek, H.-W. Kang, C.-U. Ro, K. Tsuji, Characterization of Layered Materials Related to Forensic Investigation by Confocal Micro-XRF and ATR-FT-IR Imaging Techniques, 61st Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 6-10 August 2012, Denver, Colorado, USA (poster).
- [24] S. Komatani, S. Hirano, T. Aoyama, Y. Yokota, H. Ueda, K. Tsuji, Micro X-Ray Beam Produced with a Single Glass Capillary for XRF Analysis, 61st Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 6-10 August 2012, Denver, Colorado, USA (poster).
- [25] K. Nakano, S. Emoto, T. Nakazawa, K. Otsuki, K. Tsuji, Depth Elemental Imaging of Forensic Samples by Confocal Micro XRF Method, 61st Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 6-10 August 2012, Denver, Colorado, USA (poster).
- [26] T. Nakazawa, A. Tabe, S. Smolek, C. Strelt, P. Wobrauschek, K. Tsuji, Evaluation of analytical performance of confocal micro-XRF spectrometers, European Conference on X-Ray Spectrometry (EXRS2012), 18-22 June 2012, Vienna, Austria (oral).
- [27] T. Nakazawa, M. A. Malek, H. -W. Kang, K. Tsuji, C. -U. Ro, Characterization of Layered Materials by Confocal Micro-XRF and ATR-FT-IR Imaging Techniques, European Conference on X-Ray Spectrometry (EXRS2012), 18-22 June 2012, Vienna, Austria (poster).
- [28] S. Hirano, S. Komatani, K. Tsuji, Micro X-ray beam produced with a single glass capillary and a metal small ball for XRF analysis, European Conference on X-Ray Spectrometry (EXRS2012), 18-22 June 2012, Vienna, Austria (poster).
- [29] T. Ashida, T. Ohmori, K. Tsuji, X-ray elemental imaging by using two dimensional X-ray detector, European Conference on X-Ray Spectrometry (EXRS2012), 18-22 June 2012, Vienna, Austria (poster).
- [30] S. Emoto, K. Tsuji, Depth elemental imaging of near surface of the forensic samples by confocal 3D-XRF, European Conference on X-Ray Spectrometry (EXRS2012), 18-22 June 2012, Vienna, Austria (poster).
- [31] T. Nakazawa, K. Tsuji, Enhancement of XRF intensity using total reflection in Au-coated capillary optics, The 14th International Conference on Total Reflection X-ray Fluorescence and Related Methods, June 6-9, 2011, Dortmund, Germany (poster).
- [32] T. Yoshioka, Y. Imanishi, K. Tsuji, Y. Shimizu, T. Yamada, H. Takabe, T. Doi, K. Akioka, M. Arai, Sample preparation of sea water for TXRF analysis, The 14th International Conference on Total Reflection X-ray Fluorescence and Related Methods, June 6-9, 2011, Dortmund, Germany (poster).
- [33] T. Nakazawa, A. Tabe, K. Nakano, K. Tsuji, Micro-XRF Analysis in Helium Atmosphere, IUPAC International Congress on Analytical Sciences (ICAS) 2011, May 22-26, 2011, Kyoto, Japan (poster).
- [34] K. Tsuji, K. Nakano, T. Nakazawa, Development of Confocal 3D-XRF Instrument and Nondestructive Depth Analysis of Forensic Samples, Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy,

13-18, March, 2011, Atlanta, Georgia, USA (oral).

- [35] K. Nakano, K. Tsuji, Nondestructive depth profiling of layered materials and 3D-XRF analysis of biological sample, European Conference on X-ray Spectrometry, 20-25, June, 2010, Figueira da Foz, Coimbra, Portugal (oral).
- [36] Y. Nishida, K. Tsuji, Liquid-Liquid near interface analysis by micro-XRF using injection needle type collimators, European Conference on X-ray Spectrometry, 20-25, June, 2010, Figueira da Foz, Coimbra, Portugal (poster).
- [37] T. Nakazawa, K. Nakano, K. Tsuji, K. Nakano, Analytical Performance of Newly Developed 2D/3D-XRF Instruments, 59th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 2-6, August, 2010, Denver, Colorado, USA (poster).
- [38] K. Tsuji, K. Nakano, Development of Micro and 3D XRF Instrument in the Laboratory, The 10th International Conference on X-ray Microscopy, 15-20, August, 2010, Chicago, Illinois, USA (poster).
- [39] K. Tsuji, M. Kawamata, and K. Nakano, TXRF AND MICRO-XRF ANALYSIS OF PLASTIC TOYS AND SOILS, 58th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 27-31, July, 2009, Colorado Springs, Colorado, USA (oral).
- [40] K. Nakano, M. Kawamata, and K. Tsuji, TXRF Analysis of Multiple Droplet Residues, 58th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 27-31, July, 2009, Colorado Springs, Colorado, USA (oral).
- [41] K. Tsuji, M. Yamaguchi, and T. Yonehara, X-ray Energy Filtering by Using Total Reflection in Polycapillary X-ray Optics, TXRF2009 Conference, 15-19, June, 2009, Gothenburg, Sweden (oral).
- [42] T. Awane, S. Fukuoka, K. Nakano, K. Tsuji, Grazing Exit Micro XRF Analysis of Hazardous Contaminations on a Plant Leaf, TXRF2009 Conference, 15-19, June, 2009, Gothenburg, Sweden (poster).
- [43] K. Tsuji, T. Yonehara, M. Yamaguchi, and K. Nakano, X-ray chemical imaging with scanning- and projection modes in the laboratory, JST International Symposium on "Micro and Trace X-ray Analysis", 12-14, February, 2009, Osaka City University, Osaka, JAPAN (oral).
- [44] K. Nakano, S. Fukuoka, and K. Tsuji, Reference materials (in film) for 3D-XRF analysis, JST International Symposium on "Micro and Trace X-ray Analysis", 12-14, February, 2009, Osaka City University, Osaka, JAPAN (oral).
- [45] T. Awane, S. Fukuoka, and K. Tsuji, Grazing Exit Micro X-ray Fluorescence Analysis of a Hazardous Metal Attached to a Plant Leaf Surface using an X-ray Absorber Method, JST International Symposium on "Micro and Trace X-ray Analysis", 12-14, February, 2009, Osaka City University, Osaka, JAPAN (poster).
- [46] Y. Nishida, K. Nakano, and K. Tsuji, Micro XRF analysis in the solutions by using needle-type X-ray collimators, JST International Symposium on "Micro and Trace X-ray Analysis", 12-14, February, 2009, Osaka City University, Osaka, JAPAN (poster).
- [47] K. Nakamachi, and K. Tsuji, Micro X-ray beam produced by polycapillary x-ray lens and conical pinhole aperture, JST International Symposium on "Micro and Trace X-ray Analysis", 12-14, February, 2009, Osaka City University, Osaka, JAPAN (poster).
- [48] T. Yonehara, and K. Tsuji, X-ray chemical imaging using polycapillary x-ray optics in the laboratory, JST International Symposium on "Micro and Trace X-ray Analysis", 12-14, February, 2009, Osaka City University, Osaka, JAPAN (poster).

- [49] S. Fukuoka, K. Nakano, and K. Tsuji, Grazing exit micro XRF analysis of layered reference materials, JST International Symposium on “Micro and Trace X-ray Analysis”, 12-14, February, 2009, Osaka City University, Osaka, JAPAN (poster).
- [50] M. Kawamata, and K. Tsuji, Fundamental research on sample preparation for TXRF analysis, JST International Symposium on “Micro and Trace X-ray Analysis”, 12-14, February, 2009, Osaka City University, Osaka, JAPAN (poster).
- [51] K. Tsuji, Micro and imaging x-ray analysis by using polycapillary x-ray optics, Part of the SPIE International Symposium on Optical Engineering + Applications, 10-14, August, 2008, San Diego Convention Center, San Diego, CA USA.
- [52] K. Nakano, K. Tsuji, Preparation of the Multi-Layered Plastic Reference Materials for Confocal 3D-Micro X-ray Fluorescence Analysis, 57th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 4-8, August, 2008, Denver, Colorado, USA (poster).
- [53] K. Nakano, K. Okubo, K. Tsuji, Preconcentration of the Environmental water by Agar for X-ray fluorescence, 57th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 4-8, August, 2008, Denver, Colorado, USA (oral).
- [54] K. Tsuji, A. Matsuda, K. Nakano, S. Komatani, S. Ohzawa, H. Uchihara, APPLICATIONS OF POLYCAPILLARY OPTICS TO MICRO AND TWO DIMENSIONAL XRF ANALYSIS, 57th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 4-8, August, 2008, Denver, Colorado, USA (oral).
- [55] K. Tsuji, H. Matsui, M. Hino, H. Wanibuchi, H. Kohno, K. Aranami, Y. Shimizu, T. Yamada, SAMPLE PREPARATION FOR TOTAL-REFLECTION X-RAY FLUORESCENCE ANALYSIS OF BLOOD SAMPLE, 57th Annual Conference on Applications of X-ray Analysis Denver X-ray Conference, 4-8, August, 2008, Denver, Colorado, USA (poster).
- [56] K. Tsuji, K. Nakano, 3D-XRF Analysis of Solutions in Micro Chemical Chip, XRM2008 (PSI 9th International Conference on X-Ray Microscopy), 21-25, July, 2008, Zurich, Switzerland.
- [57] K. Tsuji, S. Kawamata, Micro TXRF Analyses of Multiple Residues on A Flat Substrate, EXRS2008 (European Conference on X-ray Spectrometry), 16-20, June, 2008, Cavtat, Dubrovnik, CROATIA (poster).
- [58] K. Tsuji, K. Nakano, K. Okubo and Y. Nishida, X-ray Fluorecenece Analysis Using X-ray Transparent Thin Films for Sample Surpport EXRS2008 (European Conference on X-ray Spectrometry), 16-20, June, 2008, Cavtat, Dubrovnik, CROATIA (poster).
- [59] K. Tsuji and Y. Nishida, X-ray Fluorecenece Analysis of Liquid/Solid Samples, EXRS2008 (European Conference on X-ray Spectrometry), 16-20, June, 2008, Cavtat, Dubrovnik, CROATIA (oral).
- [60] Y. Hirose, N. Murata, T. Katayama, K. Tsuji, “Multi-dimension analysis of vias in ULSIs”, International Symposium on “Future Prospects of Scanning Electron / He⁺ Ion Microscope for Nano-surface Analysis”-bridging the gap between surface analysis and electron microscopy-, 26-29 Nov.2007, Keio University, Japan (oral)
- [61] T. Yonehara, K. Tsuji, “Development of compact XRF probe and solid-liquid interface XRF analysis”, The 9th Asian Conference on Analytical Sciences (Asianalysis), 4-8 Nov. 2007, Jeju, Korea.(poster).
- [62] A. Matsuda, K. Nakano, K. Tsuji, S. Komatani, S. Ohzawa, H. Uchihara, “Fundamental

- Research of New Optics System for micro-X-ray Fluorescence”, The 9th Asian Conference on Analytical Sciences (Asianalysis), 4-8 Nov. 2007, Jeju, Korea.(poster)
- [63]K. Nakano, H. Matsui, K. Matsuda, M. Mizuhira, K. Tsuji, “A Quick Preparation of In-house Reference materials of the Food Grain Sample for XRF analysis”, The 9th Asian Conference on Analytical Sciences (Asianalysis), 4-8 Nov. 2007, Jeju, Korea.(poster)
- [64]K. Nakano, K. Tsuji, “Total Reflection X-Ray Fluorescence and Confocal-3D micro X-Ray Fluorescence Analyses for Chemical Microchips”, The 9th Asian Conference on Analytical Sciences (Asianalysis), 4-8 Nov. 2007, Jeju, Korea.(oral)
- [65]K. Nakano, K. Tsuji, “Development and Application of confocal 3D-micro-XRF spectrometer”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(oral)
- [66]K. Katsui, K. Tsuji, “Time-Resolved XRF Measurement of Living Plants”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(poster)
- [67]H. Matsui, K. Nakano, K. Tsuji, “Comparison of Micro-TXRF and Micro Grazing-Exit XRF”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(poster)
- [68]Y. Nishida, T. Yonehara, K. Tsuji, “Solid-Liquid Interface Analysis by Compact XRF Probe”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(poster)
- [69]T. Yonehara, K. Tsuji, “Development of a Compact XRF Probe with a Ring-type Secondary Target”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(poster)
- [70]Y. Hanaoka, H. Matsui, K. Nakano, K. Tsuji, “Compact TXRF Instrument Developed by Using a Secondary Target and a Si Reflector”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(poster)
- [71]A. Matsuda, K. Nakano, S. Komatani, S. Ohzawa, H. Uchihara, K. Tsuji, “Fundamental Research of X-ray Focusing Lens”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(poster)
- [72]S. Fukuoka, K. Tsuji, “Preliminary Experiment of Micro-XRF combined with AFM”, 19th International Conference on X-Ray Optics and Microanalysis (ICXOM2007), 16-21 Sep. 2007, Kyoto, Japan.(poster)
- [73]K. Tsuji, K. Tanaka, Y. Nishida, K. Nakano, K. Sasaki, “Micro Total Reflection X-ray Fluorescence (μ -TXRF)”, EXRS 2006, 19-23 June, 2006, Paris, France. (poster)
- [74]K. Nakano, X. Ding, K. Tsuji, “Development of Confocal 3D micro XRF Spectrometer with Cr-Mo Dual Excitation”, EXRS 2006, 19-23 June, 2006, Paris, France. (oral)
- [75]K. Nakano, K. Tsuji, T. Nakamura, I. Nakai, A. Kawase, M. Imai, M. Hasegawa, Y. Ishibashi, “Preparation and certification of the new reference materials; Plastics (disk form, JSAC 0621 – 0625) for determination of Mercury using X-ray fluorescent analysis”, EXRS 2006, 19-23 June, 2006, Paris, France. (poster)
- [76]K. Tsuji, A. Matsuda, “Micro-XRF Analysis using Needle-Type Collimators”, Denver X-ray

Conference, 7-11 August, 2006, Denver, USA (oral).

- [77] K. Tsuji, K. Nakano, “Nondestructive elemental depth profile of Japanese lacquer Ware “Tamamushi-Nuri” by Micro GE-XRF and Confocal 3D-XRF”, Cultural Heritage and Science, 5 December, 2006, Gent University, Belgium.(poster)
- [78] K. Nakano, K. Tsuji, T. Nakamura, “Development of Plastic Certified Reference Materials for XRF analysis (JSAC 0611-0615) containing Pb, Cd, Cr”, Denver X-ray Conference, 1-5 August, 2005, Denver, USA (poster).
- [79] K. Tsuji, Y. Nishida, Y. Hanaoka, K. Tsutsumimoto, K. Nakano, E. Tamaki, Y. Kikutani, A. Hibara and T. Kitamori, “X-ray Fluorescence Analysis for Chemical Micorchips”, Colloquium Spectroscopicum Internationake CSI XXXIV, Antwerp, Belgium, 4-9, Sep. 2005 (oral).
- [80] K. Tsuji, A. Matsuda, K. Nakano, A. Okhrimovskyy, “Depth Unlimited X-ray Fluorescence Analysis for Soft Materials using Needle-Type Collimators”, Colloquium Spectroscopicum Internationake CSI XXXIV, Antwerp, Belgium, 4-9, Sep. 2005 (oral).
- [81] K Nakano, H. Matsui, K. Tsutsumimoto, K. Tanaka, T. Nakamura and K. Tsuji, “X-ray Fluorescence Analysis of Food and Plastic Materials using CRMS JSAC 0611-0615”, Colloquium Spectroscopicum Internationake CSI XXXIV, Antwerp, Belgium, 4-9, Sep. 2005 (poster).
- [82] M. Nakata and K. Tsuji, “Study on Chemical Sputtering in Ar(He)-H₂ Gas Mixtures Glow Discharge Plasmas by Optical Emission Spectroscopy”, Colloquium Spectroscopicum Internationake CSI XXXIV, Antwerp, Belgium, 4-9, Sep. 2005 (poster).
- [83] A. Okhrimovskyy, K. Tsuji, “Nondestructive depth profiling with GE-XRF through numerical modeling”, 11th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2005), Budapest, Hungary, 18-22, Sep., 2005 (oral).
- [84] A. Okhrimovskyy, Y. Matsuoka, K. Saito, K. Tsuji, “Theoretical characterization of reflector-assisted TXRF analysis”, 11th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2005), Budapest, Hungary, 18-22, Sep., 2005 (poster).
- [85] A. Okhrimovskyy, K. Tsuji, “Numerical Analysis of X-ray Induced by Electron Beam under Grazing Exit Conditions”, 11th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2005), Budapest, Hungary, 18-22, Sep., 2005 (poster).
- [86] K. Nakano, K. Tanaka, X. Ding, K. Tsuji, “Development of a New TXRF Instrument using Polycapillary X-ray Lens”, 11th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2005), Budapest, Hungary, 18-22, Sep., 2005 (poster).
- [87] K. Tsuji, K. Tanaka, Y. Matsuoka, A. Okhrimovskyy, X. Ding, “Applications of Focusing X-ray Optics to TXRF Analysis”, 18th International Conference on X-ray Optics and Microanalysis (ICXOM 2005), Frascati (Rome), Italy, 25-30 September, 2005 (poster).
- [88] K. Tsuji, K. Tetsuoka, A. Okhrimovskyy, K. Saito, K. Asami, “Lateral Resolution of Electron Probe Microanalysis under Grazing Exit Conditions”, 18th International Conference on X-ray Optics and Microanalysis (ICXOM 2005), Frascati (Rome), Italy, 25-30 September, 2005 (poster).
- [89] K. Tsuji, T. Emoto, Y. Nishida, K. Tsutsumimoto, K. Nakano, E. Tamaki, Y. Kikutani, A. Hibara and T. Kitamori,, “Applications of X-ray Fluorescence Analysis for Chemical Micorchips”, 9th International Conference on Miniaturized Systems for Chemical and Life Sciences (μ -TAS),

9-13, October, 2005, Boston, USA.(poster).

- [90] K. Tsuji, K. Tetsuoka, T. Nagamura, "Improvement of reproducibility and lateral resolution of elemental analysis in grazing-exit EPMA (GE-EPMA)", EXRS 2004, Italy, 5-11 June, 2004 (poster).
- [91] K. Tsuji, Y. Sato, T. Emoto, "Variation of mapping area and effect of flatness of sample surface in grazing-exit μ -XRF (GE- μ -XRF) analysis", EXRS 2004, Italy, 5-11 June, 2004 (oral).
- [92] K. Tsuji, "Combination of Scanning Tunneling Microscope and X-ray Analysis", TXRF2003 Satellite meeting, Osaka, Japan, 13, Sep., 2003 (poster).
- [93] T. Emoto, K. Tsuji, Y. Kikutani, M. Tokeshi, T. Kitamori "Development of a Micro- and Surface-XRF Instrument and its Application in Micro-Chemical Systems", TXRF2003 Satellite meeting, Osaka, Japan, 13, Sep., 2003 (poster).
- [94] T. Emoto, Y. Sato, K. Tsuji, Xunliang Ding, "Development of micro X-ray fluorescence analysis instrument using polycapillary X-ray lens and its application", 10th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2003), Awaji, Japan, 14-19, Sep., 2003 (poster).
- [95] Y. Matsuoka, M. Nakata, K. Tsuji, "Development of directly sampling method of solid materials for total-reflection x-ray fluorescence", 10th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2003), Awaji, Japan, 14-19, Sep., 2003 (poster).
- [96] K. Tetsuoka and K. Tsuji, "Improvement of lateral resolution of EPMA by applying grazing-exit X-ray measurements", 4th International Symposium on Atomic Level Characterizations for New Materials and Devices (ALC2003), Hawaii, USA, 5-10, Oct., 2003 (poster).
- [97] K. Tsuji, Y. Hasegawa, T. Sakurai, X-Ray Excitation Combined with STM, Program of the IMR Workshop "Dr. Rohrer's JSPS Workshop", 5-6 March, 2002 (poster).
- [98] F. Delalieux and K. Tsuji, "Feasibility Study of Three Dimensional X-Ray Fluorescence Analysis of Japanese Art Crafts", 7th International Conference on Non-destructive Testing and Microanalysis for the Diagnostics and Conservation of the Cultural and Environmental Heritage (ART2002), 2-6 June 2002, Antwerp, Belgium (poster).
- [99] Z. Spolnik, K. Tsuji, R. Van Grieken, "Grazing-Exit Electron Probe X-Ray Micro Analysis of Light Elements", European Conference on Energy Dispersive X-Ray Spectrometry (EDXRS2002), 16-21 June 2002, Berlin, Germany (poster)
- [100] K. Tsuji, "Total Reflection X-Ray Fluorescence Analysis using a Si Reflector", European Conference on Energy Dispersive X-Ray Spectrometry (EDXRS2002), 16-21 June 2002, Berlin, Germany (poster).
- [101] F. Delalieux, K. Tsuji, K. Wagatsuma and S. Sato, "Calculation of GE-EPMA Intensity and Thin-Film Analysis", European Conference on Energy Dispersive X-Ray Spectrometry (EDXRS2002), 16-21 June 2002, Berlin, Germany (poster).
- [102] F. Delalieux, K. Tsuji, "Feasibility Study of Three-Dimensional XRF Spectrometry Using A Pinhole Aperture in Quasi-Contact Mode", European Conference on Energy Dispersive X-Ray Spectrometry (EDXRS2002), 16-21 June 2002, Berlin, Germany (poster).

- [103] Z. Spolnik, K. Tsuji and R. Van Grieken, "Grazing-exit electron probe x-ray micro analysis of light elements in particles", 9th Conference on Total Reflection X-Ray Fluorescence Analysis and Related Methods (TXRF2002), Funchal, Madeira, Portugal, 8 - 13 September 2002.
- [104] K. Tsuji and F. Delalieux, "Feasibility Study of Three-Dimensional XRF Spectrometry Using A Pinhole Aperture in Quasi-Contact Mode", IMR (Tohoku Univ.) workshop, 11-12 November 2002, Sendai, Japan (poster).
- [105] K. Tsuji, Z. Spolnik, K. Saito, K. Asami, K. Wagatsuma, "Grazing-Exit EPMA of Ultra-thin Layers", EMAS 2001 (European Microbeam Analysis Society, 7th European Workshop on Modern Developments and Applications in Microbeam Analysis, Tampere, Finland, 6-10 May 2001 (poster).
- [106] K. Tsuji, "Enhancement of TXRF intensity by using a reflector", International Congress on Analytical Science (ICAS) 2001, 6-10 Aug. 2001, Waseda University, Japan (poster).
- [107] K. Tsuji, K. Wagatsuma, R.D. Vis, R. E. Van Grieken, "Grazing-exit EPMA and grazing-exit PIXE", European Conference on Energy-Dispersive X-ray Spectrometry (EDXRS2000), Krakow, Poland, 18-25, June 2000 (oral)
- [108] K. Tsuji, K. Wagatsuma, R. Nullens and R. E. Van Grieken, "Grazing-Exit Electron Probe Microanalysis for Surface and Particle Analyses", EMAS'99 workshop, Konstanz, Germany, 2-7, May, 1999 (poster).
- [109] R. Van Grieken, M. Claes and K. Tsuji, "Grazing emission X-ray fluorescence spectrometry: Present status and future", 6th International Conference on Applications of Nuclear Techniques, Greece, 20-26, June, 1999.
- [110] K. Tsuji, Z. Spolnik, K. Wagatsuma, R. Nullens, and R. Van Grieken, "Preliminary Experiments of Grazing-Exit Electron Probe Microanalysis (GE-EPMA)", EMAG conference, Sheffield, England, 25-27, August, 1999 (poster).
- [111] K. Tsuji, Z. Spolnik, K. Wagatsuma, J. Zhang, R. D. Vis and R. E. Van Grieken, "Grazing-exit particle-induced x-ray emission (GE-PIXE) for surface- and atmospheric particles analysis", Colloquium Spectroscopicum Internationale CSI XXXI, Ankara, Turkey, 5-10, Sep. 1999 (oral).
- [112] K. Tsuji, K. Wagatsuma, H. Takenaka and R.E. Van Grieken, "Resonance-enhanced Grazing-exit x-ray fluorescence for thin-film analysis", Colloquium Spectroscopicum Internationale CSI XXXI, Ankara, Turkey, 5-10, Sep. 1999 (poster).
- [113] K. Tsuji, R. Nullens, K. Wagatsuma and R. E. Van Grieken, "X-ray imagings and x-ray spectra of thin films and aerosols measured by grazing-exit EPMA (GE-EPMA)", Colloquium Spectroscopicum Internationale CSI XXXI, Ankara, Turkey, 5-10, Sep. 1999 (poster)
- [114] R. Van Grieken*, M. Claes, K. Gysels and K. Tsuji, "Present applications of X-ray emission micro- and trace analysis for environmental research", International Symposium on Nuclear and Related Techniques in Agriculture, Industry, and Environment (NURT-99), Havana, Cuba, 26-29, Oct. 1999 (oral).
- [115] K. Tsuji, K. Hirokawa, "Development of glancing-incidence and -takeoff x-ray analysis (GIT-XA)", 6th conference on TXRF, Eindhoven, Dortmund, 10-14, June, 1996, (oral)
- [116] K. Tsuji, K. Hirokawa, "Characteristics of total reflection x-ray excited current detected with

STM tip”, 6th conference on TXRF, Eindhoven, Dortmund, 10-14, June, 1996, (poster)

- [117] K. Tsuji, K. Hirokawa, “Surface analysis of Fe-Cr alloy by glancing-incidence and –takeoff x-ray fluorescence method”, International Symposia on Advanced Materials and Technology for the 21st Century, Honolulu, USA, 13-15, Dec., 1995, (oral)
- [118] K. Tsuji, S. Sato, K. Hirokawa, “Nondestructive depth profiling by glancing-incidence and –takeoff x-ray fluorescence”, International Symposia on Advanced Materials and Technology for the 21st Century, Honolulu, USA, 13-15, Dec., 1995 (oral)
- [119] K. Tsuji, S. Sato, K. Hirokawa, “X-ray fluorescence analysis of thin films at glancing-incidence and –takeoff angles”, The 5th workshop on TXRF, Tsukuba, Japan, 17-19, Oct. 1994, (poster)