

ARCLG347: Laboratory and instrumental skills in archaeological science

[View Online](#)

1.

Archaeometry. 49(2).

<http://onlinelibrary.wiley.com.libproxy.ucl.ac.uk/doi/10.1111/arch.2007.49.issue-2/issuetoc;jsessionid=C29BB0DA1059927413EA82D1C17CC253.d03t04>

2.

Archaeometry. 50(2).

<http://onlinelibrary.wiley.com.libproxy.ucl.ac.uk/doi/10.1111/arch.2008.50.issue-6/issuetoc>

3.

Archaeometry. 50(6).

<http://onlinelibrary.wiley.com.libproxy.ucl.ac.uk/doi/10.1111/arch.2008.50.issue-6/issuetoc>

4.

Artioli G, Angelini I. Scientific Methods and Cultural Heritage: An Introduction to the Application of Materials Science to Archaeometry and Conservation Science. Oxford University Press; 2010. <http://UCL.ebib.com/patron/FullRecord.aspx?p=618614>

5.

Bowman S. Science and the Past. British Museum Press; 1991.

6.

Brothwell DR, Pollard AM. Handbook of Archaeological Sciences. John Wiley; 2001.

7.

Demortier G, Adriaens A, European Cooperation in the Field of Scientific and Technical Research (Organization). COST G1 (Project), European Commission. Directorate General for Research. Ion Beam Study of Art and Archaeological Objects. Vol EUR. Office for Official Publications of the European Communities; 2000.

8.

Dran JC, Salomon J, Calligaro T, Walter P. Ion beam analysis of art works: 14 years of use in the Louvre. Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 2004;219-220:7-15.
doi:10.1016/j.nimb.2004.01.019

9.

Ciliberto E, Spoto G. Modern Analytical Methods in Art and Archaeology. Vol Chemical analysis. Wiley; 2000.

10.

Edwards HGM, Chalmers JM, Royal Society of Chemistry (Great Britain). Raman Spectroscopy in Archaeology and Art History. Vol RSC analytical spectroscopy monographs. Royal Society of Chemistry; 2005.

11.

Giumlia-Mair A, Albertson C, Boschian G, et al. Surface characterisation techniques in the study and conservation of art and archaeological artefacts: a review. Materials Technology. 2010;25(5):245-261. doi:10.1179/175355510X12850784228001

12.

Goffe Z. Archaeological Chemistry. 2nd ed. Wiley; 2007.

13.

Henderson J. Scientific Analysis in Archaeology and Its Interpretation. Vol UCLA Institute of Archaeology, archaeological research tools. Oxford University Committee for Archaeology, Institute of Archaeology; 1989.

14.

Henderson J. The Science and Archaeology of Materials: An Investigation of Inorganic Materials. Routledge; 2000.

<https://ebookcentral.proquest.com/lib/UCL/detail.action?docID=1144554&pq-origsite=primo>

15.

Janssens KHA, Grieken R van. Non-Destructive Microanalysis of Cultural Heritage Materials. Vol Comprehensive analytical chemistry. Elsevier; 2004.

16.

Lambert JB. Traces of the Past: Unraveling the Secrets of Archaeology through Chemistry. Vol Helix books. Addison-Wesley; 1997.

17.

Martini M, Milazzo M, Piacentini M, Società italiana di fisica, International School of Physics 'Enrico Fermi'. Physics Methods in Archaeometry. Vol Proceedings of the International School of Physics 'Enrico Fermi'. IOS Press; 2004.

18.

Martinón-Torres M, Rehren T. Archaeology, History and Science: Integrating Approaches to Ancient Materials. Vol Publications of the Institute of Archaeology, University College London. Left Coast Press; 2008.

19.

Moreau JF. Proceedings: ISA 2006 : 36th International Symposium on Archaeometry : 2-6 May 2006, Quebec City, Canada. Vol Cahiers d'archéologie du CELAT. Série archéométrie. CELAT, Université Laval; 2009.

20.

Arthur M. Sackler Colloquia of the National Academy of Sciences, National Academy of Sciences (U.S.). Scientific Examination of Art: Modern Techniques in Conservation and Analysis : National Academy of Sciences, Washington, D.C., March 19-21, 2003. National Academies Press; 2005.

21.

Nesse WD. Introduction to Optical Mineralogy. 3rd ed. Oxford University Press; 2004.

22.

Olsen SL. Scanning Electron Microscopy in Archaeology. Vol BAR international series. B.A.R.; 1988. doi:<https://doi.org/10.30861/9780860545798>

23.

Parkes PA. Current Scientific Techniques in Archaeology. Croom Helm; 1986.

24.

Pérez-Arantegui J, ed. Proceedings of the 34th International Symposium on Archaeometry. Published 2006. <http://ifc.dpz.es/publicaciones/ebooks/id/2610>

25.

Pollard AM, Heron C, Royal Society of Chemistry (Great Britain), Armitage RA. Archaeological Chemistry. Royal Society of Chemistry; 2017.

26.

Pollard AM, Batt C, Young S, Stern B. Analytical Chemistry in Archaeology. Cambridge

University Press; 2007.

27.

Shackley MS. An Introduction to X-Ray Fluorescence (XRF) Analysis in Archaeology. In: Shackley MS, ed. X-Ray Fluorescence Spectrometry (XRF) in Geoarchaeology. Springer New York; 2011:7-44. doi:10.1007/978-1-4419-6886-9_2

28.

Torrence R, Rehren T, Martinon-Torres M. Scoping the Future of Archaeological Science: Papers in Honour of Richard Klein. *Journal of Archaeological Science*. 2015;56. <http://www.sciencedirect.com/science/journal/03054403/56>

29.

Uda M, Demortier G, Nakai I, International Symposium on X-ray Archaeometry. X-Rays for Archaeology. Springer; 2005. <https://link.springer.com/book/10.1007/1-4020-3581-0>

30.

Adriaens A. Non-destructive analysis and testing of museum objects: An overview of 5 years of research. *Spectrochimica Acta Part B: Atomic Spectroscopy*. 2005;60(12):1503-1516. doi:10.1016/j.sab.2005.10.006

31.

De Atley SP, Bishop RL. Toward an integrated interface for archaeology and archaeometry. In: *The Ceramic Legacy of Anna O. Shepard*. University Press of Colorado; 1991:358-381. <https://contentstore.cla.co.uk/secure/link?id=724ac537-6915-e811-80cd-005056af4099>

32.

Hamilton E. The four scales of technical analysis; or 'how to make archaeometry more useful. In: *Exploring the Role of Analytical Scale in Archaeological Interpretation*. Vol BAR international series. Archaeopress; 2004:45-48. <https://contentstore.cla.co.uk/secure/link?id=1dfefd87-db0c-e811-80cd-005056af4099>

33.

Killick D. Archaeology and archaeometry: From casual dating to a meaningful relationship? *Antiquity*. 1997;71(273):518-524.
<http://search.proquest.com/docview/217552149?accountid=14511>

34.

Killick D. The awkward adolescence of archaeological science. *Journal of Archaeological Science*. 2015;56:242-247. doi:10.1016/j.jas.2015.01.010

35.

Jones A. *Archaeological Theory and Scientific Practice. Vol Topics in contemporary archaeology*. Cambridge University Press; 2001.
doi:<https://doi.org/10.1017/CBO9780511606069>

36.

Jones A. Archaeometry and materiality: materials-based analysis in theory and practice*. *Archaeometry*. 2004;46(3):327-338. doi:10.1111/j.1475-4754.2004.00161.x

37.

Martinón-Torres M. Why should archaeologists take history and science seriously? In: *Archaeology, History and Science: Integrating Approaches to Ancient Materials. Vol Publications of the Institute of Archaeology, University College London. Left Coast Press*; 2008:15-36. http://ls-tlss.ucl.ac.uk/course-materials/ARCLG107_45457.pdf

38.

Martinón-Torres M, Killick DC. Archaeological Theories and Archaeological Sciences. In: Gardner A, Lake M, Sommer U, eds. *The Oxford Handbook of Archaeological Theory*. ; 2015.
<http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199567942.001.0001/oxfordhb-9780199567942-e-004?rskey=F3hTAd&result=1>

39.

Rehren T. Qantir-Piramesses and the organisation of the Egyptian glass industry. In: The Social Context of Technological Change: Egypt and the Near East, 1650-1550 B.C. : Proceedings of a Conference Held at St Edmund Hall, Oxford, 12-14 September 2000. Oxbow; 2001:223-138.

<https://contentstore.cla.co.uk/secure/link?id=eadf6446-d60c-e811-80cd-005056af4099>

40.

Sillar B, Tite MS. The challenge of 'Technological choices' for materials science approaches in archaeology. *Archaeometry*. 2000;42(1):2-20. doi:10.1111/j.1475-4754.2000.tb00863.x

41.

Tite MS. Overview - materials study in archaeology. In: *Handbook of Archaeological Sciences*. John Wiley; 2001:443-448.

<https://contentstore.cla.co.uk/secure/link?id=db56c214-7a15-e811-80cd-005056af4099>

42.

Orton C. *Sampling in Archaeology*. Vol Cambridge manuals in archaeology. Cambridge University Press; 2000. doi:10.1017/CBO9781139163996

43.

Tite MS. Archaeological Collections: Invasive Sampling versus Object Integrity. *Papers from the Institute of Archaeology*. 2002;13. doi:10.5334/pia.189

44.

Tubb KW. Irreconcilable Differences? Problems with Unprovenanced Antiquities. *Papers from the Institute of Archaeology*. 2007;18. doi:10.5334/pia.294

45.

Hancock RGV. Elemental analysis. In: *Modern Analytical Methods in Art and Archaeology*. Vol Chemical analysis. Wiley; 2000:11-20.

46.

Shackley M. An introduction to X-Ray Fluorescence (XRF) analysis in archaeology. In: X-Ray Fluorescence Spectrometry (XRF) in Geoarchaeology. Springer; 2011:7-44.
doi:10.1007/978-1-4419-6886-9_2

47.

Shackley M. An introduction to X-Ray Fluorescence (XRF) analysis in archaeology. In: X-Ray Fluorescence Spectrometry (XRF) in Geoarchaeology. Springer; 2011:7-44.
doi:10.1007/978-1-4419-6886-9_2

48.

Contrey RM, Goodman-Elgar M, Bettencourt N, Seyfarth A, Van Hoose A, Wolff JA. Calibration of a portable X-ray fluorescence spectrometer in the analysis of archaeological samples using influence coefficients. *Geochemistry: Exploration, Environment, Analysis*. 2014;14(3). <http://geea.lyellcollection.org.libproxy.ucl.ac.uk/content/14/3/291.full.pdf>

49.

Frahm E, Doonan RCP. The technological versus methodological revolution of portable XRF in archaeology. *Journal of Archaeological Science*. 2013;40(2):1425-1434.
doi:10.1016/j.jas.2012.10.013

50.

Shackley M. Is there reliability and validity in portable X-ray fluorescence spectrometry (XRF)? *SAA archaeological record*. Published online 2010:17-20.

51.

Shackley MS. Portable X-ray Fluorescence Spectrometry (pXRF): The Good, the Bad, and the Ugly. *Archaeology Southwest Magazine*. 2012;26(2).
http://www.archaeologysouthwest.org/pdf/pXRF_essay_shackley.pdf

52.

Shugar AN, Mass JL. Handheld XRF for Art and Archaeology. Vol Studies in archaeological sciences. Leuven University Press; 2012. <https://www.jstor.org/stable/j.ctt9qdzfs>

53.

Shugar AN. Portable X-ray Fluorescence and Archaeology: Limitations of the Instrument and Suggested Methods To Achieve Desired Results. In: Armitage RA, Burton JH, eds. Archaeological Chemistry VIII. Vol ACS symposium series. American Chemical Society; 2013:173-189.

54.

Tykot RH. Using Nondestructive Portable X-ray Fluorescence Spectrometers on Stone, Ceramics, Metals, and Other Materials in Museums: Advantages and Limitations. Applied Spectroscopy. 2016;70(1):42-56. doi:10.1177/0003702815616745

55.

Charalambous A, Kassianidou V, Papasavvas G. A compositional study of Cypriot bronzes dating to the Early Iron Age using portable X-ray fluorescence spectrometry (pXRF). Journal of Archaeological Science. 2014;46:205-216. doi:10.1016/j.jas.2014.03.006

56.

Dussubieux L, Walder H. Identifying American native and European smelted coppers with pXRF: a case study of artifacts from the Upper Great Lakes region. Journal of Archaeological Science. 2015;59:169-178. doi:10.1016/j.jas.2015.04.011

57.

Kearns T, Martínón-Torres M, Rehren T. Metal to mould: alloy identification in experimental casting moulds using XRF. Historical metallurgy: journal of the Historical Metallurgy Society . 2010;44(1):48-58.

58.

Martínón-Torres M, Li XJ, Bevan A, Xia Y, Zhao K, Rehren T. Forty Thousand Arms for a Single Emperor: From Chemical Data to the Labor Organization Behind the Bronze Arrows of the Terracotta Army. Journal of Archaeological Method and Theory. 2014;21(3):534-562.

doi:10.1007/s10816-012-9158-z

59.

Martinón-Torres M, Valcárcel Rojas R, Sáenz Samper J, Guerra MF. Metallic encounters in Cuba: The technology, exchange and meaning of metals before and after Columbus. *Journal of Anthropological Archaeology*. 2012;31(4):439-454. doi:10.1016/j.jaa.2012.03.006

60.

Martinón-Torres M, Uribe-Villegas MA. The prehistoric individual, connoisseurship and archaeological science: The Muisca goldwork of Colombia. *Journal of Archaeological Science*. 2015;63:136-155. doi:10.1016/j.jas.2015.08.014

61.

Nicholas M, Manti P. Testing the applicability of handheld portable XRF to the characterisation of archaeological copper alloys. In: Bridgland J, ed. *ICOM-CC 17th Triennial Conference Preprints*, Melbourne. Paris: International Council of Museums; 15AD. <http://orca.cf.ac.uk/65469/>

62.

Orfanou V, Rehren Th. A (not so) dangerous method: pXRF vs. EPMA-WDS analyses of copper-based artefacts. *Archaeological and Anthropological Sciences*. 2015;7(3):387-397. doi:10.1007/s12520-014-0198-z

63.

Scott RB, Eekelers K, Degryse P. Quantitative Chemical Analysis of Archaeological Slag Material Using Handheld X-ray Fluorescence Spectrometry. *Applied Spectroscopy*. 2016;70(1):94-109. doi:10.1177/0003702815616741

64.

Scott RB, Eekelers K, Fredericks L, Degryse P. A methodology for qualitative archaeometallurgical fieldwork using a handheld X-ray fluorescence spectrometer. *STAR: Science & Technology of Archaeological Research*. 2015;1(2):70-80.

doi:10.1080/20548923.2016.1183941

65.

Forster N, Grave P, Vickery N, Kealhofer L. Non-destructive analysis using PXRF: methodology and application to archaeological ceramics. *X-Ray Spectrometry*. 2011;40(5):389-398. doi:10.1002/xrs.1360

66.

Goren Y, Mommsen H, Klinger J. Non-destructive provenance study of cuneiform tablets using portable X-ray fluorescence (pXRF). *Journal of Archaeological Science*. 2011;38(3):684-696. doi:10.1016/j.jas.2010.10.020

67.

Hunt AMW, Speakman RJ. Portable XRF analysis of archaeological sediments and ceramics. *Journal of Archaeological Science*. 2015;53:626-638. doi:10.1016/j.jas.2014.11.031

68.

Speakman RJ, Little NC, Creel D, Miller MR, Inanez JG. Sourcing ceramics with portable XRF spectrometers? A comparison with INAA using Mimbres pottery from the American Southwest. *Journal of Archaeological Science*. 2011;38(12):3483-3496. doi:10.1016/j.jas.2011.08.011

69.

Dungworth D, Girbal B. Walmer Castle, Deal, Kent: Analysis of Window Glass. English Heritage Research Department Report Series. 2011;2011(2).
<http://archaeologydataservice.ac.uk/archives/view/greylit/details.cfm?id=11363>

70.

Liu S, Li QH, Gan F, Zhang P, Lankton JW. Silk Road glass in Xinjiang, China: chemical compositional analysis and interpretation using a high-resolution portable XRF spectrometer. *Journal of Archaeological Science*. 2012;39(7):2128-2142. doi:10.1016/j.jas.2012.02.035

71.

Nazaroff AJ, Prufer KM, Drake BL. Assessing the applicability of portable X-ray fluorescence spectrometry for obsidian provenance research in the Maya lowlands. *Journal of Archaeological Science*. 2010;37(4):885-895. doi:10.1016/j.jas.2009.11.019

72.

Frahm E. Validity of 'off-the-shelf' handheld portable XRF for sourcing Near Eastern obsidian chip debris. *Journal of Archaeological Science*. 2013;40(2):1080-1092. doi:10.1016/j.jas.2012.06.038

73.

Frahm E. Silo science and portable XRF in archaeology: a response to Speakman and Shackley. *Journal of Archaeological Science*. 2013;40(2):1435-1443. doi:10.1016/j.jas.2012.09.033

74.

Frahm E. Is obsidian sourcing about geochemistry or archaeology? A reply to Speakman and Shackley. *Journal of Archaeological Science*. 2013;40(2):1444-1448. doi:10.1016/j.jas.2012.10.001

75.

Milić M. PXRF characterisation of obsidian from central Anatolia, the Aegean and central Europe. *Journal of Archaeological Science*. 2014;41:285-296. doi:10.1016/j.jas.2013.08.002

76.

Grave P, Attenbrow V, Sutherland L, Pogson R, Forster N. Non-destructive pXRF of mafic stone tools. *Journal of Archaeological Science*. 2012;39(6):1674-1686. doi:10.1016/j.jas.2011.11.011

77.

Ogburn D, Sillar B, Sierra JC. Evaluating effects of chemical weathering and surface contamination on the in situ provenance analysis of building stones in the Cuzco region of Peru with portable XRF. *Journal of Archaeological Science*. 2013;40(4):1823-1837. doi:10.1016/j.jas.2012.09.023

78.

Potts PJ, Williams-Thorpe O, Webb PC. The Bulk Analysis of Silicate Rocks by Portable X-Ray Fluorescence: Effect of Sample Mineralogy in Relation to the Size of the Excited Volume. *Geostandards and Geoanalytical Research*. 1997;21(1):29-41. doi:10.1111/j.1751-908X.1997.tb00529.x

79.

Colombo C, Bracci S, Conti C, Greco M, Realini M. Non-invasive approach in the study of polychrome terracotta sculptures: employment of the portable XRF to investigate complex stratigraphy. *X-Ray Spectrometry*. 2011;40(4):273-279. doi:10.1002/xrs.1336

80.

Chaplin TD, Clark RJH, Martín-Torres M. A combined Raman microscopy, XRF and SEM-EDX study of three valuable objects - A large painted leather screen and two illuminated title pages in 17th century books of ordinances of the Worshipful Company of Barbers, London. *Journal of Molecular Structure*. 2010;976(1-3):350-359. doi:10.1016/j.molstruc.2010.03.042

81.

Eliyahu-Behar A, Shilstein S, Raban-Gerstel N, et al. An integrated approach to reconstructing primary activities from pit deposits: iron smithing and other activities at Tel Dor under Neo-Assyrian domination. *Journal of Archaeological Science*. 2008;35(11):2895-2908. doi:10.1016/j.jas.2008.06.004

82.

Gauss RK, Břitoraj J, Nowaczinski E, Rassmann K, Schukraft G. The Early Bronze Age settlement of Fidsvřr, Vřrble (Slovakia): reconstructing prehistoric settlement patterns using portable XRF. *Journal of Archaeological Science*. 2013;40(7):2942-2960. doi:10.1016/j.jas.2013.01.029

83.

Freestone IC, Middleton AP. Mineralogical applications of the analytical SEM in archaeology. *Mineralogical Magazine*. 1987;51:21-31.
http://www.minersoc.org/pages/Archive-MM/Volume_51/51-359-21.pdf

84.

Ingo GM, Balbi S, de Caro T, Fragalà I, Angelini E, Bultrini G. Combined use of SEM-EDS, OM and XRD for the characterization of corrosion products grown on silver roman coins. *Applied Physics A*. 2006;83(4):493-497. doi:10.1007/s00339-006-3533-0

85.

Martinón-Torres M, Uribe-Villegas MA. The prehistoric individual, connoisseurship and archaeological science: The Muisca goldwork of Colombia. *Journal of Archaeological Science*. 2015;63:136-155. doi:10.1016/j.jas.2015.08.014

86.

Sax M, Walsh JM, Freestone IC, Rankin AH, Meeks ND. The origins of two purportedly pre-Columbian Mexican crystal skulls. *Journal of Archaeological Science*. 2008;35(10):2751-2760. doi:10.1016/j.jas.2008.05.007

87.

Abe Y, Nakai I, Takahashi K, Kawai N, Yoshimura S. On-site analysis of archaeological artifacts excavated from the site on the outcrop at Northwest Saqqara, Egypt, by using a newly developed portable fluorescence spectrometer and diffractometer. *Analytical and Bioanalytical Chemistry*. 2009;395(7):1987-1996. doi:10.1007/s00216-009-3141-x

88.

Cotte M, Dumas P, Taniguchi Y, Checroun E, Walter P, Susini J. Recent applications and current trends in Cultural Heritage Science using synchrotron-based Fourier transform infrared micro-spectroscopy. *Comptes Rendus Physique*. 2009;10(7):590-600.
doi:10.1016/j.crhy.2009.03.016

89.

De Benedetto GE, Laviano R, Sabbatini L, Zambonin PG. Infrared spectroscopy in the mineralogical characterization of ancient pottery. *Journal of Cultural Heritage*. 2002;3(3):177-186. doi:10.1016/S1296-2074(02)01178-0

90.

Eiland ML, Williams Q. Investigation of Islamic ceramics from Tell Tuneinir using X-ray diffraction. *Geoarchaeology*. 2001;16(8):875-903. doi:10.1002/gea.1025

91.

Ricciardi P, Colombari P, Tournié A, Macchiarola M, Ayed N. A non-invasive study of Roman Age mosaic glass tesserae by means of Raman spectroscopy. *Journal of Archaeological Science*. 2009;36(11):2551-2559. doi:10.1016/j.jas.2009.07.008

92.

Derrick MR, Stulik DC, Landry JM. *Infrared Spectroscopy in Conservation Science - Infrared Spectroscopy*. Getty Conservation Institute; 1999.
<http://www.getty.edu/publications/virtuallibrary/0892364696.html>

93.

Young ML, Casadio F, Schnepf S, Pearlstein E, Almer JD, Haefner DR. Non-invasive characterization of manufacturing techniques and corrosion of ancient Chinese bronzes and a later replica using synchrotron X-ray diffraction. *Applied Physics A*. 2010;100(3):635-646. doi:10.1007/s00339-010-5646-8

94.

Archaeological and Anthropological Sciences. 1(3).
<http://link.springer.com/journal/12520/1/3/page/1>

95.

Ben-David M, Flaherty EA. Stable isotopes in mammalian research: a beginner's guide. *Journal of Mammalogy*. 2012;93(2):312-328. doi:10.1644/11-MAMM-S-166.1

96.

Alexander Bentley R. Strontium Isotopes from the Earth to the Archaeological Skeleton: A Review. *Journal of Archaeological Method and Theory*. 2006;13(3):135-187.
doi:10.1007/s10816-006-9009-x

97.

Degryse P. Isotope-Ratio Techniques in Glass Studies. In: Janssens K, ed. *Modern Methods for Analysing Archaeological and Historical Glass*. John Wiley & Sons Ltd; 2013:235-245.
doi:10.1002/9781118314234.ch10

98.

Degryse P, Henderson J, Hodgins G. *Isotopes in Vitreous Materials. Vol Studies in archaeological sciences*. Leuven University Press; 2009.
<https://www.jstor.org/stable/j.ctt9qdx40>

99.

Freestone IC, Leslie KA, Thirlwall M, Gorin-Rosen Y. Strontium Isotopes in the Investigation of Early Glass Production: Byzantine and Early Islamic Glass from the Near East*. *Archaeometry*. 2003;45(1):19-32. doi:10.1111/1475-4754.00094

100.

HAUSTEIN M, GILLIS C, PERNICKA E. TIN ISOTOPY-A NEW METHOD FOR SOLVING OLD QUESTIONS. *Archaeometry*. 2010;52(5):816-832. doi:10.1111/j.1475-4754.2010.00515.x

101.

Janssens KHA. *Modern Methods for Analysing Archaeological and Historical Glass*. John Wiley & Sons Inc; 2011. <http://dx.doi.org/10.1002/9781118314234>

102.

LEE-THORP JA. ON ISOTOPES AND OLD BONES*. *Archaeometry*. 2008;50(6):925-950.
doi:10.1111/j.1475-4754.2008.00441.x

103.

Brothwell DR, Pollard AM. Handbook of Archaeological Sciences. John Wiley; 2001.

104.

Hein A, Tsolakidou A, Iliopoulos I, et al. Standardisation of elemental analytical techniques applied to provenance studies of archaeological ceramics: an inter laboratory calibration study. *The Analyst*. 2002;127(4):542-553. doi:10.1039/b109603f

105.

Heginbotham A, Bezur A, Bouchard M, et al. An Evaluation of inter-laboratory reproducibility for quantitative XRF of historic copper Alloys. In: Mardikian P, Chemello C, Watters C, Hull P, eds. In Metal 2010. Proceedings of the International Conference on Metal Conservation, Charleston, South Carolina, USA, October 11-15, 2010. Clemson University; 2010:178-188.
http://www.getty.edu/museum/pdfs/heginbotham_metal2010_submitted2.pdf

106.

Kovacs R, Schlosser S, Staub SP, Schmiderer A, Pernicka E, Günther D. Characterization of calibration materials for trace element analysis and fingerprint studies of gold using LA-ICP-MS. *Journal of Analytical Atomic Spectrometry*. 2009;24(4). doi:10.1039/b819685k

107.

Baxter MJ. Exploratory Multivariate Analysis in Archaeology. Edinburgh University Press; 1994. <https://www.jstor.org/stable/j.ctv2sx9gfb>

108.

Baxter MJ. Statistics in Archaeology. Vol Arnold applications of statistics. Arnold; 2003.

109.

Baxter MJ, Buck CE. Data handling and statistical analysis. In: Modern Analytical Methods in Art and Archaeology. Vol Chemical analysis. Wiley; 2000:681-746.
<https://contentstore.cla.co.uk/secure/link?id=5381c5cf-6c15-e811-80cd-005056af4099>

110.

BAXTER MJ, FREESTONE IC. LOG-RATIO COMPOSITIONAL DATA ANALYSIS IN ARCHAEOOMETRY*. Archaeometry. 2006;48(3):511-531.
doi:10.1111/j.1475-4754.2006.00270.x

111.

Charlton MF, Blakelock E, Martinon-Torres M. Investigating the production provenance of iron artifacts with multivariate methods. Journal of Archaeological Science. 2012;39(7):2280-2293. <http://discovery.ucl.ac.uk/1375923/1/1375923.pdf>

112.

Drennan RD. Statistics for Archaeologists: A Commonsense Approach. Vol Interdisciplinary contributions to archaeology. 2nd ed. Springer; 2009.
<http://dx.doi.org/10.1007/978-1-4419-0413-3>

113.

Fletcher M, Lock GR. Digging Numbers: Elementary Statistics for Archaeologists. Vol Monograph / Oxford University Committee for Archaeology. Oxford University Committee for Archaeology; 1991.

114.

Orton, Clive. Mathematics in Archaeology. Vol Collins archaeology. Collins; 1980.

115.

Shennan S. Quantifying Archaeology. 2nd ed. University of Iowa Press; 1997.
<https://www.jstor.org/stable/10.3366/j.ctvxcrtz3>

116.

Chippindale C. Colleagues, talking, writing, publishing. In: Handbook of Archaeological Methods. Vol 2. Altamira Press; 2006:1339-1371.
<https://contentstore.cla.co.uk/secure/link?id=d9c1e291-e30c-e811-80cd-005056af4099>

117.

Sand-Jensen K. How to write consistently boring scientific literature. Oikos. 2007;116(5):723-727. doi:10.1111/j.0030-1299.2007.15674.x

118.

White P. Producing the record. In: Archaeology in Practice: A Student Guide to Archaeological Analyses. Blackwell; 2006:410-425.
<https://contentstore.cla.co.uk/secure/link?id=0e7f700a-df0c-e811-80cd-005056af4099>