

ARCLG109: Archaeometallurgy II: Metallic Artefacts: John Frederick Merkel

View Online



[1]

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

[2]

Aitchison, Leslie 1960. A history of metals. Macdonald & Evans.

[3]

Aubert, Jacques F. and Aubert, Liliane 2001. Bronzes et or Egyptiens. Cybèle.

[4]

Avner, Sidney H. 1974. Introduction to physical metallurgy. McGraw-Hill.

[5]

Avner, Sidney H. 1974. Introduction to physical metallurgy. McGraw-Hill.

[6]

Bar-Adon, Pesah 1980. The cave of the treasure: the finds from the caves in Naḥal Mishmar. Israel Exploration Society.

[7]

Bayley, J. et al. 2008. Metals and metalworking: a research framework for archaeometallurgy. Historical Metallurgy Society.

[8]

Bayley, J. et al. 2008. Metals and metalworking: a research framework for archaeometallurgy. Historical Metallurgy Society.

[9]

Bayley, J. and Society of Antiquaries of London 2004. Roman brooches in Britain: a technological and typological study based on the Richborough Collection. Society of Antiquaries of London.

[10]

Blakelock, E. and McDonnell, G. 2007. A review of metallographic analyses of early medieval knives. Historical Metallurgy: Journal of Historical Metallurgy. 41, 1 (2007), 40-56.

[11]

Branigan, K. 1969. Early Aegean Hoards of Metalwork. The Annual of the British School at Athens. 64, (Nov. 1969), 1-11. <https://doi.org/10.1017/S0068245400014489>.

[12]

Bray, W. 2000. Malagana and the goldworking tradition of Southwest Columbia. Precolumbian gold: technology, style and iconography. British Museum Press. 94-111.

[13]

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

[14]

Callister, William D. and Rethwisch, David G. 2011. Materials science and engineering. Wiley.

[15]

Callister, William D. and Rethwisch, David G. 2007. Materials science and engineering: an introduction. Wiley.

[16]

Chase, W.T. 1974. Comparative analysis of archaeological bronzes. 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. American Chemical Society. 148-185.

[17]

Chase, W.T. 1979. Solid samples from metallic antiquities and their examination. International symposium on the conservation and restoration of cultural property: cultural property and analytical chemistry. Tokyo National Research Institute of Cultural Properties. 73-109.

[18]

Coles, J. 1970. Metal analysis, and the early Scottish Bronze Age. Proceedings of the Prehistoric Society. 35, (Feb. 1970), 330-345.
<https://doi.org/10.1017/S0079497X00013517>.

[19]

Corfield, M. 1982. Radiography of archaeological ironwork. Conservation of iron. Trustees of the National Maritime Museum. 8-14.

[20]

Craddock, P. T. 1995. Early metal mining and production. Edinburgh University Press.

[21]

Craddock, P. T. 1995. Early metal mining and production. Edinburgh University Press.

[22]

Craddock, P.T. 1985. Medieval copper alloy production and West African bronze analyses - Part 1. *Archaeometry*. 27, 1 (Feb. 1985), 17-41.
<https://doi.org/10.1111/j.1475-4754.1985.tb00344.x>.

[23]

Craddock, P.T. 1991. The composition of Iberian Bronze Age metalwork in the British Museum. *Aspects of early metallurgy*. British Museum. 51-62.

[24]

Craddock, P.T. 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.

[25]

Craddock, P.T. 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.

[26]

Craddock, P.T. 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.

[27]

Craddock, P.T. 1979. The copper alloys of the Medieval Islamic world - inheritors of the classical tradition. *World Archaeology*. 11, 1 (June 1979), 68-79.

<https://doi.org/10.1080/00438243.1979.9979750>.

[28]

Craddock, P.T. et al. 2001. The rapid qualitative analysis of groups of metalwork: Making a dream come true. 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. 117-124.

[29]

Craddock, P.T. 1985. Three thousand years of copper alloys: from the Bronze Age to the Industrial Revolution. Application of science in examination of works of art: proceedings of the seminar September 7-9, 1983. Research Laboratory, Museum of Fine Arts. 59-67.

[30]

Craddock, P.T. and Picton, J. 1986. Medieval copper alloy production and West African bronze analyses - Part 2. *Archaeometry*. 28, 1 (Feb. 1986), 3-32.
<https://doi.org/10.1111/j.1475-4754.1986.tb00371.x>.

[31]

Cronyn, J. M. and Robinson, W. S. 1990. *The elements of archaeological conservation*. Routledge.

[32]

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.

[33]

Denker, Andrea et al. 2006. Non-destructive testing and analysis of museum objects. Fraunhofer IRB.

[34]

Deshayes, Jean and Institut français d'archéologie de Beyrouth 1960. Les outils de bronze, de l'Indus au Danube: (IVe au IIe mille'naire). Librairie Orientaliste Paul Geuthner.

[35]

Dickinson, Tania Marguerite and Härke, Heinrich G. H. 1992. Early Anglo-Saxon shields. Society of Antiquaries.

[36]

Doran, J. E. and Hodson, Frank Roy 1975. Mathematics and computers in archaeology. Edinburgh University Press.

[37]

Doran, J. E. and Hodson, Frank Roy 1975. Mathematics and computers in archaeology. Edinburgh University Press.

[38]

Dungworth, D. 1997. Iron Age and Roman Copper Alloys from Northern Britain. Internet archaeology. 2, (Mar. 1997). <https://doi.org/10.11141/ia.2.2>.

[39]

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.

[40]

Forsyth, Hazel and Museum of London 2005. Toys, trifles & trinkets: base-metal miniatures from London 1200-1800. Unicorn.

[41]

Freestone, I. et al. A Bronze Statuette of Minerva: A study in mineralogical provenancing. *MASCA journal*. 3, 1, 10–12.

[42]

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

[43]

Godfrey, E.G. et al. 2003. The role of Phosphorus in early ironworking. Prehistoric and medieval direct iron smelting in Scandinavia and Europe: aspects of technology and society. Aarhus University Press. 191–194.

[44]

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

[45]

Hatcher, H. et al. 1995. A comparison of inductively-coupled plasma emission spectrometry and atomic absorption spectrometry analysis on standard reference silicate materials and ceramics. *Archaeometry*. 37, 1 (Feb. 1995), 83–94.
<https://doi.org/10.1111/j.1475-4754.1995.tb00728.x>.

[46]

Henderson, Jon C. 2007. *The Atlantic Iron Age: settlement and identity in the first millennium BC*. Routledge.

[47]

Henderson, Jon C. 2007. *The Atlantic Iron Age: settlement and identity in the first millennium BC*. Routledge.

[48]

Hennessy, John Basil and Colt Archaeological Institute 1967. The foreign relations of Palestine during the Early Bronze Age. Quaritch.

[49]

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

[50]

Hobbs, Richard et al. 2002. Guide to conservation for metal detectorists. Tempus.

[51]

Hook, D. and Craddock, P.T. 1996. The Scientific Analysis of the copper-alloy lamps: Aspects of Classical Alloying Practices. 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. 144–163.

[52]

Hughes, M.J. et al. 1976. Atomic absorption techniques in archaeology. *Archaeometry*. 18, 1 (Feb. 1976), 19–37. <https://doi.org/10.1111/j.1475-4754.1976.tb00141.x>.

[53]

Hughes, M.J. et al. 1982. Problems in the analysis of leaded bronze alloys in ancient artefacts. *Oxford Journal of Archaeology*. 1, 3 (Nov. 1982), 359–364. <https://doi.org/10.1111/j.1468-0092.1982.tb00320.x>.

[54]

Hughes, M.J. et al. 1982. Problems in the analysis of leaded bronze alloys in ancient artefacts. *Oxford Journal of Archaeology*. 1, 3 (Nov. 1982), 359–364. <https://doi.org/10.1111/j.1468-0092.1982.tb00320.x>.

[55]

Humphrey, John William et al. 1998. Greek and Roman technology: a sourcebook: annotated translations of Greek and Latin texts and documents. Routledge.

[56]

Junghans, Siegfried et al. 1968. Kupfer und Bronze in der frühen Metallzeit Europas. Gebr. Mann.

[57]

Kenyon, Kathleen Mary et al. 1965. Excavations at Jericho: Vol.2: The tombs excavated in 1955-8. British School of Archaeology in Jerusalem.

[58]

Lambert, J.B. 1997. Metals. Traces of the past: unraveling the secrets of archaeology through chemistry. Addison-Wesley. 168-213.

[59]

Lang, J. 1995. A Metallographic Examination of Eight Roman Daggers from Britain. Sites and sights of the Iron Age: essays on fieldwork and museum research presented to Ian Mathieson Stead. Oxbow. 119-132.

[60]

Lang, J. 1988. Study of the metallography of some Roman swords. *Britannia*. 19, (1988), 199-216. <https://doi.org/10.2307/526199>.

[61]

Lang, J. and Ager, B. 1989. Swords of the Anglo-Saxon and Viking Periods in the British Museum: a radiographic study. *Weapons and warfare in Anglo-Saxon England*. Oxford University Committee for Archaeology. 85-122.

[62]

Maddin, R. et al. 1980. Distinguishing artifacts made of native copper. *Journal of archaeological science*. 7, 3 (1980), 211–255.
[https://doi.org/10.1016/S0305-4403\(80\)80025-2](https://doi.org/10.1016/S0305-4403(80)80025-2).

[63]

Maddin, R. and Merkel, J. 1990. Metallographic and statistical analyses. *Analisi metallurgiche e statistiche sui lingotti di rame della Sardegna: Metallographic and statistical analyses of copper ingots from Sardinia. Il Torchietto*. 42–199.

[64]

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

[65]

Manning, W. H. and British Museum 1985. *Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum*. British Museum Publications.

[66]

Martinon-Torres, M. 2008. Why should archaeologists take history and science seriously? *Archaeology, history and science: integrating approaches to ancient materials*. Left Coast Press. 15–36.

[67]

McCreight, Tim 1991. *The complete metalsmith: an illustrated handbook*. Davis.

[68]

McDonnell, J.G. et al. 2002. *The Metallurgy of the Knives. Craft, industry and everyday life: finds from medieval York*. Council for British Archaeology. 2751–2799.

[69]

Meyer-Roudet, Hélène and Barrandon, Jean-Noël 1999. A la recherche du métal perdu: nouvelles technologies dans la restauration des métaux archéologiques. Errance.

[70]

Moorey, P. R. S. 1994. Ancient Mesopotamian materials and industries: the archaeological evidence. Clarendon Press.

[71]

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

[72]

Nicholson, Paul T. and Shaw, Ian 2000. Ancient Egyptian materials and technology. Cambridge University Press.

[73]

Notis, M.R. 2002. 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. 712, (2002), 259-267.

[74]

Oddy, A. 1996. Jewelry under the microscope. A Conservator's Guide to Cataloguing. Ancient jewelry and archaeology. Indiana University Press. 185-197.

[75]

Pearce, Mark 2007. Bright blades and red metal: essays on north Italian prehistoric metalwork. Accordia Research Institute, University of London.

[76]

Pearce, Mark 2007. Bright blades and red metal: essays on north Italian prehistoric metalwork. Accordia Research Institute, University of London.

[77]

Pernicka, E. 2004. Archaeometallurgy: Examples of the application of scientific methods to the provenance of archaeological metal objects. *Physics methods in archaeometry*. IOS Press. 309–329.

[78]

Petrie, W. M. Flinders et al. 1917. *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.

[79]

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

[80]

Pope, John Alexander et al. 1967. *The Freer Chinese bronzes*. Smithsonian Institution.

[81]

Pryor, Francis et al. 1980. *A catalogue of British and Irish prehistoric bronzes in the Royal Ontario Museum*. The Museum.

[82]

Rapp, George Robert 2000. *Determining geologic sources of artifact copper: source characterization using trace element patterns*. University Press of America.

[83]

Rehren, Th. and Pernicka, E. 2008. Coins, artefacts and isotopes - archaeometallurgy and archaeometry. *Archaeometry*. 50, 2 (Apr. 2008), 232–248.

<https://doi.org/10.1111/j.1475-4754.2008.00389.x>.

[84]

Richards, E.E. and Blin-stoyle, A.E. 1961. A study of the homogeneity in composition of an Irish thick-butted axe. *Archaeometry*. 4, 1 (June 1961), 53-55.
<https://doi.org/10.1111/j.1475-4754.1961.tb00532.x>.

[85]

Rostoker, William and Bronson, Bennet 1990. Pre-industrial iron: its technology and ethnology. [Archeomaterials].

[86]

Samuels, Leonard Ernest 1980. Optical microscopy of carbon steels. American Society for Metals.

[87]

Sanders, N.K. 1961. The first Aegean swords and their ancestors. *American journal of archaeology*. 65, 1 (Jan. 1961), 17-29. <https://doi.org/10.2307/502497>.

[88]

Scott, David A. 1991. Metallography and microstructure of ancient and historic metals. Getty Conservation Institute.

[89]

Scott, David A. 1991. Metallography and microstructure of ancient and historic metals. Getty Conservation Institute.

[90]

Scott, David A. 1991. Metallography and microstructure of ancient and historic metals. Getty Conservation Institute.

[91]

Scott, David A. and Getty Conservation Institute 2002. Copper and bronze in art: corrosion, colorants, conservation. Getty Conservation Institute.

[92]

Sease, Catherine 1987. A conservation manual for the field archaeologist. Institute of Archaeology, University of California, Los Angeles.

[93]

Selwyn, Lyndsie and Canadian Conservation Institute 2004. Metals and corrosion: a handbook for the conservation professional. Canadian Conservation Institute.

[94]

Shearman, F. and Dove, S. 1997. Application of radiography in conservation. Radiography of cultural material. Butterworth-Heinemann. 155-174.

[95]

Shearman, F. and Dove, S. 1997. Application of radiography in conservation. Radiography of cultural material. Butterworth-Heinemann. 155-174.

[96]

Slater, E.A. and Charles, J.A. 1970. Archaeological classification by metal analysis. *Antiquity*. 44, 175 (1970), 207-213.

[97]

Smith, C.S. 1981. The interpretation of microstructures of metallic artefacts. A search for structure: selected essays on science, art, and history. MIT Press. 69-111.

[98]

Smith, Cyril Stanley 1981. *A search for structure: selected essays on science, art, and history*. MIT Press.

[99]

Smith, Cyril Stanley 1981. *A search for structure: selected essays on science, art, and history*. MIT Press.

[100]

Stronach, D.B. 1957. The Development and Diffusion of Metal Types in Early Bronze Age Anatolia. *Anatolian Studies*. 7, (1957), 89–125. <https://doi.org/10.2307/3642348>.

[101]

Swanton, Michael James and Royal Archaeological Institute (Great Britain) 1973. *The spearheads of the Anglo-Saxon settlements*. Royal Archaeological Institute.

[102]

Tylecote, R. F. 1962. *Metallurgy in archaeology: a prehistory of metallurgy in the British Isles*. Edward Arnold.

[103]

Tylecote, R. F. 1962. *Metallurgy in archaeology: a prehistory of metallurgy in the British Isles*. Edward Arnold.

[104]

Tylecote, R. F. 1987. *The early history of metallurgy in Europe*. Longman.

[105]

Tylecote, R. F. 1987. *The early history of metallurgy in Europe*. Longman.

[106]

Tylecote, R. F. and Gilmour, Brian J. J. 1986. The metallography of early ferrous edge tools and edged weapons. B.A.R.

[107]

Tylecote, R. F. and Metals Society 1976. A history of metallurgy. Metals Society.

[108]

Tylecote, R.F. 1970. The Composition of Metal Artifacts: a Guide to Provenance. *Antiquity*. 44, 173 (1970), 19-25.

[109]

Untracht, Oppi 1969. Metal techniques for craftsmen: a basic manual for craftsmen on the methods of forming and decorating metals. Hale.

[110]

Vandkilde, Helle and Northover, Jeremy P. 1996. From stone to bronze: the metalwork of the late neolithic and earliest bronze age in Denmark. Jutland Archaeological Society.

[111]

Wagner, D. 1974. Ferrous Metallurgy. Science and civilisation in China: Volume 5: Chemistry and chemical technology. Cambridge University Press.

[112]

Wagner, Donald B. 1993. Iron and steel in ancient China. E.J. Brill.

[113]

Waldbaum, Jane C. and Archaeological Exploration of Sardis 1983. Metalwork from Sardis: the finds through 1974. Harvard University Press.

[114]

Watkinson, David et al. 1998. First aid for finds. RESCUE - The British Archaeological Trust; Archaeology Section of the UKIC; The Museum of London.

[115]

Williams, Alan 2003. The knight and the blast furnace: a history of the metallurgy of armour in the Middle Ages & the early modern period. Brill.

[116]

Young, S.M.M. et al. 1997. Inductively coupled plasma-mass spectrometry for the analysis of ancient metals. *Archaeometry*. 39, 2 (Aug. 1997), 379–392.
<https://doi.org/10.1111/j.1475-4754.1997.tb00814.x>.