

ARCLG109: Archaeometallurgy II: Metallic Artefacts: John Frederick Merkel

View Online



1.

Bayley, J., Crossley, David W., Ponting, Matthew, Historical Metallurgy Society. Metals and Metalworking: A Research Framework for Archaeometallurgy. Vol Occasional publication / Historical Metallurgy Society. Historical Metallurgy Society; 2008.

2.

Craddock, P. T. Early Metal Mining and Production. Edinburgh University Press; 1995.

3.

McCreight, Tim. The Complete Metalsmith: An Illustrated Handbook. Rev. ed. Davis; 1991.

4.

Rostoker, William, Bronson, Bennet. Pre-Industrial Iron: Its Technology and Ethnology. Vol Archeomaterials monograph. [Archeomaterials]; 1990.

5.

Scott, David A. Metallography and Microstructure of Ancient and Historic Metals. Getty Conservation Institute; 1991.

6.

Smith, Cyril Stanley. A Search for Structure: Selected Essays on Science, Art, and History.

MIT Press; 1981.

7.

Tylecote, R. F. Metallurgy in Archaeology: A Prehistory of Metallurgy in the British Isles. Edward Arnold; 1962.

8.

Tylecote, R. F., Metals Society. A History of Metallurgy. Metals Society; 1976.

9.

Tylecote, R. F. The Early History of Metallurgy in Europe. Vol Longman archaeology series. Longman; 1987.

10.

Untracht, Oppi. Metal Techniques for Craftsmen: A Basic Manual for Craftsmen on the Methods of Forming and Decorating Metals. Hale; 1969.

11.

aata.getty.edu/NPS/ - Similar Sites and Reviews | Xmarks.
<http://www.xmarks.com/site/aata.getty.edu/NPS/>

12.

HMS Archaeology Committee. <https://historicalmetallurgy.org/about-hms/hms-acc/>

13.

Main Archaeo-Metallurgical Bibliography.
<http://users.ox.ac.uk/~salter/arch-metals/met-bib-ak.htm>

14.

Fire Gilding of Arms and Armor | Thematic Essay | Heilbrunn Timeline of Art History | The Metropolitan Museum of Art. http://www.metmuseum.org/toah/hd/fire/hd_fire.htm

15.

Newsletter. <http://www.ucl.ac.uk/iams/newsletter>

16.

British Museum - British Museum Technical Research Bulletin.
https://www.britishmuseum.org/research/publications/online_journals/technical_research_bulletin.aspx

17.

Getty Vocabularies (Getty Research Institute).
<https://www.getty.edu/research/tools/vocabularies/>

18.

Bayley, J., Crossley, David W., Ponting, Matthew, Historical Metallurgy Society. Metals and Metalworking: A Research Framework for Archaeometallurgy. Vol Occasional publication / Historical Metallurgy Society. Historical Metallurgy Society; 2008.

19.

Craddock, P. T. Early Metal Mining and Production. Edinburgh University Press; 1995.

20.

Lambert JB. Metals. In: Traces of the Past: Unraveling the Secrets of Archaeology through Chemistry. Vol Helix books. Addison-Wesley; 1997:168-213.
<https://contentstore.cla.co.uk//secure/link?id=d366ebde-4d36-e711-80c9-005056af4099>

21.

Martinon-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://www.ucl.ebib.com/patron/FullRecord.aspx?p=677776>

22.

Rehren Th, Pernicka E. Coins, artefacts and isotopes - archaeometallurgy and archaeometry. Archaeometry. 2008;50(2):232-248. doi:10.1111/j.1475-4754.2008.00389.x

23.

Tylecote, R. F. The Early History of Metallurgy in Europe. Vol Longman archaeology series. Longman; 1987.

24.

Aitchison, Leslie. A History of Metals. Macdonald & Evans; 1960.

25.

Humphrey, John William, Oleson, John Peter, Sherwood, Andrew N. Greek and Roman Technology: A Sourcebook : Annotated Translations of Greek and Latin Texts and Documents. Routledge; 1998.

26.

Moorey, P. R. S. Ancient Mesopotamian Materials and Industries: The Archaeological Evidence. Clarendon Press; 1994.

27.

Nicholson, Paul T., Shaw, Ian. Ancient Egyptian Materials and Technology. Cambridge University Press; 2000.

28.

Smith, Cyril Stanley. *A Search for Structure: Selected Essays on Science, Art, and History*. MIT Press; 1981.

29.

Tylecote, R. F. *Metallurgy in Archaeology: A Prehistory of Metallurgy in the British Isles*. Edward Arnold; 1962.

30.

Craddock PT, Wallis JM, Merkel JF. The rapid qualitative analysis of groups of metalwork: Making a dream come true. In: *Pattern and Purpose in Insular Art: Proceedings of the Fourth International Conference on Insular Art, Held at the National Museum & Gallery, Cardiff 3-6 September 1998*. Oxbow Books; 2001:117-124.
<https://contentstore.cla.co.uk//secure/link?id=c1193fd0-8136-e711-80c9-005056af4099>

31.

Dungworth D. Iron Age and Roman Copper Alloys from Northern Britain. *Internet archaeology*. 1997;2. doi:10.11141/ia.2.2

32.

Hughes MJ, Northover JP, Staniaszek BEP. Problems in the analysis of leaded bronze alloys in ancient artefacts. *Oxford Journal of Archaeology*. 1982;1(3):359-364.
doi:10.1111/j.1468-0092.1982.tb00320.x

33.

Pernicka E. Archaeometallurgy: Examples of the application of scientific methods to the provenance of archaeological metal objects. In: *Physics Methods in Archaeometry. Vol Proceedings of the International School of Physics 'Enrico Fermi'*. IOS Press; 2004:309-329.

34.

Richards EE, Blin-stoyle AE. A study of the homogeneity in composition of an Irish thick-butted axe. *Archaeometry*. 1961;4(1):53-55.
doi:10.1111/j.1475-4754.1961.tb00532.x

35.

Young SMM, Budd P, Haggerty R, Pollard AM. Inductively coupled plasma-mass spectrometry for the analysis of ancient metals. *Archaeometry*. 1997;39(2):379-392.
doi:10.1111/j.1475-4754.1997.tb00814.x

36.

Chase WT. Comparative analysis of archaeological bronzes. In: *Archaeological Chemistry: A Symposium Sponsored by the Division of the History of Chemistry at the 165th Meeting of the American Chemical Society, Dallas, Tex., April 9-10, 1973. Vol Advances in chemistry series*. American Chemical Society; 1974:148-185.
<https://contentstore.cla.co.uk//secure/link?id=87e3d2ae-7036-e711-80c9-005056af4099>

37.

Coles J. Metal analysis, and the early Scottish Bronze Age. *Proceedings of the Prehistoric Society*. 1970;35:330-345. doi:10.1017/S0079497X00013517

38.

Denker, Andrea, COST Action G8 (Project), European Cooperation in the Field of Scientific and Technical Research (Organization). *Non-Destructive Testing and Analysis of Museum Objects*. Fraunhofer IRB; 2006.

39.

Hamilton E. Metallurgical analysis and the Bronze Age of Bohemia: or , Are cultural alloys real? *Archeomaterials*. 1991;5:75-98.

40.

Hatcher H, Tite MS, Walsh JN. A comparison of inductively-coupled plasma emission spectrometry and atomic absorption spectrometry analysis on standard reference silicate

materials and ceramics. *Archaeometry*. 1995;37(1):83-94.
doi:10.1111/j.1475-4754.1995.tb00728.x

41.

Hughes MJ, Cowell MR, Craddock PT. Atomic absorption techniques in archaeology. *Archaeometry*. 1976;18(1):19-37. doi:10.1111/j.1475-4754.1976.tb00141.x

42.

Junghans, Siegfried, Sangmeister, Edward, Schröder, Manfred, Römisch-Germanisches Zentralmuseum Mainz. *Kupfer Und Bronze in Der Frühen Metallzeit Europas. Vol Studien zu den Anfängen der Metallurgie*. Gebr. Mann; 1968.

43.

Ponting M, Segal I. Inductively coupled plasma atomic emission spectroscopy analyses of Roman military copper-alloy artefacts from the excavations at Masada, Israel. *Archaeometry*. 1998;40(1):109-122. doi:10.1111/j.1475-4754.1998.tb00827.x

44.

Rapp, George Robert. *Determining Geologic Sources of Artifact Copper: Source Characterization Using Trace Element Patterns*. University Press of America; 2000.

45.

Slater EA, Charles JA. Archaeological classification by metal analysis. *Antiquity*. 1970;44(175):207-213.
<http://search.proquest.com/docview/1293810457?accountid=14511>

46.

Tylecote RF. The Composition of Metal Artifacts: a Guide to Provenance. *Antiquity*. 1970;44(173):19-25. <http://search.proquest.com/docview/1293671550?accountid=14511>

47.

Craddock PT. The composition of the copper alloys used by the Greek, Etruscan and Roman civilizations 1. The Greeks before the archaic period. *Journal of Archaeological Science*. 3(2):93-113. <http://www.sciencedirect.com/science/article/pii/0305440376900790>

48.

Craddock PT. The composition of the copper alloys used by the Greek, etruscan and Roman civilisations: 2. The Archaic, Classical and Hellenistic Greeks. *Journal of Archaeological Science*. 4(2):103-123.
<http://www.sciencedirect.com/science/article/pii/0305440377900589>

49.

Craddock PT. The composition of the copper alloys used by the Greek, Etruscan and Roman civilizations: 3. The Origins and Early Use of Brass. *Journal of Archaeological Science*. 5(1):1-16. <http://www.sciencedirect.com/science/article/pii/0305440378900158>

50.

Craddock PT. The copper alloys of the Medieval Islamic world - inheritors of the classical tradition. *World Archaeology*. 1979;11(1):68-79. doi:10.1080/00438243.1979.9979750

51.

Craddock PT. The composition of Iberian Bronze Age metalwork in the British Museum. In: *Aspects of Early Metallurgy*. Vol Occasional paper / British Museum. British Museum; 1991:51-62.
<https://contentstore.cla.co.uk//secure/link?id=d6115d65-7336-e711-80c9-005056af4099>

52.

Craddock PT. Three thousand years of copper alloys: from the Bronze Age to the Industrial Revolution. In: *Application of Science in Examination of Works of Art: Proceedings of the Seminar September 7-9, 1983*. Research Laboratory, Museum of Fine Arts; 1985:59-67.

53.

Craddock PT. Medieval copper alloy production and West African bronze analyses - Part 1. *Archaeometry*. 1985;27(1):17-41. doi:10.1111/j.1475-4754.1985.tb00344.x

54.

Craddock PT, Picton J. Medieval copper alloy production and West African bronze analyses - Part 2. *Archaeometry*. 1986;28(1):3-32. doi:10.1111/j.1475-4754.1986.tb00371.x

55.

Forsyth, Hazel, Museum of London. *Toys, Trifles & Trinkets: Base-Metal Minatures from London 1200-1800*. Unicorn; 2005.

56.

Godfrey EG, Vizcaino A, McDonnell JG. The role of Phosphorus in early ironworking. In: *Prehistoric and Medieval Direct Iron Smelting in Scandinavia and Europe: Aspects of Technology and Society*. Vol Acta Jutlandica. Aarhus University Press; 2003:191-194.

57.

Hook D, Craddock PT. The Scientific Analysis of the copper-alloy lamps: Aspects of Classical Alloying Practices. In: *A Catalogue of the Lamps in the British Museum: 4: Lamps of Metal and Stone, and Lamp-Stands*. Published for the Trustees of the British Museum by British Museum Publications; 1996:144-163.
<https://contentstore.cla.co.uk//secure/link?id=5d3060ba-6336-e711-80c9-005056af4099>

58.

Maddin R, Merkel J. Metallographic and statistical analyses. In: *Analisi Metallurgiche e Statistiche Sui Lingotti Di Rame Della Sardegna: Metallographic and Statistical Analyses of Copper Ingots from Sardinia*. Vol Quaderni / Italy. Soprintendenza ai beni archeologici per le provincie di Sassari e Nuoro. Il Torchietto; 1990:42-199.

59.

Callister, William D., Rethwisch, David G. Materials Science and Engineering. 8th ed. Wiley; 2011.

60.

Scott, David A. Metallography and Microstructure of Ancient and Historic Metals. Getty Conservation Institute; 1991.

61.

Avner, Sidney H. Introduction to Physical Metallurgy. 2d ed. McGraw-Hill; 1974.

62.

Chase WT. Solid samples from metallic antiquities and their examination. In: International Symposium on the Conservation and Restoration of Cultural Property: Cultural Property and Analytical Chemistry. Tokyo National Research Institute of Cultural Properties; 1979:73-109.

63.

Lang J. Study of the metallography of some Roman swords. *Britannia*. 1988;19:199-216. doi:10.2307/526199

64.

Lang J. A Metallographic Examination of Eight Roman Daggers from Britain. In: Sites and Sights of the Iron Age: Essays on Fieldwork and Museum Research Presented to Ian Mathieson Stead. Vol Oxbow monograph. Oxbow; 1995:119-132. <https://contentstore.cla.co.uk//secure/link?id=28b158a6-8f36-e711-80c9-005056af4099>

65.

Maddin R, Wheeler TS, Muhly JD. Distinguishing artifacts made of native copper. *Journal of archaeological science*. 1980;7(3):211-255. doi:10.1016/S0305-4403(80)80025-2

66.

Notis MR. A ghost story: remnant structures in corroded ancient iron objects. *Materials issues in art and archaeology VI: symposium held Nov 26-30, 2001, in Boston, MA.* 2002;712:259-267. <http://www.lehigh.edu/~inarcmet/papers/Notis%202002.pdf>

67.

Callister, William D., Rethwisch, David G. *Materials Science and Engineering: An Introduction.* 7th ed. Wiley; 2007.

68.

Scott, David A. *Metallography and Microstructure of Ancient and Historic Metals.* Getty Conservation Institute; 1991.

69.

Avner, Sidney H. *Introduction to Physical Metallurgy.* 2d ed. McGraw-Hill; 1974.

70.

Blakelock E, McDonnell G. A review of metallographic analyses of early medieval knives. *Historical Metallurgy: Journal of Historical Metallurgy.* 2007;41(1):40-56. <https://contentstore.cla.co.uk//secure/link?id=feb26fdc-4a36-e711-80c9-005056af4099>

71.

McDonnell JG, Starley D, Weimer K. The Metallurgy of the Knives. In: *Craft, Industry and Everyday Life: Finds from Medieval York. Vol Archaeology of York. v. 17, Small finds.* Council for British Archaeology; 2002:2751-2799. <http://www.yorkarchaeology.co.uk/wp-content/uploads/2015/05/AY17-15-Medieval-Finds-from-York.pdf>

72.

Samuels, Leonard Ernest. *Optical Microscopy of Carbon Steels.* American Society for Metals; 1980.

73.

Smith CS. The interpretation of microstructures of metallic artefacts. In: *A Search for Structure: Selected Essays on Science, Art, and History*. MIT Press; 1981:69-111.
<https://contentstore.cla.co.uk//secure/link?id=892f6a2d-4f36-e711-80c9-005056af4099>

74.

Tylecote, R. F., Gilmour, Brian J. J. *The Metallography of Early Ferrous Edge Tools and Edged Weapons*. Vol BAR British series. B.A.R.; 1986.

75.

Wagner, Donald B. *Iron and Steel in Ancient China*. Vol Handbuch der Orientalistik = Handbook of Oriental studies. Vierte Abteilung, China. E.J. Brill; 1993.

76.

Wagner D. *Ferrous Metallurgy*. In: *Science and Civilisation in China: Volume 5: Chemistry and Chemical Technology*. Cambridge University Press; 1974.

77.

Williams, Alan. *The Knight and the Blast Furnace: A History of the Metallurgy of Armour in the Middle Ages & the Early Modern Period*. Vol History of warfare. Brill; 2003.

78.

Demortier G. Review of the recent applications of high energy microprobes in arts and archaeology. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*. 54(1-3):334-345.
<http://www.sciencedirect.com/science/article/pii/0168583X9195535L>

79.

Hughes MJ, Northover JP, Staniaszek BEP. Problems in the analysis of leaded bronze alloys in ancient artefacts. *Oxford Journal of Archaeology*. 1982;1(3):359-364.
doi:10.1111/j.1468-0092.1982.tb00320.x

80.

Bray W. Malagana and the goldworking tradition of Southwest Columbia. In: *Precolumbian Gold: Technology, Style and Iconography*. British Museum Press; 2000:94-111.
<https://contentstore.cla.co.uk//secure/link?id=85a394e7-6336-e711-80c9-005056af4099>

81.

Dickinson, Tania Marguerite, Härke, Heinrich G. H. *Early Anglo-Saxon Shields*. Vol *Archaeologia*. Society of Antiquaries; 1992.

82.

Doran, J. E., Hodson, Frank Roy. *Mathematics and Computers in Archaeology*. Edinburgh University Press; 1975.

83.

Henderson, Jon C. *The Atlantic Iron Age: Settlement and Identity in the First Millennium BC*. Routledge; 2007.

84.

Pearce, Mark. *Bright Blades and Red Metal: Essays on North Italian Prehistoric Metalwork*. Vol *Accordia specialist studies on Italy*. Accordia Research Institute, University of London; 2007.

85.

Shearman F, Dove S. Application of radiography in conservation. In: *Radiography of Cultural Material*. Vol *Butterworth-Heinemann series in conservation and museology*. Butterworth-Heinemann; 1997:155-174.
<http://www.vlebooks.com/vleweb/product/openreader?id=UCL&isbn=9780080455600>

86.

Swanton, Michael James, Royal Archaeological Institute (Great Britain). *The Spearheads of the Anglo-Saxon Settlements*. Royal Archaeological Institute; 1973.

87.

Corfield M. Radiography of archaeological ironwork. In: Conservation of Iron. Vol Maritime monographs and reports. Trustees of the National Maritime Museum; 1982:8-14.
<https://contentstore.cla.co.uk//secure/link?id=7ad4e06f-7536-e711-80c9-005056af4099>

88.

Pope, John Alexander, Gettens, Rutherford J., Freer Gallery of Art. The Freer Chinese Bronzes. Vol Smithsonian publication 4706. Smithsonian Institution; 1967.

89.

Lang J, Ager B. Swords of the Anglo-Saxon and Viking Periods in the British Museum: a radiographic study. In: Weapons and Warfare in Anglo-Saxon England. Vol Monograph / Oxford University Committee for Archaeology. Oxford University Committee for Archaeology; 1989:85-122.
<https://contentstore.cla.co.uk//secure/link?id=d3c78fbe-7736-e711-80c9-005056af4099>

90.

Shearman F, Dove S. Application of radiography in conservation. In: Radiography of Cultural Material. Vol Butterworth-Heinemann series in conservation and museology. Butterworth-Heinemann; 1997:155-174.
<http://www.vlebooks.com/vleweb/product/openreader?id=UCL&isbn=9780080455600>

91.

Aubert, Jacques F., Aubert, Liliane. Bronzes et or Egyptiens. Vol Contribution à l'égyptologie. Cybèle; 2001.

92.

Bar-Adon, Pesah. The Cave of the Treasure: The Finds from the Caves in Naḥal Mishmar. Vol Judean Desert studies. Israel Exploration Society; 1980.

93.

Branigan K. Early Aegean Hoards of Metalwork. *The Annual of the British School at Athens*. 1969;64:1-11. doi:10.1017/S0068245400014489

94.

Bayley, J., Society of Antiquaries of London. Roman Brooches in Britain: A Technological and Typological Study Based on the Richborough Collection. Vol Reports of the Research Committee of the Society of Antiquaries. Society of Antiquaries of London; 2004.

95.

Deshayes, Jean, Institut français d'archéologie de Beyrouth. Les Outils de Bronze, de l'Indus Au Danube: (IVe Au Iie Mille'naire). Vol Bibliotheque arche'ologique et historique / Institut Français d'Arche'ologie de Beyrouth. Librairie Orientaliste Paul Geuthner; 1960.

96.

Doran, J. E., Hodson, Frank Roy. Mathematics and Computers in Archaeology. Edinburgh University Press; 1975.

97.

Henderson, Jon C. The Atlantic Iron Age: Settlement and Identity in the First Millennium BC. Routledge; 2007.

98.

Hennessy, John Basil, Colt Archaeological Institute. The Foreign Relations of Palestine during the Early Bronze Age. Vol Publications / Colt Archaeological Institute. Quaritch; 1967.

99.

Kenyon, Kathleen Mary, Bennett, C.-M., British School of Archaeology in Jerusalem. Excavations at Jericho: Vol.2: The Tombs Excavated in 1955-8. British School of Archaeology in Jerusalem; 1965.

100.

Manning, W. H., British Museum. Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum. British Museum Publications; 1985.

101.

Sanders NK. The first Aegean swords and their ancestors. American journal of archaeology. 1961;65(1):17-29. doi:10.2307/502497

102.

Stronach DB. The Development and Diffusion of Metal Types in Early Bronze Age Anatolia. Anatolian Studies. 1957;7:89-125. doi:10.2307/3642348

103.

Pearce, Mark. Bright Blades and Red Metal: Essays on North Italian Prehistoric Metalwork. Vol Accordia specialist studies on Italy. Accordia Research Institute, University of London; 2007.

104.

Petrie, W. M. Flinders, British School of Archaeology in Egypt, Egyptian Research Account, University College, London. Tools and Weapons: Illustrated by the Egyptian Collection in University College, London, and 2,000 Outlines from Other Sources. British School of Archaeology in Egypt, University College; 1917.

105.

Pryor, Francis, Hosek, Jirina, Craddock, P. T., Royal Ontario Museum. A Catalogue of British and Irish Prehistoric Bronzes in the Royal Ontario Museum. The Museum; 1980.

106.

Vandkilde, Helle, Northover, Jeremy P. From Stone to Bronze: The Metalwork of the Late Neolithic and Earliest Bronze Age in Denmark. Vol Jutland Archaeological Society

publications. Jutland Archaeological Society; 1996.

107.

Waldbaum, Jane C., *Archaeological Exploration of Sardis. Metalwork from Sardis: The Finds through 1974. Vol Monograph / Archaeological Exploration of Sardis.* Harvard University Press; 1983.

108.

Cronyn, J. M., Robinson, W. S. *The Elements of Archaeological Conservation.* Routledge; 1990. doi:10.4324/9780203169223

109.

Freestone I, LaNiece SC, Meeks ND. A Bronze Statuette of Minerva: A study in mineralogical provenancing. *MASCA journal.* 3(1):10-12.

110.

Hobbs, Richard, Honeycombe, Celia, Watkins, Sarah C. *Guide to Conservation for Metal Detectorists.* Tempus; 2002.

111.

Meyer-Roudet, Hélène, Barrandon, Jean-Noël. *A La Recherche Du Métal Perdu: Nouvelles Technologies Dans La Restauration Des Métaux Archéologiques.* Errance; 1999.

112.

Oddy A. Jewelry under the microscope. *A Conservator's Guide to Cataloguing.* In: *Ancient Jewelry and Archaeology.* Indiana University Press; 1996:185-197.

113.

Scott, David A., Getty Conservation Institute. *Copper and Bronze in Art: Corrosion, Colorants, Conservation.* Getty Conservation Institute; 2002.

114.

Sease, Catherine. A Conservation Manual for the Field Archaeologist. Vol Archaeological research tools. Institute of Archaeology, University of California, Los Angeles; 1987.

115.

Selwyn, Lyndsie, Canadian Conservation Institute. Metals and Corrosion: A Handbook for the Conservation Professional. Canadian Conservation Institute; 2004.

116.

Watkinson, David, Neal, Virginia, United Kingdom Institute for Conservation of Historic and Artistic Works, Museum of London, Rescue (Trust). First Aid for Finds. 3rd ed. RESCUE - The British Archaeological Trust; Archaeology Section of the UKIC; The Museum of London; 1998.