



List of Publications

1. A. von Bohlen, R. Klockenkämper, H. Otto, G. Tölg, B. Wiecken. Qualitative survey analysis of thin layers of tissue samples Heavy metal traces in human lung tissue. *Int Arch Occup Health* 59 (1987) 403-411
2. A. von Bohlen, R. Eller, R. Klockenkämper, G. Tölg. Microanalysis of solid samples by total-reflection X-ray fluorescence spectrometry. *Anal Chem* 59 (1987) 2551-2555
3. A. von Bohlen, R. Klockenkämper, G. Tölg, B. Wiecken. Microtome sections of biomaterials for trace analyses by TXRF. *Fresenius Z Anal Chem* 331 (1988) 454-458.
4. R. Klockenkämper, A. von Bohlen, B. Wiecken. Quantification in total reflection X-ray fluorescence analysis of microtome sections. *Spectrochim Acta B* 44 (1989) 511-517.
5. R. Klockenkämper, A. von Bohlen. Determination of the critical thickness and the sensitivity for thin-film analysis by total reflection X-ray fluorescence spectrometry. *Spectrochim Acta B* 44 (1989) 461-469.
6. P. Burba, P. G. Willmer, A. von Bohlen. Analytical preconcentration of trace elements by different cellulose collectors (ion-exchange, sorption, co-precipitation): a comparison. *Fresenius Z Anal Chem* 334 (1989) 686-687.
7. A. von Bohlen, R. Klockenkämper, A. Niemann, E. Keck. Quantification of the biomineralization by TXRF and SEM-EDX. *Fresenius Z Anal Chem* 334 (1989) 675-676.
8. T. Graule, A. von Bohlen, J.A.C. Broekaert, E. Grallath, R. Klockenkämper, P. Tschöpel, G. Tölg. Atomic emission and atomic absorption spectrometric analysis of high-purity powders for the production of ceramics. *Fresenius Z Anal Chem* 335 (1989) 637-642.
9. A. Niemann, A. von Bohlen, R. Klockenkämper, E. Keck. Quantifizierung der Biomineralisation - Gewebekultur und Mikroanalyse. In : H.-G. Willert , F.H.W. Heuck (Hrsg) *Neuere Ergebnisse in der Osteologie*. Springer - Verlag Heidelberg 1989 : 195-202
10. K. Günther, A. von Bohlen. Simultaneous multielement determination in vegetable foodstuffs and their respective cell fractions by total-reflection X-ray fluorescence (TXRF). *Z Lebensm Unters Forsch* 190 (1990) 331-335.
11. A. Niemann, A. von Bohlen, R. Klockenkämper, E. Keck. Quantification of biomineralization : an in-vitro culture system and micro analysis of calcium, phosphorus and trace elements by total-reflection X-ray fluorescence. *Biochem and Biophys Res Commun* 170 (1990) 1216-1222.
12. A. von Bohlen, S. Brüggerhoff, R. Klockenkämper. Determination of the sulfur distribution in stone by electron microprobe analysis. *Mikrochim Acta III* (1990) 201-212.



13. A. Niemann, A. von Bohlen, R. Klockenkämper, H. Clahsen, E. Keck. Hemmung der Zink-Aufnahme durch Ethylen-1-hydroxy-1,1-diphosphonat (EHDP) während der Biomineralisation in vitro. In : Werner , Matthiaß (Hrsg) Osteologie – Interdisziplinär. Springer - Verlag Heidelberg 1991 : 300-304.
14. K. Günther, A. von Bohlen. Multielement speciation in vegetable foodstuffs by gel permeation chromatography (GPC) and total-reflection X-ray fluorescence (TXRF). Spectrochim Acta B 46 (1991) 1413-1419.
15. K. Günther, A. von Bohlen, G. Paprott, R. Klockenkämper. Multielement analysis of biomaterials by total reflection X-ray fluorescence and ICP mass spectrometry in the semiquant mode. Fresenius J Anal Chem 342 (1992) 444-448.
16. R. Klockenkämper, A. von Bohlen. Total reflection X-ray fluorescence - An efficient method for micro-, trace- and surface-layer-analysis. J Anal At Spectrom 7 (1992) 273-279.
- ** Soft option for pigment analysis, über die Arbeit von L. J. Moens, W. J. Devos, A. von Bohlen, R. Klockenkämper. Nature 359 (1992) 367.
17. R. Klockenkämper, A. von Bohlen, L. Moens, W. Devos. Analytical characterization of artists' pigments used in old and modern paintings by total reflection X-ray fluorescence. Spectrochim Acta B 48 (1993) 239-246.
18. K. Günther, A. von Bohlen, H. Waldner. Solubility behaviour of metals in ordinary vegetables after cell breakdown. Fresenius J Anal Chem 345 (1993) 533-536.
19. A. Salvà, A. von Bohlen, R. Klockenkämper, D. Klockow. Multielement analysis of airborne particulate matter by total reflection X-ray fluorescence. Química Analítica 12 (1993) 57-62.
20. A. von Bohlen, R. Klockenkämper, S. Garbe, G. Gaul, F. Lechtenberg, A. Knöchel, L. Palmethofer. Application of a synchrotron microprobe to the analytical characterization of ion-implanted material. HASYLAB/DESY Jahresbericht 1993 : 347-348.
21. L. Moens, W. Devos, R. Klockenkämper, A. von Bohlen. Total reflection X-ray fluorescence in the ultramicro analysis of artists' pigments. TrAC Trends Anal Chem 13 (1994) 198-205.
22. A. von Bohlen, P. Rechmann, J.L. Tourmann, R. Klockenkämper. Ultramicro analysis of dental plaque films by total reflection X-ray fluorescence. J Trace Elem Electrolytes Health Dis 8 (1994) 37-42.
23. A. von Bohlen, W. Devos, L. Moens, R. Klockenkämper. Ultramikroanalyse von Pigmenten. Restauro 5 (1994) 328-330.
24. P. Rechmann, A. von Bohlen, J.-L. Tourmann. Nachweis von Legierungsbestandteilen in mikrobieller Plaque. Dtsch Zahnärztl Z 49 (1994) 377-340.



25. W. Devos, L. Moens, A. von Bohlen, R. Klockenkämper. Hoofdstuk XI/2: Pigmentanalyses en materieel-technisch onderzoek. In: 'De Keizerskapel te Antwerpen' (1994). Ed. J.-P. De Bruyn, De Cuyper, Zele (Belgien) pp. 287-290.
26. R. Klockenkämper, A. von Bohlen, S. Garbe, F. Lechtenberg, A. Knöchel, L. Palmetshofer. Analytical characterization of ion-implanted wafers by a synchrotron microprobe. HASYLAB/DESY Jahresbericht 1994 : 919-920.
27. R. Klockenkämper, H. Bayer, A. von Bohlen. Total reflection X-ray fluorescence analysis of airborne particulate matter. Adv X-Ray Chem Anal Jpn 26s (1995) 41-46.
28. L. Moens, W. Devos, R. Klockenkämper, A. von Bohlen. Application of TXRF for the ultra micro analysis of artists' pigments. J Trace & Microprobe Tech 13 (1995) 119-139.
29. Xie, A. von Bohlen, K. Günther. Elementbestimmung in chinesischem Tee und Teeaufguß durch Totalreflexions- Röntgenfluoreszenzanalyse. Lebensmittelchemie 49 (1995) 67-68.
30. K. Günther, A. von Bohlen, Ch. Stropfen. Element determination by total-reflection X-ray fluorescence (TXRF) at the initial step of element speciation in biological matrices. Anal Chim Acta 309 (1995) 327-332.
31. R. Klockenkämper, H. Bayer, A. von Bohlen, M. Schmeling, D. Klockow. Collection of Airborne Particulate Matter for Subsequent Analysis by Total Reflection X-Ray Fluorescence. Anal Sci 11 (1995) 495-498.
32. W. Devos, L. Moens, A. von Bohlen, R. Klockenkämper. Ultra micro analysis of inorganic pigments and painted objects by total reflection X-ray fluorescence analysis. Studies in Conservation 40 (1995) 153-162.
33. H. Bayer, A. von Bohlen, R. Klockenkämper, D. Klockow. Choice of a suitable material for the construction of a Battelle type impactor to minimize systematic errors in sampling airborne dust. Mikrochim Acta 119 (1995) 167-176.
34. M.Y. Xie, J. Messerschmidt, A. von Bohlen, Y.H. Ma, K. Pfeilsticker, K. Günther. Selengehalte in Tee aus verschiedenen Provinzen der Volksrepublik China. Z Lebensm Unters Forsch 201 (1995) 303-306.
35. A. von Bohlen, R. Klockenkämper, S. Garbe, G. Gaul, A. Knöchel, F. Lechtenberg, L. Palmetshofer. Application of a synchrotron microprobe to the analytical characterization of ion-implanted material. Spectrochim Acta B 50 (1995) 1769-1777.
36. R. Klockenkämper, A. von Bohlen, M. Radtke, S. Garbe, M. Haller, A. Knöchel, L. Palmetshofer. Analytical characterization of ion-implanted conductors in Si-wafers by a synchrotron microprobe. HASYLAB/DESY Jahresbericht 1995, II : 967-968.
37. K. Günther, M.Y. Xie, Y.H. Ma, A. von Bohlen, J. Messerschmidt. Selen-Tees: Eine Möglichkeit zur praktischen Selen-Versorgung der Bevölkerung in Mangelregionen dieser Erde. Lebensmittelchemie 50 (1996) 10-11.



38. R. Klockenkämper, A. von Bohlen. Element analysis of Environmental Samples by Total Reflection X-Ray Fluorescence: a Review. *X-Ray Spectrom* 25 (1996) 156-162.
39. S. Bredendiek-Kämper, A. von Bohlen, R. Klockenkämper, A. Quentmeier, D. Klockow. Microanalysis of solid samples by laser ablation and total reflection X-ray fluorescence. *J Anal At Spectrom* 11 (1996) 537-541.
40. W. Devos, L. Moens, A. von Bohlen, R. Klockenkämper. Q-tips and old masters, ultra-micro analysis of artists' pigments by total reflection X-ray fluorescence analysis in: *Archaeometry* 94 (1996). Ed. Demirci, Özer, Summers (Ankara) pp. 243-251.
41. L. Moens, W. Devos, R. Klockenkämper, A. von Bohlen. Identification of artists' pigments by TXRF of ultra micro samples. *Proc. Anwendertreffen Uni-Do/FB-Chemie* 1996, 92-99.
42. A. von Bohlen, F. Meyer. Arsen und Blei im Geigenlack. *Restauro* 7 (1996) 472-478.
43. J. Injuk, R. Van Grieken, R. Klockenkämper, A. von Bohlen, P. Kump, M. Budnar. Performance and characteristics of two TXRF equipments and of PIXE for aerosol analyses. *Spectrochim. Acta B* 52 (1997) 977-984.
44. B. Aster, A. von Bohlen, P. Burba. Determination of metals and their species in aquatic humic substances by using total reflection X-ray fluorescence spectrometry. *Spectrochim. Acta B* 52 (1997) 1009-1018.
45. J. K. Vilhunen, A. von Bohlen, M. Schmeling, R. Klockenkämper, D. Klockow. Total reflection X-ray fluorescence analyses of samples from oil refining and chemical industries. *Spectrochim. Acta B* 52 (1997) 953-959.
46. A. von Bohlen, F. Meyer. Microanalysis of old violin varnishes by total reflection X-ray fluorescence. *Spectrochim. Acta B* 52 (1997) 1053-1056.
47. V.-M. Kerminen, T. E. Mäkelä, C. H. Ottosson, R. E. Hillamo, J. K. Vilhunen, L. Rantanen, N. Havers, A. von Bohlen, D. Klockow. Characterization of the Particulate Phase from a Diesel Car Exhaust. *Environ. Sci. Technol.* 31 (1997) 1883-1889.
48. J. Messerschmidt, A. von Bohlen, F. Alt, R. Klockenkämper. Determination of Arsenic and Bismuth in Biological Samples by Total-Reflection X-Ray Fluorescence after Separation and Collection of Their Hydrides. *J. Anal. At. Spectrom.* 12 (1997) 1251-1254.
49. D. Brown, K. Qin, J. Herms, A. Maldung, J. Manson, R. Strome, P. Fraser, T. Kuck, A. von Bohlen, W. Schulz-Schaeffer, A. Giese, D. Westaway, H. Kretzschmar. The cellular prion protein binds copper in vivo. *Nature* 390 (1997) 684-687.
50. M.Y. Xie, A. von Bohlen, R. Klockenkämper, X.H. Jian, K. Günther. Multielement analysis of Chinese tea (*Camellia sinensis*) by total reflection X-ray fluorescence. *Z Lebensm Unters Forsch A* 207 (1998) 31-38.



51. R. Klockenkämper, A. von Bohlen; Depth-profiling of a Co-implanted silicon wafer by total-reflection X-ray fluorescence analysis after repeated oxidation and HF-etching. *Anal. Commun.* 36 (1999) 27-30.
52. P. Vandenabeele, B. Wehling, L. Moens, B. Dekeyzer, B. Cardon, A. von Bohlen, R. Klockenkämper. Pigment investigation of a medieval manuscript with total reflection X-ray fluorescence and micro-Raman spectroscopy. *The Analyst* 124 (1999)169-172.
53. R. Klockenkämper, A. von Bohlen. Survey of solid sampling suitable for microanalysis by total reflection X-ray fluorescence spectrometry. *J. Anal. At. Spectrom.* 14 (1999) 571-576.
54. B. Wehling, P. Vandenabeele, L. Moens, R. Klockenkämper, A. von Bohlen, G. van Hooydonk, M. De Reu. Investigation of Pigments in Medieval Manuscripts by Micro Raman-Spectroscopy and Total Reflection X-ray Fluorescence Spectrometry. *Mikrochim. Acta* 130 (1999) 253-260.
55. A. von Bohlen. Multielement microanalysis and pattern characterisation of historical violin varnishes. *J Trace & Microprobe Tech* 17 (1999) 177-187.
56. E. Auer, Th. Rehren, A. von Bohlen, D. Kirchner, R. Klockenkämper. Über die Herstellung der ersten Platinmünzen in Rußland. *Metalla* 5 (1998) 71-90.
57. R. Klockenkämper, A. von Bohlen; German Patent pend, DE 197 55 967 A 1, 1.7.1999 (1999).
58. M. Claes, R. van Ham, K. Janssens, R. Van Grieken, R. Klockenkämper, A. von Bohlen. Micro-analysis of artists' pigments by grazing-emission X-ray fluorescence spectrometry. *Adv. X-ray Anal.* 41 (1998) 262-277.
59. J. K. Vilhunen, A. von Bohlen, M. Schmeling, L. Rantanen, S. Mikkonen, R. Klockenkämper, D. Klockow. Trace element determination in Diesel particulates by total reflection X-ray fluorescence analysis. *Mikrochim. Acta* 131 (1999) 219-223.
60. R. Klockenkämper, A. von Bohlen. A new method for depth-profiling of shallow layers in silicon wafers using total-reflection X-ray fluorescence. *Spectrochim. Acta B* 54 (1999) 1385-1392.
61. R. Klockenkämper, A. von Bohlen, H.W. Becker, L. Palmetshofer. Comparison of Shallow Depth Profiles of Co-implanted Si-wafers - Determined by Total Reflection X-ray Fluorescence Analysis after Repeated Stratified Etching and by Rutherford Backscattering Spectrometry. *Surf Interface Anal* 27 (1999) 1003-1008.
62. M.-Y. Xie, H.-L. Wen, A. von Bohlen, K. Guenther. Element analysis of Oolong Teas from Fujian Province by TXRF and HG-AAS. *Gaodeng Xuexiao Huaxue Xuebao* 20 (1999) 85.



63. M. De Reu, G. van Hooydonk, P. Vandenabeele, L. Moens, A. von Bohlen, R. Klockenkämper. Remarques méthodologiques à propos de l'analyse chimique non-destructive des pigments utilisés dans les manuscrits enluminés. *Scriptorium* 53 (1999) 357-372.
64. R. Klockenkämper, A. von Bohlen, L. Moens. Analysis of Pigments and Inks on Oil Paintings and Historical Manuscripts using Total-Reflection X-Ray Fluorescence Spectrometry. *X-Ray Spectrom* 29 (2000) 119-129.
65. J. Messerschmidt, A. von Bohlen, F. Alt, R. Klockenkämper. Separation and enrichment of palladium and gold in environmental samples, adapted to the determination by total reflection X-ray fluorescence. *The Analyst* 125 (2000) 397-399.
66. H. Brink-Kloke, A. von Bohlen, M. Doll, E. Lietz, C. Poniecki. Ein (kleines) germanisches Dorf – Die jüngerkeiserzeitliche Siedlung von Dortmund-Oespel. In *Fundort Nordrhein-Westfalen. Millionen Jahre Geschichte*, pp. 343-345 Ed. Ministerium für Arbeit, Soziales und Stadtentwicklung (2000). Verlag Phillip von Zabern, Mainz.
67. H. Staat, L. Seifert, A. von Bohlen. Detection of casting material on historical violins by infrared spectroscopy and total reflection X-ray fluorescence spectrometry. *Anal Lett* 33 (2000) 953-962.
68. A. von Bohlen, E. Lietz, H. Brink-Kloke, C. Poniecki. Microanalytical characterisation of Germanic non-iron metal finds at Dortmund-Oespel. *J Trace & Microprobe Tech* 18 (2000) 275-285.
69. I. Varga, A. von Bohlen, Gy. Záray, R. Klockenkämper. Chemical speciation of metals and sulphur in air dust by sequential leaching and total reflection X-ray fluorescence analysis. *J Trace & Microprobe Tech* 18 (2000) 293-302.
70. J. Spanke, A. von Bohlen, R. Klockenkämper, A. Quentmeier, D. Klockow. Total reflection X-ray fluorescence analysis of laser-deposited solid sample material. *J Anal At Spectrom* 15 (2000) 673-680.
71. L. Moens, A. von Bohlen, P. Vandenabeele. X-Ray Fluorescence. In: *Modern Analytical Methods in Art and Archaeology*. Eds.: E. Ciliberto and G. Spoto, Chemical Analysis Series (2000) Vol. 155, John Wiley Sons.
72. P. Vandenabeele, A. von Bohlen, L. Moens, R. Klockenkämper, F. Joukes, G. Dewispelaere. Spectroscopic examination of two Egyptian masks: an approach. *Anal Lett* 33 (2000) 3315-3331.
73. I. Varga, A. von Bohlen, R. Klockenkämper, Gy. Záray. Solid state speciation of elements in urban dust by sequential leaching and total reflection X-ray fluorescence spectrometry. *Microchem. J.* 67 (2000) 265-269.
74. M. Y. Xie, C. Y. Cao, H. L. Wen, A. von Bohlen, K. Guenther. Element analysis and element speciation of Se-tea from Enshi region. *Yingyang Xuebao* 22 (2000) 278-281.



75. M.Y. Xie, H.L. Wen, A. von Bohlen, K. Günther. Analysis of Mineral Elements in Tea by Total-Reflection X-Ray Fluorescence Method. *Journal of Tea Science* 20 (2000) 51-54.
76. R. Klockenkämper, F. Alt, R. Brandt, N. Jakubowski, J. Messerschmidt and A. von Bohlen. Results of a proficiency testing with regard to sediment analysis by FAAS, ICP-MS and TXRF. *J. Anal. At. Spectrom.* 16 (2001) 658-663.
77. M. M. Castiñeira, R. Brandt, A. von Bohlen, N. Jakubowski. Development of a procedure for the multi-element analysis of trace element in wine by ICP-MS. *Fresenius J Anal Chem* 379 (2001) 553-558.
78. B. Sures, S. Zimmermann, J. Messerschmidt, A. von Bohlen, F. Alt. First report on the uptake of automobile catalyst emitted Palladium by European eels (*Anguilla anguilla*) following experimental exposure to road dust. *Environ Pollut* 113 (2001) 341-345.
79. G. Weber, J. Messerschmidt, A. von Bohlen, F. Alt. Influence of extraction pH on the availability of metal species from plant roots. *Fresenius. J. Anal. Chem.* 371 (2001) 921-926.
80. R. Klockenkämpfe, A. von Bohlen. Total reflection X-ray fluorescence moving towards nanoanalysis: a survey. *Spectrochim Acta B* 56 (2001) 2005-2018.
81. A. von Bohlen, R. Klockenkämper, J. Messerschmidt, F. Alt. Development and Application of a Micro-digestion Device for Biological Samples. *Anal Chim Acta* 451 (2002) 279-284.
82. M. Doğan, M. Soylak, L. Elçi, A. von Bohlen. Application of total reflection X-ray fluorescence spectrometry in textile industry. *Mikrochim. Acta* 138 (2002) 77-82.
83. Alt, G. Weber, J. Messerschmidt, A. von Bohlen, B. Kastenholz, K. Günther. Bonding states of palladium in phytosystems. First results for endive. *Anal. Letters* 35 (2002) 1349-1359.
84. B. Sures, S. Zimmermann, J. Messerschmidt, A. von Bohlen. Relevance and analysis of traffic related platinum group element (Pt, Rh, Pd) in the aquatic biosphere, with emphasis on Palladium. *Ecotoxicology* 11 (2002) 385-392.
85. R. Klockenkämper, A. von Bohlen, M. Radtke, A. Knöchel, L. Palmetshofer. Recording a line profile across ion-implanted conductor paths in Si-wafers by a synchrotron beam microprobe. *X-Ray Spectrom* 31 (2002) 373-376.
86. R. Klockenkämper, H. W. Becker, H. Bubert, H. Jenett, A. von Bohlen. Depth Profiles of a shallow implanted layer in a Si-wafer determined by different methods of thin-layer analysis. *Spectrochim Acta B* 57 (2002) 1593-1599.
87. P. Vandenabeele, B. Wehling, L. Moens, G. Van Hooydonk, A. von Bohlen, R. Klockenkämper. Characterization of pigments in Mercatellis Manuscripts by total-reflection X-ray fluorescence and Raman-microscopy. *Archaeometry* 98 Edrs. E. Jerem and K.T. Biró. *BAR International Series* 1043 (2002) 825-827.



88. S. Zimmermann, F. Alt, J. Messerschmidt, A. von Bohlen, H. Taraschewski, B. Sures. Biological availability of traffic-related platinum group elements (Palladium, Platinum, and Rhodium) and other metals to the Zebra mussel (*Dreissena polymorpha*) in water containing road dust. *Environ Toxicol Chem* 21 (2002) 2713-2718.
89. A. von Bohlen, H. Brink-Kloke, Ch. Althoff. Element determination in medieval soil samples by total reflection X-ray fluorescence analysis. *Anal Chim Acta* 480 (2003) 327-335.
90. A. von Bohlen, P. Vandenabeele, M. De Reu, L. Moens, R. Klockenkämper, B. Dekeyzer, B. Cardon. Pigmente und Tinten in mittelalterlichen Handschriften. Eine andere Art zu lesen: Extreme Mikroanalysen. *Restauro* 2 (2003) 118-122.
91. R. Klockenkämper, H. Krzyżanowska, A. von Bohlen. Density-depth profiles of an As-implanted Si wafer studied by repeated planar sputter etching and total reflection x-ray fluorescence analysis. *Surf Interface Anal* 35 (2003) 829-834.
92. S. Zimmermann, J. Messerschmidt, A. von Bohlen, B. Sures. Determination of Pt, Pd and Rh in biological samples by electrothermal atomic absorption spectrometry as compared with adsorptive cathodic stripping voltammetry and total reflection X-ray fluorescence analysis. *Anal Chim Acta* 498 (2003) 93-104.
93. H. Krzyżanowska, A. von Bohlen, R. Klockenkämper. Depth profiles of shallow implanted layers by soft ion sputtering and total-reflection X-ray fluorescence. *Spectrochim Acta B* 58 (2003) 2059-2067.
94. H. Brink-Kloke, J. Meurers-Balke, W.B. Becker, A. von Bohlen, M. Doll, H. Heinrich, M. Kunter, E. Lietz, R. Pasternak, C. Poniecki, E. Schneider, U. Tegtmeier, B. Weninger, F. Witter. Siedlungen und Gräber am Oespeler Bach (Dortmund) – eine Kulturlandschaft im Wandel der Zeit. *Germania* 81 (2003) 47-146.
95. A. von Bohlen, H. Krzyżanowska, R. Klockenkämper. A broad beam ion-source used for the planar sputter etching of shallow layers from flat samples and a determination of their mass density. *Nucl Instrum Meth B* 217 (2004) 158-166.
96. J. Koch, A. von Bohlen, R. Hergenröder, K Niemax. Particle size distribution and composition of aerosols produced by femto- and nanosecond laser ablation of brass. *J Anal At Spectrom* 19 (2004) 267-272.
97. A. von Bohlen. Quantitative analysis of minor and trace elements in historical varnishes by total reflection X-ray fluorescence. *Anal Letters* 37 (2004) 491 – 498.
98. F. Zereini, F. Alt, J. Messerschmidt, A. von Bohlen, K. Liebl, W. Püttmann. Concentration and Distribution of Platinum Group Elements (Pt, Pd, Rh) in Airborne Particulate Matter in Frankfurt am Main, Germany. *Environm Sci Technol* 38 (2004) 1686 –1692.
99. G. Weber, J. Messeschmidt, A. von Bohlen, B. Kastenholz, K. Günther. Improved separation of Pd-species in phytosystems by using a combination of isotachopheresis and SEC. *Electrophoresis* 25 (2004) 1758 – 1764.



- 100.A. von Bohlen. Total reflection X-ray fluorescence spectrometry – A versatile tool for ultra-micro analysis of objects of cultural heritage. Review. e-Preservation Sciences, 1 (2004) 23-34.
- 101.B. Sures, F. Thielen, F. Baska, J. Messerschmidt, A. von Bohlen. The intestinal parasite *Pomphorhynchus laevis* as a sensitive accumulation indicator for the platinum group metals Pt, Pd and Rh. Environmental Res 98 (2005) 83-88.
- 102.A. von Bohlen, R. Hergenröder, C. Sternemann, M. Paulus, M. Radtke, H. Riesemeier. Wavelength dispersive synchrotron microprobe used for material analysis. Instrumentation Science & Technology, 33 (2005) 137 – 150.
- 103.S. Zimmermann, A. von Bohlen, J. Messerschmidt, B. Sures. Accumulation of the precious metals Platinum, Palladium and Rhodium from automobile catalytic converters in *Paratenuisentis ambiguus* (Eoacanthocephala) as compared with its fish host, *Anguilla anguilla*. J Helminthology, 79 (2005) 85 – 89.
- 104.S. Zimmermann, J. Messerschmidt, A. von Bohlen, B. Sures. Uptake and bioaccumulation of platinum group metals (Pd, Pt, Rh) from automobile catalytic converter materials by the Zebra mussel (*Dreissena polymorpha*). Environmental Res, 98 (2005) 203 - 209.
- 105.A. von Bohlen, R. Klockenkämper. Parasitic low energy ion-implantation produced by a Kaufman-type ion source used for planar etching of surfaces. Anal. Bioanal. Chem., 382 (2005) 1975-1980.
- 106.J. Koch, H. Lindner, A. von Bohlen, R. Hergenröder, K. Niemax. Elemental fractionation of dielectric aerosols produced by near-infrared femtosecond laser ablation of silicate glasses. J Anal At Spectrom 20 (2005) 901 – 906.
- 107.R. Klockenkämper, H.-W. Becker, M. Becker, H. Krzyżanowska, A. von Bohlen, L. Palmesthofer. Effects of ion-implantation on the density of near-surface layers in Si wafers by Rutherford backscattering spectrometry and total reflection X-ray fluorescence. J. Appl. Physics 98 (2005) 033517.
- 108.S. Schilling, H. Cynis, A. von Bohlen, T. Hoffmann, M. Wermann, U. Heiser, M. Buchholz, K. Zunkel and H.-U. Demuth. Isolation, Catalytic Properties and New Competitive Inhibitors of Murine Glutaminyl Cyclase. Biochemistry 44 (2005) 13415 – 13424.
109. Zereini, F.; Alt, F.; Messerschmidt, J.; Wiseman, C.; Feldmann, I.; von Bohlen, A.; Muller, J.; Liebl, K.; Puttmann, W.. Concentration and Distribution of Heavy Metals in Urban Airborne Particulate Matter in Frankfurt am Main, Germany Environ. Sci. Technol. 39 (2005) 2983 - 2989.
110. F. Zereini, F. Alt, J. Messerschmidt, C. Wisemann, A. von Bohlen, K. Liebl, J. Müller, W. Püttmann. Palladium in airborne particulate matter: Total concentrations and particle size distribution. In: F.Alt; F. Zereini (eds.): Palladium emissions in the environment: Analytic, environmental assessment and health effects (Springer Verlag) 2005, pp 397 – 405.



111. J. Lambert, P. Lampen, A. von Bohlen, R. Hergenröder. Two- and three-dimensional mapping of the iron distribution in the apoplastic fluid of plant leaf tissue by means of magnetic resonance imaging. *Anal. Bioanal. Chem.*, 384 (2006) 231 – 236..
112. T. Magalhães, A. von Bohlen, M.L. Carvalho, M. Becker. Trace Elements in Human Cancerous and Healthy Tissues from the same Individual: A Comparative Study by TXRF and EDXRF. *Spectrochim Acta B* 61 (2006) 1185-1193.
113. M. Krämer, A. von Bohlen, C. Sternemann, M. Paulus, R. Hergenröder. X-ray standing waves: A method for ultrathin layered systems. *J. Anal. Atom. Spec.*, 21 (2006) 1136-1142.
114. K. Hühnerfuß, A. von Bohlen, D. Kurth. Characterization of Pigments and Colours used in Ancient Egyptian Boat Models. *Spectrochim Acta B* 61 (2006) 1224-1228.
115. E.D. Greaves, M. Angeli-Greaves, U. Jaehde, A. Drescher, A. von Bohlen. Rapid determination of platinum plasma concentrations of chemotherapy patients using total reflection X-ray fluorescence. *Spectrochim. Acta* 61 (2006) 1194-1200.
116. A. von Bohlen, M. Krämer, R. Hergenröder, U. Berges. The ISAS Synchrotron Microprobe at DELTA, *AIP Conference Proceedings* 879 (2006) 852-622.
117. A. von Bohlen, S. Röhrs, J. Salomon. Spatial resolved element analysis of historical violin varnishes using μ PIXE. *Anal. Bioanal. Chem.* 387 (2007) 781-790.
118. M. Krämer, A. von Bohlen, C. Sternemann, M. Paulus, R. Hergenröder. Synchrotron Radiation Induced X-ray Standing Waves Analysis of Layered Structures. *Appl Surface Sci* 253 (2007) 3533-3542.
119. A. von Bohlen, *Cité de la Musique 2007*, online
http://www.cite-musique.fr/francais/musee/actu_recherche/vernis_violon.html
120. S. Schilling, I. Stenzel, A. von Bohlen, M. Wermann, K. Schulz, H.-U. Demuth, C. Wasternack. Isolation and Characterization of the Glutaminyl Cyclases from *Solanum tuberosum* and *Arabidopsis thaliana*: Implications for Physiological Functions. *Biol Chem* 388 (2007) 145-153.
121. A. von Bohlen, Erste Erfahrungen mit einem Prototyp. Eine wellenlängen-dispersive Röntgenmikrosonde am Synchrotron DELTA. *GIT 02* (2007) 98-100.
122. S. Schilling, C. Lindner, B. Koch, M. Warnemann, J.-U. Rahfeld, A. von Bohlen, T. Rudolph, G. Reuter, H.-U. Demuth. Isolation and Characterization of Glutaminyl Cyclases from *Drosophila*: Evidence for enzymes with different subcellular localization. *Biochemistry* 46 (2007) 10921-10930.
123. M.L. Carvalho, T. Magalhães, M. Becker, A. von Bohlen. Trace elements in human cancerous and healthy tissues: A comparative study by EDXRF, TXRF, synchrotron radiation and PIXE. *Spectrochim. Acta B* 62 (2007) 1004-1011.



- 124.A. von Bohlen, Report I Louvre, http://www.eu-artech.org/files/REPORT_AGLAE/Report_2_VonBohlen.pdf
- 125.A. von Bohlen, Report II Louvre, http://www.eu-artech.org/files/REPORT_AGLAE/Report_6_Von_Bohlen.pdf
- 126.A. von Bohlen. Totalreflexions-Röntgenfluoreszenz an partikelförmigen Feststoffen. Dissertation, Fakultät Physik, TU-Dortmund, 30.11.2007.
- 127.A. von Bohlen. Moderne Musikinstrumenten-Saiten. Einfach Drähte oder technologische Meisterwerke? GIT Fach-Laborzeitschrift 52/2 (2008) 90-92.
- 128.A. von Bohlen, M. Tolan. Editorial for Synchrotron Radiation. J. Anal. At. Spectrom. 23 (2008) 790-791.
- 129.C.C. Garcia, H. Lindner, A. von Bohlen, C. Vadla, K. Niemax. Elemental fractionation and stoichiometric sampling in femtosecond laser ablation. J. of Anal. At. Spectrom. 23 (2008) 470-478.
- 130.T. Mangalhaes, M. Becker, M.L. Carvalho, A. von Bohlen. Study of Br, Zn, Cu und Fe concentrations in healthy and breast cancer tissue by TXRF. Spectrochim. Acta B 63 (2008) 1473-1479.
- 131.N. Jakubowski, L. Waentig, H. Hayen, A. Venkatachalam, A. von Bohlen, P.H. Roos, A. Manz. Labelling of proteins and antibodies and detection by laser ablation inductively coupled plasma mass spectrometry. Part II: Labelling of proteins by use of 2-(4-isothiocyanatobenzyl)-1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid) and lanthanide. J. Anal. At. Spectrom. 23 (2008) 1497-1507.
- 132.H. Brink-Kloke, A. von Bohlen, Ch. Althoff, „Das bisschen Dreck“... – Untersuchungen mittelalterlicher Erdschichten aus der Dortmunder Innenstadt. Studia honorica 29 (2009) 507-514.
- 133.A. von Bohlen, M. Krämer, C. Sternemann, M. Paulus. The influence of X-ray coherence length on TXRF and XSW for the characterization of nanoparticles observed under grazing incidence of X-rays. J. Anal. At. Spectrom. 24 (2009) 792-800.
- 134.A. von Bohlen, Total Reflexion X-Ray Fluorescence and Grazing Incidence X-Ray Spectrometry – Tools for Micro- and Surface Analysis. A review. Spectrochim. Acta B 64 (2009) 821-832. doi: [10.1016/j.sab.2009.06.012](https://doi.org/10.1016/j.sab.2009.06.012)..
- 135.A. Stephan, M. Wermann, A. von Bohlen, B. Koch, H. Cynis, H.-U. Demuth, S. Schilling. Heterologous Expression and Characterization of Mammalian Glutaminyl Cyclase Isoenzymes. FEBS-Journal 276 (2009) 6522-6536.
- 136.M. Brücher, P. Jacob, Alex von Bohlen, J. Franzke, C. Sternemann, M. Paulus, R. Hergenröder. Analysis of the Ion Distribution at a charged solid-liquid Interface using X-ray Standing Waves. Langmuir (2009) in press.



137. J.-P. Echard, L. Bertrand, A. von Bohlen, A.-S. Le Hô, C. Paris, L. Bellot-Gurlet, B. Soulier, A. Lattuati-Derieux, S. Thao, L. Robinet, B. Lavédrine, S. Vaiedelich. Nature of the Extraordinary Finish of Stradivari's Instruments. *Angew. Chemie Int. Ed.* 122 (2010) 197-201.
138. J.-P. Echard, L. Bertrand, A. von Bohlen, A.-S. Le Hô, C. Paris, L. Bellot-Gurlet, B. Soulier, A. Lattuati-Derieux, S. Thao, L. Robinet, B. Lavédrine, S. Vaiedelich. Zusammensetzung und Aufbau des berühmten Stradivari-Lackes. *Angew. Chemie* 122 (2010) 202-206.
139. M. Brücher, P. Jacob, Alex von Bohlen, J. Franzke, C. Sternemann, M. Paulus, R. Hergenröder. Analysis of the Ion Distribution at a charged solid-liquid Interface using X-ray Standing Waves. *Langmuir* 26 (2010) 959-966. DOI: 10.1021/la902385d
140. A. von Bohlen. Der magische Lack. *labor&more* 2/10 (2010) 14-18.
141. M. Krämer, K. Roodenko, B. Pollakowskie, K. Hinrichs, J. Rappich, N. Esser, A. von Bohlen, R. Hergenröder. Combined ellipsometry and X-ray related techniques for studies of organic nanocomposite films. *Thin Solid Films* 518 (2010) 5509-5514.
142. M. Brücher, A. von Bohlen, P. Jacob, J. Franzke, M. Rathke, U. Reinholz, B.R. Müller, O Scharf, R. Hergenröder. The Charge of solid/liquid Interfaces measured by X-ray Standing Waves and Streaming Current. *ChemPhysChem* 11 (2010) 2118-2123.
143. A. von Bohlen, M. Brücher, B. Holland, R. Wagner, R. Hergenröder. X-ray standing waves and SEM-EDX study of gold nanoparticles. *Spectrochim. Acta B* 65 (2010) 409-414. DOI:10.1016/j.sab.201004.017
144. S. Pessanha, M. L. Carvalho, M. Becker, A. von Bohlen. Quantitative determination of heavy metals in different stages of wine production by TXRF and EDXRF: Comparison on two vineyards. *Spectrochim. Acta B* 65 (2010) 504-507.
145. T. Magalhaes, M.L. Carvalho, A. von Bohlen, M. Becker. Study on trace elements behavior in cancerous and healthy tissues of colon, breast and stomach: TXRF applications. *Spectrochim. Acta B* 65 (2010) 493-498.
146. D. Guimaraes, M.L. Carvalho, M. Becker, A. von Bohlen, V. Geraldés, I. Rocha, J.P. Santos. Lead concentration in feces and urine of exposed rats by x-ray fluorescence and electrothermal atomic absorption spectrometry. *X-Ray Spectrom.* 41 (2012) 80-86.
147. A. Köhnen, M. Brücher, A. Reckmann, H. Klesper, Alex von Bohlen, R. Wagner, A. Herdt, D. Lützenkirchen-Hecht, R. Hergenröder, K. Meerholz. Tracing a Moving Thin-Film Reaction Front with Nanometer Resolution. *Macromolecules* 45 (2012) 3487-3495. dx.doi.org/10.1021/ma300204g
148. M. Brücher, A. von Bohlen, R. Hergenröder. The distribution of the contrast of X-ray standing waves fields in different media. *Spectrochim. Acta B* 71 (2012) 62-69.



- 149.A. Hauptmann, A. von Bohlen. Aurelian Silver and Silver Beads from Tombs at El-Mahâsna, Egypt. In: ORIENTALIA LOVANIENSIA ANALECTA 205. Egypt at its origins 3. Ed R.F. Friedmann and P.N. Fiske. p 430- 435. 2011.
- 150.A. von Bohlen. Spurenelement in Tee aus verschiedenen Provinzen der VR-China Fachausschussbericht Nr. 3.020, 137 Vollsitzung des Chemikerausschuss im VDEh, Dez. 2012. ISBN 978-3-941269-04-0
- 151.R.G. Figueroa, E. Lozano, F. Belmar, D. Alcaman, A. von Bohlen, C. A. B. Oliveira, A. L. M. Silva, J. F. C. A. Veloso. Characteristics of a robust and portable large area X-ray fluorescence imaging system. X-RAY SPECTROMETRY 43(2014) 126-130.
- 152.M. Brücher, A. von Bohlen, M. Becker, R. Hergenröder. Investigation of nanoscale element distributions at surfaces with grazing incidence X-ray spectroscopy techniques - an instrumentation study. X-Ray Spectrom. 43 (2014) 269-277.
- 153.Ch. Keutner, A. von Bohlen, U. Berges, P. Espeter, C. M. Schneider, C. Westphal. Photoemission Electron Microscopy and Scanning Electron Microscopy of Magnetospirillum magnetotacticum's Magnetosome Chains. Anal. Chem. 86 (2014) 9590-9594.
- 154.R. Klockenkämper, A. von Bohlen. Worldwide distribution of Total Reflection X-ray Fluorescence instrumentation and its different fields of application: A survey. Spectrochim. Acta B 99 (2014) 133-137.
- 155.R. Klockenkämper, A. von Bohlen. Total Reflection X-ray Fluorescence Analysis and Related Methods. Second Edition. Wiley. 2015. ISBN 987-1-118-46027-6.