MIDDLE EAST

The countries covered in this section include: Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates (UAE), and Yemen. See also the two specialized theme bibliographies and the General and Miscellaneous bibliography as they also contain reports dealing with these countries.

Abu-Laban, Aiysha
Discusses the recovered marine-shell beads.

This inland site produced a variety of marine shells, most of which had been modified for possible use as ornaments. The author questions whether these objects are prestige items as some researchers contend.

While the range of shell species used to produce beads at the site is great, the range of bead types is rather limited.
Adachi, Takuro, and Sumio Fujii
A chronological review of the recovered stone and faience beads corroborates the Early to Middle Bronze Age date previously assigned to the site.

Alarashi, Hala
Several techniques were used for modifying cowrie beads: grinding or hammering, engraving, drilling, etc. Local use wear observed on some areas, as well as the location of the perforations, is related to various attachment systems.

On the Epipalaeolithic and Neolithic personal adornments excavated at various sites in Syria (12th-7th millennia BC). Includes production technology, uses, and trade.

The study of butterfly beads, which first appeared during the 10th millennium cal. BC, covers an important span of the Neolithization process and gives new insights on the symbolic and socio-economic systems of the first farming communities in the Near East.

Aims to shed the light on the cultural identity of Mureybetian societies through the study of their body ornaments. The focus is on a series of Long Narrow Engraved Pendants, a special type of ornament that has been found exclusively in Mureybetian sites (10,000-8,700 cal. BC) in Syria.

Alarashi, Hala and Marie-Laure Chambrade
Geographic tools are applied to the study of the origin of the materials used in Neolithic stone adornment (including beads) at Mureybet in northern Syria.
Albaz, Shira  

Examines the raw materials used in the production of beads and its potential for understanding trade relationships, economic status, and as a tool for broad chronological determinations.

Algaze, A.  

Report on an unpublished site, probably 3rd millennium, dug in northern Iraq in 1933. Includes a few beads of faience, bone, and stone.

Alkim, U.B., H. Alkim, and Ö. Bilgi  

The small finds section includes a few simple Early Bronze Age beads (pp. 191-194); Turkey.

Almasri, Eyad, Firas Alawneh, and Fadi Bala’awi  

Uses finds from sites in Jordan and Israel to gain a better understanding of the kinds, shapes, and material of Nabataean jewelry and accessories and its function and symbolism in Nabataean society. A number of bead necklaces are discussed.

Alpaslan-Roodenberg, Songül  

A neolithic burial of a young woman in Turkey was accompanied by a necklace of stone beads (exact material not specified).

Amelirad, Sheler, Bruno Overlaet, and Ernie Haerinck  

Excavation revealed beads and pendants of the following materials: carnelian, agate, black stone, frit, faience, glass, bronze, iron, gold, and shell.

Amiet, P.  
Central Asian imports, etched carnelian beads, etc. (pp. 143f., 147, figs. 92, 97, 100). Iran.

**Andersson, Ann**

Related to the Dilmun culture, the beads are composed of various materials including glass, faience, stone, metal, shell, ostrich eggshell, bone, and pearls. All appear to be imported.


Dating primarily to the late 3rd millennium BC, the beads are composed of a variety of stones, as well as organic materials, glass, faience, and metal.

**Andrews, Carol**
Includes much on beads: craftsmen, techniques of manufacture, materials, and methods of wearing.

**Angelini, Ivana, Bernard Gratuze, and Gilberto Artioli**
2019  Glass and Other Vitreous Materials through History. EMU Notes in Mineralogy 20(Chapter 3):87-150; eurominunion.org › uploads › 2019/11 › 9780903056618-03_ang

The nature and properties of vitreous materials are summarized briefly, with an eye to the historical evolution of glass production in the Mediterranean world. Focus is on the evolution of European, Egyptian, and Near East materials. The most common techniques of mineralogical and chemical characterization of vitreous materials are also described.

**Arslan Üregen, Melis**

Examines the jewelry of the Phrygian civilization of Anatolia, with numerous examples of necklaces and earrings that incorporate beads and pendants of various materials but especially gold.

**Artin, Gassia**

Some of the beads recovered from this site in Lebanon are illustrated and briefly discussed.
Aruz, J. (ed.)
2003  Art of the First Cities: The Third Millennium B.C. from the Mediterranean to the Indus.
Metropolitan Museum of Art, New York.
Exhibition catalog. Bead entries, passim, with large photos (mostly color) and full information.
Of especial interest is an etched carnelian and a plain carnelian bicone found in an Early Bronze
Age settlement on the Greek island of Aegina (pp. 260-261, nos. 166a-b). The etched bead,
linked with the Indus Valley and Mesopotamia, is the first to be found west of Mesopotamia!

Asher-Greve, Julia M.
For references to Sumerian women wearing beads and their significance, see index: “Schmuck.”

Assaf, Ali Abu
Mentions agate beads (pp. 87, 90, plates 21-22), Syria.

Avni, Gideon, Zvi Greenhuit, Tamar Shadmi, Tal Ilan, Roni Ben-Arieh, Tania Coen-
Uzzelli, Tamar Winter, Gabriela Bijovsky, and Joseph Zias
Antiquities Authority Reports 1.
Final report on a group of Roman cave tombs reused during the Byzantine period. Finds include
23 glass, 13 frit (8 melon, 4 plain barrel, 1 vase-shaped amulet), and 1 spherical carnelian bead
discussed with reference to beads from Samaria and other sites (pp. 111, 113-114).

Bacharach, Jere L. (ed.)
2002  Fustat Finds: Beads, Coins, Medical Instruments, Textiles, and Other Artifacts from the
Awad Collection. American University in Cairo Press.
One section describes the beads recovered in Old Cairo, Egypt.

Bachhuber, C.
A careful discussion of the Late Bronze Age wreck off the coast of Turkey: destination, purpose,
and passengers on the voyage. The glass, faience, and amber beads are an important element in
the argument (see esp. pp. 351-354).

Bagherpour Kashani, Natascha
2009  A Note on the Role of Colour in the Beads of Pre-Islamic Iran. Paper presented at The
Color of Things Workshop at the Annual Meeting of the Theoretical Archaeology Group,
Proposes that the major colors (blue, green, yellow, and red ) of the beads recovered at
Veshnäveh, Iran, had talismanic meanings.

2011 Studies of Ancient Depositional Practices and Related Jewellery Finds, Based on the Discoveries at Veshnaveh: A Source for the History of Religion in Iran. Ph.D. dissertation. Faculty of History, Ruhr-University Bochum. This study describes and analyzes the personal ornaments found in two ancient copper mines, Čale Ĝăr 1 and 2, at Vešnave, Iran. Including beads and pendants of glass, metal, stone, amber, and shell, the adornments are assigned to the period 800 BC - 8th century AD.

Bagherpour Kashani, N., K. Roustaei, and T. Stöllner 2011 Iron Age Amber Beads from Vešnave/Iran. Archäologische Mitteilungen aus Iran und Turan 43:71-78. Various bead forms were recovered. Infrared spectroscopy revealed that the beads originated in the Baltic region.


Barker, Diane 2001 Stone, Paste, Shell and Metal Beads from Sharm. Arabian Archaeology and Epigraphy 12(2):202–222. Eighty-seven beads of various materials from a site in Fujairah, United Arab Emirates (U.A.E.) are assigned to 12 typological groups on the basis of shape, although manufacturing techniques
and materials are also discussed. The beads are compared to other assemblages in southeastern Arabia.

**Bar-Yosef Mayer, Daniella E.**


During the Upper Paleolithic and Epi-Paleolithic periods of the southern Levant (ca. 30,000-12,500 years BP), Mediterranean gastropods such as *Columbella rustica*, *Nassarius gibbosula*, *Mitrella* sp., and *Dentalium* sp., were the preferred shells for use as ornaments. The subsequent Natufian culture (ca. 12,500-10,300 BP), best known for the development of the first sedentary communities, exhibits increasing use of shells. During the Neolithic Period (10,300-8,000 BP) there was a marked shift in the selection of marine shells. Israel, Egypt.

1997 Neolithic Shell Bead Production in Sinai. *Journal of Archaeological Science* 24:97-111. Describes five marine shell assemblages with over 5,000 beads, pendants, and other artifacts from two Pre-Pottery Neolithic B (9200-7800 BP) sites, and considers their importance for both artistic uses and as objects of exchange.


The material includes *Conus* shell beads. Israel.


Describes the 15 shell pendants found at a Chalcolithic site in Israel.


Conus-shell beads were found in *nawamis* tombs and sites in the central Levant. Their presence suggests that the *nawamis* were continuously used during the Early Bronze II period, longer than proposed by previous studies. Israel.


Systematic exploitation begins in the Upper Paleolithic, especially of small gastropods. The Neolithic change to farming sees the use of more species and the production of more kinds of artifacts, some of which are used for exchange. In desert areas Red Sea species are collected. The Mediterranean zone concentrates on *Glycymeris* and *Cerastoderma*.


The frequency of *Dentalium* in a shell assemblage and the length of the *Dentalium* beads may reflect changes in the availability of the raw material and changes in the degree of mobility of hunter-gatherer societies.


https://www.academia.edu/23476894/.
The *nawamis* (above-ground burial structures) investigated in Israel contained associated artifacts, primarily beads and pendants. They are made of ostrich egg shell, bone, shell, steatite, carnelian, and other minerals such as turquoise, hematite, and copper.

Personal ornaments and jewelry, including beads, from this Neolithic site in Turkey were made not only of local material (*Unio, Viviparus, Stagnicola*, and *Xeropicta*), but also from imported shells. These consist of marine and fossil shells that were either used in their natural state (as in the case of scaphopods and naturally holed gastropods), or were perforated and/or painted.
Discusses the identifiable shells and shell beads, while shell beads made of unidentifiable shell are dealt with in Bar-Yosef Mayer and Porat (2013).

Profers a comprehensive typology of the earliest stone bead assemblages in the southern Levant from Late Natufian and Neolithic sites.

Describes the small collection of shell and stone beads and pendants recovered from Beisamoun, a major Middle and Late Pre-Pottery Neolithic B settlement in the northern part of the Southern Levant. Israel.

A general overview of the subject.

A comparison of Upper Paleolithic shell bead assemblages of Levantine sites to Aurignacian assemblages in Europe suggests that while most of the shells are Mediterranean species, it is nonetheless possible to distinguish between the local Ahmarian traditions in personal ornaments, and those which were brought or influenced by the Aurignacian traditions.

Delves into the early use of shell beads by modern humans throughout the Old World.


Based on unaltered *Glycymeris* shells found in Misliya Cave, Israel (dated to 240-160 ka BP), and naturally perforated *Glycymeris* shells exhibiting string wear at Qafzeh Cave, Israel (dated to ca. 120 ka BP), the authors conclude that between those times there was a shift from collecting complete valves to perforated ones, reflecting both the desire and the technological ability to suspend shell beads on string to be displayed on the human body.
Bar-Yosef Mayer, D.E., S. Paz, and Y. Paz
Sixteen Conus apex beads recovered from a site in central Israel are made of Indo-Pacific shells, suggesting long-range contacts. The existence of a workshop of such artifacts in Oman might point to their actual origin.

Bar-Yosef Mayer, D.E. and Naomi Porat
During the transition to agriculture in the Near East, stone, in particular green stone, was used for the first time to make beads and pendants. A large variety of minerals of green colors were sought, including apatite, several copper-bearing minerals, amazonite, and serpentine. It is suggested that the occurrence of green beads is directly related to the onset of agriculture. Green beads and bead blanks were used as amulets to ward off the evil eye and as fertility charms.


Describes the typology of the stone and shell beads and assesses their possible sources. Includes archaeometric analysis. See also Bar-Yosef Mayer (2013).

Bar-Yosef Mayer, D.E., Naomi Porat, and Uri Davidovich
The small but diverse bead assemblage from the cave constitutes an important contribution to the growing database of Levantine Chalcolithic beads. Israel.

The burial cave at Peqi’in in Israel yielded about 190 small beads made of white enstatite, found in the context of ossuaries. They were apparently made of a paste composed of powdered talc.
formed into long tubes and fired at a high temperature, then sliced to form beads. Neither talc nor enstatite are found in Israel; the nearest sources are in Turkey or Egypt.

Bar-Yosef Mayer, D.E., Naomi Porat, and Mina Weinstein-Evron

Discovered in el-Wad Cave, Mount Carmel, Israel, the pendants are among the earliest green stone beads in the Levant and are attributed to the Late Natufian period.

Bar-Yosef Mayer, D.E., B. Vandermeesch, and O. Bar-Yosef

Qafzeh Cave, the burial place of several anatomically modern humans, yielded archaeological evidence reflecting their modern behavior. Dated to 92 ka BP, the lower layers at the site contained a series of hearths, several human graves, and a collection of sea shells which had been brought from the Mediterranean Sea some 35 km away, and are complete Glycymeris bivalves with natural perforations. Several valves bear traces of having been strung, and a few have red ochre stains on them.

Bass, George F.

Faience and amber beads, an amphora filled with glass beads, and early glass ingots were found on a shipwreck off the southern coast of Turkey; late 14th century BC.

Bass, George F., Cemal Pulak, Dominique Collon, and James Weinstein

A wreck off Turkey with mixed Egyptian, Levantine, and Aegean cargo continues to produce interesting beads.

Baysal, Emma L.

Turkey.

2013 A Tale of Two Assemblages: Early Neolithic Manufacture and Use of Beads in the Konya Plain. Anatolian Studies 63.

Turkey.
The Epipalaeolithic bead assemblage from Pınarbaşı in the Konya Plain, Turkey, provides a unique window on the use of beads in the earliest context yet known from Central Anatolia. The assemblage is largely associated with the inhumation of a single individual who was interred with a variety of possessions including marine shell beads, mostly *Dentalium* and *Nassarius*.

This site in Turkey yielded a diverse collection of beads and pendants of stone, shell, bone, and clay.

Discusses the production technology of the beads recovered from this site in Turkey, as well as their uses.

Looks at typological and chronological trends, how Neolithic ornaments may be interpreted, what they can tell us about Neolithic technology and identity, and how remaining questions might be answered in future research. In Turkish with English abstract.

New evidence from Direkli Cave in southeastern Turkey reveals that, as in the Levant, marine shells and stone were used to make beads during the Epipaleolithic period.

Aktoprakh saw a particularly prolific use of beads that indicates complex networks of communication and exchange with other areas, both near and far, as well as possible early craft specialization. This article provides a brief introduction to the beads and their implications for the archaeology of prehistoric northwestern Turkey.

Dated to ca. 5800 BC, an intricate piece of beadwork composed of nearly 1,500 stone beads was found in a basket at a site in south-central Turkey. It is discussed in detail.
Explores the evidence for how beads, bracelets, and pendants were procured, made, used, and deposited, what meanings they might have had, and how all these factors changed through the Neolithic period.

Details the beads, pendants, plaques, and other ornaments recovered from a site in central Turkey, and considers their temporal and geographical positions within the history of personal adornments.

Considers how and why the human relationship with ornaments developed and continued over tens of thousands of years, from hunter-gatherer life in the cave to urban elites, from expedient use of natural resources to complex technologies.

Highly portable blue fluorapatite beads offer an ideal medium through which to explore short-term multi-directional encounters of the prehistoric period in Turkey via the traceability of both materials and forms through space and time.

**Baysal, Emma and Ayşe Bursal**
Explores the technological and social significance of blue apatite beads found at sites in Turkey and elsewhere in the Middle East, primarily through the use of scientific analyses.

**Baysal, Emma and Burçin Erdoğan**
DOI:10.1017/ppr.2014.13
The shell beads and bracelets of the Chalcolithic settlement at Uğurlu, Turkey, evidence a consistent engagement with *Spondylus* and *Glycymeris* throughout the Chalcolithic occupation period, and particularly during Phase III.
Baysal, Emma and Cevdet Merih Erek
Analysis of the beads – made primarily from shell (marine and freshwater) and stone – reveals that the raw materials were brought to the site from the shores of the Mediterranean and that the material culture of the site has relationships to the Levant, northern Mesopotamia, and inner Anatolia.

Baysal, Emma and Holly Miller
Prehistoric beads from Anatolia and the Near East have long been analyzed through the description of visual characteristics and associated with the practice of ornamentation. This paper examines this perspective and discusses how it has shaped analysis and interpretation to the detriment of the archaeological record. In Turkish.

de Beauchair, Roland
More than 24,000 ornamental objects (beads and pendants included) have been found at a site in the United Arab Emirates, many of them in a secure funerary context, making it possible to reconstruct ornamental ensembles, and shedding light on specific rules concerning the way jewelry was worn by different sub-groups of the population.
2008 *La parure funéraire de la nécropole néolithique d’al-Buhais 18 (Émirats Arabes Unis).* Préhistoires Méditerranéennes 14.
Describes the various forms of shell beads and other ornaments found in a Neolithic necropolis in the United Arab Emirates (U.A.E.).
Many of the stone and shell beads were found in secure funerary contexts, thus offering a starting point for the investigation of burial practices through the analysis of jewelry use.
Excavations at a Neolithic graveyard in the U.A.E. have yielded numerous ornamental objects, many of marine origin. Their detailed analysis not only gives an insight into the shell and stone bead industry during the 5th millennium BC, but also testifies to the great importance of the sea and its resources for this desert nomad population.

Beeri, Ron and Oren Cohen
Beads, mostly of glass, found at this cave site in Israel range from the Late Bronze Age to the Middle Ages.

Becher, Ellen H.
Examines some of the technological aspects of stone beads, pendants, and seals from a large 6th-millennium BC site in southeast Turkey in terms of both the utilization of raw materials and the evidence for the methods of manufacture of final products.

Ben Basat, Hagar
The site produced beads and pendants of a variety of materials: stone, bone, ivory, shell, egg-shell, clay, metal, faience, and glass.

2013 Beads. NGSBA Archaeology 2:36-43.
Discusses a small but varied collection of beads of various materials recovered from Tsur Natan, an Iron Age tomb in Israel.

Ben Tor, A. and M.T. Rubiato
A hoard of beads and cylinder seals was found next to a jewelry box in the Late Bronze Age palace of Hazor in the southern Lavant (color photo, p. 35).

Benedick, Jered T.
Examines the lives of Middle Kingdom Egyptians, mostly from a non-royal context, in an effort to broaden the understanding of Egyptian personal identity and social structure. Beads and
amulets recovered from the Abydos north cemetery in Upper Egypt are briefly described in Appendix 1.

**Bennett, C.-M. and P. Bienkowski**
A variety of carnelian/agate, amethyst, calcite, marble, unidentified stone, amber (?), bone, coral, shell, glass, and faience (?) beads are discussed from Late Iron Age (Edomite/Achaemenid) contexts; additional beads were recorded from Nabataean and Islamic contexts.

**Benton, Jodie**
1993 *Update on the 1993 Excavations at Tell Abraq (Umm al Qaiwain, UAE).* Orient Express 2:13f.
Beads from a 3rd-millennium tomb; many stone and frit, one silver.

Describes carnelian, tubular talcose or baked steatite, and softstone microbeads from a late 3rd-millennium Hafit tomb. Imports from India?

The systematic use of 1mm-mesh sieves resulted in the recovery of an enormous quantity of beads, primarily microbeads. These were sewn onto either garments or shrouds.

**Benzel, Kim**
An in-depth study of the jewelry belonging to a female named Pu-abi buried in the so-called Royal Cemetery at the site of Ur in modern Iraq. The mid-third millennium BC assemblage includes beads of stone and gold.

**Berna, F.**
1995 *La lavarazione dell’amazzonite nel villaggio neolitico di Jebel Ragref (Giordania meridionale).* L’ecologia del Quaternario 17:41-54.
Amazonite processing for beads in the neolithic village of Jebel Ragref, southern Jordan.

**Biagi, Paolo**
Serpentinite and phyllite beads, mostly small cylinders, and one perhaps unfinished bead (p. 63, fig. 15), 5th-4th millennia BC.
Bialowarczuk, Marcin and Agnieszka Szymczak
Beads of stone and shell (including Akab-type beads) are among the recovered

Bianchi, Alice and Anne Wissing
Excavations at the ancient city of Urkesh in Syria produced a broad assortment of beads and pendants which are well described.

Bianchi, R.S.
On the meaning of a deposit of more than 2,000 carnelian beads carefully arranged around two burned boats in a mortuary temple.

Bimson, M. and I.C. Freestone
Very early colorless Egyptian glass beads.

Bingöl, F.R. Isik
Includes grey and white stone disc beads with antler pendants from Catalhoyuk, Early Bronze Age, carnelian phallic beads, Uratian quartz and amber beads, Hellenistic emeralds (?), and Roman faceted sardonyx beads, some attached to earrings. Western Turkey.

Biron, Isabelle, Valérie Matoïan, Julian Henderson, and Jane Evans
Presents the results of the chemical analysis of glass beads from a Late Bronze Age context in Syria.
Ornaments recovered from a major Middle and Late Pre-Pottery Neolithic B settlement in northern Israel include beads and pendants of shell and stone.

Boehmer, R.M.
Two gold beads (p. 119); a marine-snail bead (p. 136); a frit spacer (p. 146) of various dates. Iraq.

Beads of the Kassite period: faience, shell, and (?) boars tusk (pp. 52f., pls. 60, 62). Iraq.

A few beads ranging from Uruk to Middle Babylonian date, including a glass bead with wavy bands. Iraq.

Bonatz, D., H. Kühne, and Mahmoud As’ad
Early Syrian beads from Mari with gold collars, 2300-2200 (p. 75, no. 72): one lapis lazuli cylindrical and one etched carnelian with white wavy lines.

Boonstra, Stephanie
Uses evidence from Egypt and the southern Levant to discuss typological patterns and examples of proposed “typological” workshops for scarab amulets, as well as to examine the archaeological evidence, or “material” workshops, for these artifacts.
Bos, Jolanda E.M.F.
Describes a system for documenting and analyzing archaeological beadwork in Egyptian contexts and how it has contributed to the study of beadwork found in the tomb of Tutankhamun (18th Dynasty).

Bos-Seldenthuis, J.
Shows how the beadwork found in Tutankamun’s tomb can be reconstructed, thanks to Howard Carter using the then-standard technique of pouring hot paraffin wax to preserve the beadwork in situ before removing it. Ancient Egypt.

Bosch, Marjolein D., Laura Buck, and André Strauss
Uses μCT scans of pristine shells to create a 3-D model of shell thickness in Tritia (Nassarius) gibbosula in order to identify structurally weak zones that would be prone to natural perforations.

Bosse-Griffiths, Kate
Reviews the historical outline of bead composition, such as bead collars, bead bands, bead faces, and a hassock with geometrical patterned beading from Tutankhamun’s tomb. Ancient Egypt.

Bourke, S.J.
Chalcolithic faience beads were found in Area G of the site. Jordan.

Bourke, S.J., P.L. Seaton, Rachael T. Sparks, Jaimie Lovell, and L.D. Mairs
1995 A First Season of Renewed Excavation by the University of Sydney at Tulaylat al-Ghassul. Annual of the Department of Antiquities of Jordan 39:31-63.
Small disc beads made of calcite and frit, thought to be of possible Egyptian origin, were found at this Chalcolithic type-site in Jordan.
Boyce, Andrew
Covers every aspect of the (mostly faience) beads from Akhenaten’s city in ancient Egypt.

A lasting contribution to the study of beads in ancient Egypt and surrounding regions.

Pastoralists using pottery and metal had carnelian beads probably in necklaces as well as microbeads of a white composition (baked chlorite?) perhaps worn in the hair or on clothing (p. 34, table 4, fig. 13).

Braidwood, L.S., R.J. Braidwood, B. Howe, C.A. Reed, and P.J. Watson (eds.)
Stone Age beads of stone, shell, and bone from Jarmo and other sites in Iraq.

Brand, Peter J.
The shebyu-collar came in two varieties. The most familiar type was composed of bi-conical or lenticular shaped beads, but a second type consisted of flat disk-like or wafer-shaped beads. Ancient Egypt.

Braun, E., Daniella E. Bar-Yosef, Catherine Commenge, Mariana Grinblat, Liora Kolska Horwitz, Mikko Louhivuori, Roman Malinowski, Steven A. Rosen, Sariel Shalev, and Patricia Smith
A small number of bone and stone beads were recovered.

Braun-Holzinger, Eva A.
See pp. 360-372 for a catalog of beads and interesting remarks on the inscribed beads dedicated to deities and plain beads used in foundation ceremonies and other rituals.

**Breniquet, Catherine**
Reconsideration of the find-place of an important Mesopotamian bead complex in Iraq.

**Brock, L.P.**
An Amarna-period tomb in the Valley of the Kings dug in 1907, re-examined in 1993. Bead details are on pp. 127-128.

**Broeder, N.H. and C.W. Skinner**
Covers 241 bead samples from contexts in Jordan dated to Early Bronze Age IV, Nabatean, Roman, Byzantine, Umayyad, Fatimid, Ayyubid-Mamlu and/or Ottoman, and modern periods.

Discusses the beads of various materials from an Early Bronze Age site in Jordan.

**Brovarski, Edward**
Expounds upon the translation of a column of hieroglyphic text located at the entrance of the 5th-Dynasty chapel of Akhethotep which records gifts awarded to that official by his sovereign, including two beaded collars.

**Brunet, Olivier**
Many believe that all ancient carnelian beads came from the Indus valley. This technological study reveals the existence outside the Indus Valley of different productions and levels of technical skill. It suggests that we should revise our understanding of Bronze and Iron Age exchange networks, by offering another reading of carnelian production in this part of the world.

Exhaustive study of the production, circulation, and value of stone beads and other ornaments from the Oman Peninsula during the 6th to 2nd millennium BC.


Focuses on more than 100,000 stone beads (agate, carnelian, lapis lazuli, green softstone, etc.) uncovered in Oman, spanning approximately four millennia, from a morphological, dimensional, and especially technological perspective.

Buhl, M.-L.


Beads of many materials at a Late Bronze to Early Iron Age site in Syria (pp. 77-78; plate XXIV).

Bulsink, Mariëlle


Contains a catalog of gold objects (including beads, pendants, necklaces, etc.) which are part of the renowned collection of the Egyptian Department of the National Museum of Antiquities in Leiden.

Bursalý, A., R. Özbal, E. Baysal, H. Özbal, and B. Yağcı


Investigates beads, turquoise-like in color, which may be deliberate imitations of genuine semiprecious stone. Although beads from the 7th-millennium BCE site of Barcın Höyük, located in northwest Anatolia, comprise the focus of this case study, examples of similar blue imitation turquoise beads from nearby contemporary Neolithic and/or Early Chalcolithic sites provide a comparative overview.

Bursalý, A., H. Özbal, R. Özbal, G. Şimşek, B. Yağcı, C. Yılmaz Akkaya, and E. Baysal

2017 Investigating the Source of Blue Color in Neolithic Beads from Barcın Höyük, NW Turkey. In The Exploitation of Raw Materials in Prehistory: Sourcing, Processing and
Reports on the analysis of turquoise-blue beads found at the 7th-millennium Neolithic site of Barcin Höyük in northwestern Anatolia (Turkey), and explores the way in which the social desire for ownership of the color blue in the seemingly egalitarian and homogenous Neolithic period may have functioned.

Calley, Sylvie

Presents a few technological comments relating to the production of Neolithic stone beads at Kumartepe, Turkey.

Calvet, Y., A. Caubet, and J.-F. Salles

Agate and carnelian beads from a Hellenistic sanctuary in Kuwait (p. 12; fig. 7).

Carter, Robert and Harriet Crawford

Excavation report on a late-6th-millennium Ubaid settlement in northern Kuwait with extensive evidence for the manufacture of shell beads, typically small annular examples. Finds include a necklace of 44 shell disc beads, selected and trimmed to show the orange surface on one side and white on the other (p. 2). Other finds include circular, sub-rectangular, and hourglass-shaped shell “buttons” and “plaques,” usually with 4 holes. Also a brief discussion of comparative evidence for shell beads at Ubaid sites (p. 8).


Concludes that the small quantity of obsidian (as opposed to the much larger quantity of chipped flint) lithic material was used for bead-drilling (p. 86).

Carter, Robert, Harriet Crawford, Simeon Mellalieu, and Dan Barrett

Flint microdrills found with finished and unfinished shell disc beads confirm a bead manufacturing function for this small, coastal 5th-millennium site.

Casanova, M., G.P. Jerrat-Bonnefois, P. Quenet, V. Danrey, and D. Lacambre
2015 Lapis Lazuli in the Tôd Treasure: A New Investigation. In *Proceedings of the Tenth International Congress of Egyptologists, University of the Aegean, Rhodes, 22-29 May*
Examines the fragments of raw lapis lazuli and the thousands of carved pieces (such as beads, inlays, and cylinder seals) found in two small caskets at the temple of the god Montu in Tôd, about 30 km from Luxor, Ancient Egypt.


Beads with votive offerings in a mineworkers’ shrine, ancient Egypt (pp. 18-20).


Discusses biconical faience beads and others from Tello, the ancient city of Girsu in Iraq.


Proposes an Indus origin for two types of unusual carnelian beads from 1300-1200 BC contexts in central Syria. In French with English summary.


Seven beads of glass (including gold-in-glass forms) and faience from a site in Egypt are described and discussed.


Briefly discusses and illustrates some of the perforated pearls and shell beads and pendants recovered from sites in Oman occupied during the Holocene and Neolithic periods.
Charpentier, V., M. Cremaschi, and F. Demnard
Carnelian, chlorite, and holed shell beads are illustrated from a 4th-millennium coastal site.

Charpentier, V. and S. Méry
The site yielded several types of characteristic beads, including tubular beads of the Akab type. In particular the occupants of Akab produced discoid beads of *Spondylus* shell, to the extent that this site may be termed one of specialized production. The *chaîne opératoire* for them is provided.

Chernov, Elena
The finds at this village site in Israel include glass eye beads of the Roman-Byzantine period.

Chevalier, J., M.L. Inizan, and J. Tixier
Workshop with carnelian beads in association with flint drills.

Cifarelli, Megan
Discusses the beads, pendants, and other ornaments recovered from the ancient city of Hasanlu in northwester Iran. See also Appendix VI: Catalog of Personal Ornaments, Cemetery, Outer Town, Hasanlu Periods VIb-IVc.

Among these burials associated with Hasanlu Period IVb (1050-800 BC) are five adult women decorated with multicomponent personal ornaments consisting of repurposed copper alloy or iron armor scales with attached garment pins, stone, shell and composite beads, and copper-alloy tubes of various lengths. Iran.
Çinardali-Karaaslan, Nazli
The glass finds at Panaztepe in western Turkey include necklace spacers, relief beads, and spherical and circular beads recovered from the two burial grounds. It is believed that most of the items were used during the Late Helladic III A-B periods.

Cingi, Cemal and Can Cemal Cingi

Connan, J.
Mentions the use of bitumen mixtures and asphaltite for the production of beads at several sites in the United Arab Emirates and Iran.

Cooke, L.
Reports on the material recovered from Neolithic sites in eastern Jordan.

Coppa, A., R. Macchiarelli, S. Salvatori, and G. Santini
A few beads and pendants of shell and steatite (p. 99, pl. 3).

Corboud, Pierre, Anne-Catherine Castella, Roman Hapka, and Peter im Obersteg
Modified *Conus, Engina*, and *Cypraea* shells, biconical agate/carnelian, cylindrical and barrel-shaped alabaster and agate/carnelian, spherical carnelian, faceted carnelian and cylindrical frit/glass beads from a late-2nd to early-1st-millennia tomb in southeast Arabia (UAE), re-used in the Parthian period.

Costa, P.M. and T.J. Wilkinson
Early Islamic bone and stone beads found near the ancient Oman capital (p. 202).
Covello-Paran, K.  
Hagosherim, Israel; ostrich eggshell disc, “flint” barrel, rounded agate, and biconical and barrel  
glass beads from a Hellenistic burial although the eggshell beads may be residual Middle Bronze  
Age pieces. Israel.

Crawford, Harriet  
2001 The British Archaeological Expedition to Kuwait. British School of Archaeology in Iraq  
Newsletter 7:10-11.  
Excavations at a late 5th-millennium-BC Ubaid coastal site in northern Kuwait have revealed  
“about 800 shell beads in all stages of manufacture” as well as “a single small seed pearl with a  
hole drilled in,” illustrating the long history of pearling in the Arabian Gulf.

Crawford, H., R. Killick, and J. Moon (eds.)  
A single agate barrel and a crude asphalt “bead” (possibly a net-weight) from the Bronze Age at  
Saar, Bahrain (pp. 63, 66).

Creamer, Petra M.  
Department of Anthropology, The Ohio State University, Columbus.  
By analyzing resin artifacts from eleven different sites in Iran, Iraq, Jordan, Egypt, Israel, and  
Ukraine, this study focuses on a comparison among the resins to understand any area- or culture-  
specific trends in resin quality, use, color, clarity, craftsmanship, size, and shape.

Cristiani, Emanuela  
2014 Ostrich Eggshell Products from Hidden Valley Village, Farafra Oasis – Contributions  
from Technological Analysis. In From Lake to Sand: The Archaeology of Farafra Oasis,  
Western Desert, Egypt, edited by Barbara E. Barich, Giulio Lucarini, Mohamed A.  
https://www.academia.edu/10351356/.  
Analysis permitted the reconstruction of the chaîne opératoire of the ostrich eggshell beads from  
a mid-Holocene site thanks to the large number of unfinished fragments.

Critchley, Pat  
2000 Stone Bead Production at Wadi Jilat 25, a Neolithic site in Eastern Jordan: Technical,  
Economic, Social and Symbolic Aspects. M.A. thesis. Institute of Archaeology,  
University College London.  
Archaeological, ethnographic, and experimental evidence is used to investigate the technology of  
stone bead production at Wadi Jilat 25. The approach used is the chaîne opératoire – how the  
production process is embedded in socio-economic and socio-cultural organization. Exchange
networks, aspects of economic and craft specialization, and symbolic and aesthetic aspects of bead production are briefly examined.


Curtis, John
1984 Nush-i Jan III: The Small Finds. The British Institute of Persian Studies, London. Much on beads from this site in Iran, including important discussions of silver spirals and glass eye beads, Median and Parthian periods and earlier.

Curtis, J. and A. Green

Curvers, H.H. and G.M. Schwartz
1990 Excavations at Tell al-Raqá’i: A Small Rural Site of Early Urban Northern Mesopotamia. American Journal of Archaeology 94:3-23. Stone, faience, and shell beads from a necklace and bracelet were found in a burial dating to the mid-3rd millennium BC, northeastern Syria (fig. 16).

Dalley, Stephanie
1999 Sennacherib and Tarsus. Anatolian Studies 49:73-80. Glass eye beads used with incantations in a ritual suggest who the occupant of a house was and add some light on cultural history. Also includes an account of the magical and healing properties of various stones and eye beads. Turkey.

Damick, Alison and Marshall Woodworth
2015 Steatite Beads from Tell Fadous-Kfarabida: A Case Study in Early Bronze Age Technology in Northern Coastal Lebanon. Journal of Archaeological Science: Reports 3:603-614. SEM/EDX and XRD analysis of seven small stone beads revealed that six were made from fired steatite (synthetic enstatite) while the seventh was formed of quartz-based faience or frit.

Danti, Michael D. and Megan Cifarelli
2015 Iron II Warrior Burials at Hasanlu Tepe, Iran. Iranica Antiqua 50:61-157. Eight burials (99, 100, 105, 107, 111, 493a, 495, and 497) were accompanied by beads of glass, stone, and metal which are briefly described and illustrated in line drawings.
Dapschauskas, Rimtautas

Discusses empirical evidence for the intentional use of personal ornaments by early Homo sapiens and interprets the finds in the context of theoretical reflections on symbolic communication. The analysis draws on a combination of theories, concluding that an expansion of human cognitive capacities to communicate symbolically probably occurred in Homo sapiens during the Middle Stone Age in Southern Africa, as well as the Middle Paleolithic of Northern Africa and the Levant.

Dardeniz, Gonca

Despite their low number, the nine faience beads present important findings in terms of examining the dimensions of the terrestrial and marine relations of the settlements.

Daviau, Paulette M. Michèle

This site in central Jordan due south of Amman is not to be confused with the 4th-millennium site of the same name in northeastern Jordan. The finds are regarded as indicative of Ammonite material culture and include a small quantity of beads of stone, glass, faience, and shell.

Dayagi-Mendels, Michal
2002 The Akhziv Cemeteries: The Ben-Dor Excavations, 1941-1944. Israel Antiquities Authority Reports 15.

Chapter 6 discusses the various types of jewelry, including beads, pendants, and amulets from necklaces.

De Waele, An

Beads, pendants, and insets of stone, bone, shell, pearl, glass, frit, faience, pottery, gold, and copper-alloy were unearthed from contexts attributed to the late 1st century and the early 2nd century AD.

Trade in and Beyond the Persian Gulf in the Late 1st. C. BC. to the 2nd C. AD. Ph.D. dissertation. Faculty of Arts and Philosophy, University of Ghent.

De Waele, An and Ernie Haerinck
Surveys and illustrates examples from the Arabian side of the Persian Gulf which is not yet archaeologically well known. Best represented are the Early Bronze Age and the centuries straddling BC-AD, but other periods have produced examples as well.

Deblauwe, F.
On some beads as evidence for contacts with Syro-Mesopotamia (p. 139).

Dębowska-Ludwin, Joanna, Karolina Rosińska-Balik, and Marcin Czarnowicz
Presents details re: the chemical composition, workmanship, and typical shapes of gold beads discovered at Tell el-Farkha, Egypt, as well as other examples from similar temporal and geographical loci; e.g., Kom el-Khilgan, Minshat Abu Omar, and Gerzeh.

Delougaz, P. and Helene J. Kantor
Iran. Occasional prehistoric carnelian globular, white stone and greenstone tubular, shell and white stone disc, and incised lentoid beads; hoard of 4th-millennium carnelian, black stone, fired clay, frit, and shell beads; single agate barrel bead placed near the chin of an Achaemenid burial.

Dieudonné-Glad, Nadine, Michel Feugère, and Mehmet Önal
2013 Zeugma V. Les objets. Travaux de la Maison de l’Orient 64.
Provides an illustrated catalog of the Roman beads and amulets recovered from a site in Turkey. Materials include glass, faience, gold, stone, and bone.

Dijk, Jacobus van
This pottery rare 18th-Dynasty mold has a depression with a raised inscription reading “The Son of Re, God’s Father Ay, divine ruler of Thebes.”

Donaldson, P.
Egyptian tombs with beads (pp. 86f.).
Döpper, Stephanie

Dothan, Trude
1998 Cultural Crossroads: Deir el-Balah & the Cosmopolitan Culture of the Late Bronze Age. Biblical Archaeology Review 24(5):24-37, 70-72. A cemetery in the Gaza Strip produced several anthropomorphitic ceramic coffins whose contents included necklaces composed of gold and carnelian beads and pendants dating to around 3500 BP.

Douka, Katerina, Christopher A. Bergman, Robert E. M. Hedges, Frank P. Wesselingh, and Thomas F. G. Higham
2013 Chronology of Ksar Akil (Lebanon) and Implications for the Colonization of Europe by Anatomically Modern Humans. PLoS ONE 8(9):e72931. The remains of two anatomically modern humans found at Ksar Akil are estimated to date between 40.8-39.2 ka cal BP (68.2% prob.) and between 42.4-41.7 ka cal BP (68.2% prob.), respectively, based on radiocarbon dates derived from marine shell beads.

Doumet-Serhal, C.
2004 Sidon (Lebanon): Twenty Middle Bronze Age Burials from the 2001 Season of Excavation. Levant 36:89-154. Beads are of types too common and long-lived to be informative, but two ribbed “melon” beads of rock crystal are worth noting (p. 150).

Dubiel, Ulrike
2008 Amulette, Siegel und Perlen: Studien zu Typologie und Tragesitte im Alten und Mittleren Reich. Orbis Biblicus et Orientalis 229. Presents a typology for the amulets, seals, and beads recovered from Old and Middle Kingdom cemeteries in the region of Qau el-Kebir (Middle Egypt), and discusses their various uses.

2012 „Dude looks like a Lady …“. Der zurechtgemachte Mann. In Sozialisationen: Individuum – Gruppe – Gesellschaft. Beiträge des ersten Münchner Arbeitskreises Junge Aegyptologie (MAJA 1) 3. bis 5.12.2010, edited by Gregor Neunert, Kathrin Gabler, and Alexandra Verbovsek, pp. 61-78. Göttinger Orientforschungen IV. Reihe Ägypten 51. Data acquired from the provincial cemeteries of Middle Egypt shows that the wearing of jewellery (i.e., amulets, beads, shells, and seals) is clearly gender-specific and restricted to women and children. In contrast, Medu-Nefer, governor of the oasis Dakhla, was buried with an assemblage of jewellery expected in the burials of female individuals. This is not a matter of
cross-dressing, but rather the representation of the deceased as a social individual and his social distinction through means of beauty.

**Duckworth, Chloë N.**  
ToF-SIMS is used to investigate the origin of the colorant-opacifiers used in Egyptian glass production, beads and amulets included. Also examines color in Egyptian thought, the relative value of Lower Bronze Age glass, the significance of the material properties of glass, and beadmaking technology.

**Duka, Katerina, Christopher A. Bergman, Robert E. M. Hedges, Frank P. Wesselingh, and Thomas F. G. Higham**  
2013 Chronology of Ksar Akil (Lebanon) and Implications for the Colonization of Europe by Anatomically Modern Humans. *PLoS ONE* 8(9):e72931, DOI: 10.1371/journal.pone.0072931.  
The remains of two anatomically modern humans found at the key site of Ksar Akil in Lebanon were associated with early Upper Palaeolithic archaeological assemblages. Radiocarbon dating of marine-shell beads place one individual between 40.8–39.2 ka cal BP (68.2% prob.) and the other between 42.4–41.7 ka cal BP (68.2% prob.). The dating of the so-called “transitional” or Initial Upper Palaeolithic layers of the site may indicate that the passage from the Middle to Upper Palaeolithic at Ksar Akil, and possibly in the wider northern Levant, occurred later than previously estimated, casting some doubts on the assumed singular role of the region as a locus for human dispersals into Europe.

**During Caspers, Elisabeth C.L.**  
1987 In the Footsteps of Gilgamesh – In Search of the “Prickly Rose.” *Persica* XII:57-95.  
On Mesopotamian trade in the Persian Gulf. Deals principally with pearls and coral, but see pp. 74-76 on etched carnelian beads from India, and p. 70 on the custom of burying a snake with a single pearl or turquoise bead.

**Eger, Christoph**  
Carnelian beads with etched white decoration occur in around a dozen settlements of late antiquity in the southern Levant. They deserve special attention as they count as foreign forms and point to long-distance contacts. In German with an English summary.
Eger, Christoph and Lutfi Khalil
The excavation of a rock-chamber necropolis at Khirbat Yajuz (northern Amman, Jordan) yielded more than 360 beads and pendants from the Late Roman and Byzantine periods.

Ekmen, H., C. Diker, F.G. Ekmen, and C. Tunoğlu
SEM-EDS analysis of seven beads was performed to understand steatite bead production techniques during the Chalcolithic Age in western Turkey.

El Morr, Ziad and Marianne Mödlinger
The specimens include copper-alloy beads of various forms.

El Sayed El Gayar
Re-analysis of three surviving iron beads from two groups excavated by Petrie and Wainwright from pre-dynastic graves at Gerzeh suggests that they are not made from meteoric iron as once believed but more probably made from iron produced as a by-product of copper smelting.

Emberling, Geoff and Helen McDonald
2002  Recent Finds from the Northern Mesopotamian City of Tell Brak. Antiquity 76:949-950.
Color illustration of a cache of over 350 beads of a wide range of shapes (mainly carnelian, also gold, silver, lapis, amethyst, and rock crystal) placed in a basket and concealed beneath the floor of a mid-4th-millennium house, Syria.

A cache of some 350 beads and 2 stamp-seals was found buried in a mat or basket below a courtyard floor in level 16 (early-4th millennium BC) of Area TW. The beads were mostly carnelian but included silver, gold, lapis, and rock crystal (p. 9). Micro-stratigraphic sampling of a small area in level 20 of the same excavation area revealed 6 gypsum and unidentified stone beads (discs, cylinders, and lozenges) measuring 2-10 mm across. Syria.

Emberling, G., J. Robb, John D. Speth, and Henry T. Wright
The skulls of the burials were repositioned some time after original burial and some were decorated with beads (bone, chlorite, and limestone) at this point (pp. 62, 71, fig. 16). Iran.

**Engle, Anita**

Illustrated with color photos, this publication deals with a small group of glass beads of 16th-17th-centuries origin which were picked up at the site of ancient Caesarea on the coast of Israel. See Francis (1990) for a review.

**Esin, Ufuk**

Extremely early metal beads: cylindrical rolls of copper from Central Anatolia dated to the first quarter of 7th millennium, Pre-Pottery Neolithic; found with stone beads. Turkey.

**van Ess, Margarete and F. Pedde**

Iraq: includes beads in various materials from excavations conducted 1912-1985; dates from the Uruk to Parthian periods.

**Ezzughayyar, A. and M. Al-Zawahra**

The material includes *Conus* shell beads.

**Fabiano, M., F. Berna, and E. Borzatti von Lowenstern**

Thousands of borers and awls were found together with hundreds of worked and unworked amazonite fragments. A few finished beads of amazonite and sandstone were also found. Experiments demonstrate that the awls were mounted in drills and the majority of the borers were actually drill bits.

**Finkbeiner, U.**
Concordance to the finds from 34 seasons of excavation at Uruk in Iraq. The many beads and their publications are listed under *Schmuck*.

**Finkenstaedt, E.**

**Finlayson, Bill**
2005 Wadi Faynan: The Most Polluted Place on Earth? *Current World Archaeology* 13:37-44. Page 39 illustrates beads from the Pre-Pottery Neolithic in southern Jordan; copper minerals were used to make beads and pigments.

**Fischer, Alysia Anne**

**Fischer, Moshe**

**Fortin, M.**
1999 *Syria, Land of Civilizations: A Traveling Exhibition Organized by the Musée de la Civilisation de Québec*. Musée de la Civilisation, Québec/Les Éditions de l’Homme. Beads from Ugarit, called carnelian but are amber (p. 212, no. 207).

**Foster, Catherine Painter**
2009 Household Archaeology and the Uruk Phenomenon: A Case Study from Kenan Tepe, Turkey. Ph.D. dissertation. Department of Near Eastern Studies, University of California, Berkeley. The domestic modes of production and consumption for four chronologically distinct 4th-millennium households at Kenan Tepe are identified through the analysis of domestic artifact trends and intensive microdebris sampling. Beads of various materials are mentioned throughout the text.
Francis, Peter, Jr.


A report on the museum’s collection of ca. 700 excavated beads, ca. 5th-13th centuries, including information on materials, manufacturing technique, and uses.


A more popular account of the Nishapur beads in the collections of the Metropolitan Museum of Art in New York.


On the recent history of glass beadmaking in Cairo (Egypt), Hebron (Palestine), and Turkey.


Beads from four sites involved in the Early Islamic trade (7th to 12th centuries) represent the role that the Muslim world played in the Indian Ocean trade.


Contains much interesting information from historical sources on trade with various northern and western parts of Africa and on Hebron (Palestine), Fustat (Egypt), Tyre (Lebanon), Damascus (Syria), Herat (Afghanistan), and other manufacturing centers.


A book with a broad scope. In addition to the production, use, and provenance of beads involved in Asian maritime commerce, this book examines the importance of the bead trade for the economies of the countries involved and provides insights into the lives of its many participants: artisans, mariners, and merchants. Includes a chapter on Middle Eastern glass beads.

The beads from the Awad collection of artifacts from Fustat in Old Cairo, Egypt, are not entirely homogeneous, but for the most part can be attributed to the Fustat or Early Islamic Period, 7th-12th centuries. They provide additional information about beadmaking and importing at this time.


An appendix to the final excavation report on an 11th-millennium-BC cemetery and contemporary nearby settlement site in Iraqi Kurdistan. It deals with stone and bone beads, followed by a section dealing with drilling technology. Most of the stone beads were simple plain pink calcite discoids, but a single greenstone (described as jade) triple spacer was also found. The bone beads were mostly tubular, and the process of making these is carefully described.


2001 New Symbols of a New Power in a “Royal” Tomb from 3000 BC Arslantepe, Malatya (Turkey). *Paleorient* 27(2):105-139.

A tomb in eastern Anatolia raises questions about connections with the Caucasus and/or Transcaucasia. It contained beads of gold, silver, copper, carnelian, and rock crystal. More than 100 small cylindrical limestone beads around the man’s head and chest were perhaps sewn onto a garment or veil (pp. 108-111, 121).

**Fransolet, André-Mathieu**


On the mineralogical identification of two stone beads from a Bronze Age tomb in Syria.

**French, David**


Includes a discussion of the beads, pendants, plaques, and other ornaments recovered from a Chalcolithic site in central Turkey.
Frifelt, Karen
Some 13,000 beads were recovered from an island site off Abu Dhabi, UAE: mostly very small, probably sewn onto clothing. Interesting discussion of materials, both local (“talcose steatite”) and imported.

1995 *The Island of Umm an-Nar, Volume 2: The Third Millennium Settlement.* Aarhus University Press.
Perforated *Conus* and *Strombus* shells were found at a late-3rd-millennium coastal site, UAE. Evidence for beads was surprisingly rare (pp. 117, 120, 225).

A hoard of some 250 beads (mostly glass but also carnelian, agate, alabaster, amethyst, crystal, turquoise, coral, and shell) and some 100 stray finds were recovered from Islamic contexts at Qala’at al-Bahrain (pp. 151-154, figs. 309-319, color. pl. 4).

Frish, B., G. Mansfield, G. and W.-R. Thiele
Late Bronze Age frit and faience beads (pp. 79, 111f.), Lebanon.

Fritz, V. and A. Kempinski

Gabolde, Marc
Discusses Tutankhamun’s broad collar as well as necklaces, collars, and ornaments which are more or less related to his burial jewelry. Ancient Egypt.

Galter, Hannes D.
Provides a list of cylindrical beads that bear Assyrian royal inscriptions, including curses, and provides their translations.
Gansell, A.R.
Assemblages of adornments (including many well-known bead items) are used to interpret the social and ritual identities of the dead and begin to clarify dynamics of group and individual identity at Ur in Iraq.

Garfinkel, Y.
Discusses Neolithic stone beadmaking at a site in northern Israel.

Deals with the ritual burial of cultic objects in the Near East during the Neolithic and Chalcolithic periods. These items are not grave goods associated with human burials but objects buried on their own because of their ritual significance. A cave of Pre-Pottery Neolithic B date had a “very rich collection of beads” deposited along with other objects.

Discusses Neolithic stone beadmaking at a site in northern Israel.

Gates, Marie-Henriette
The final season on the Late Bronze Age shipwreck off Uluburun (Kaş) “increased the previous collection by the thousands:” beads of faience, agate, ostrich eggshell, quartz, steatite, amber, and chalcedony.

Gebel, Hans Georg K., Marion Benz, Christoph Purschwitz, Hala Alarashi, Joachim Bauer, Julia Gresky, Blair Heidkamp, Bellal Abuhelaleh, Lucia Miškolcová, Arnica Kessler, Barbora Kubíková, Denis Štefanisko, Martin Strauss, and Kai Wellbrock
The principal ornament recovered was a complex necklace of stone and shell beads with a mother-of-pearl ring as a center piece (p. 22). Individual beads were also found (p. 33).

Gensheimer, T.R.
Shell artifacts, including beads, from major Mesopotamian sites of the 4th and 5th millennia BC are critically reexamined in terms of their role in Mesopotamian contexts and their value as indicators of external trade/exchange contacts.

Getzov, N.

Gibson, McGuire, Muhammad Maktash, Judith A. Franke, Amr Al-Azm, John C. Sanders, Tony Wilkinson, Clemens Reichel, Jason Ur, Peggy Sanders, Abdillah Salameh, Carrie Hritz, Brigitte Watkins, and Mahmoud Kattab
2002 First Season of Syrian-American Investigations at Hamoukar, Hasekeh Province. *Iraq* 64:45-68.
Fluted double-conoid, trilobate, and unspecified other faience beads have been uncovered in Northern Middle Uruk (ca. 3700-3500 BC) contexts, plus unspecified shell, stone, and thousands of minute bone beads found in a cache (pp. 50, 53, 58).

Gibson, M., R.L. Zettier, and J.A. Armstrong
Describes a post-Kassite burial in Iraq with hundreds of beads, including frit, stone, and copper (p. 182, fig. 23).

Golani, Amir
Reports on the beads of stone, bone, shell, and siliceous materials (faience, Egyptian Blue, and glass) from Bronze and Iron Age tombs.

Beads and pendants were made of the following materials: glass, faience, shell, stone, bone, and ivory.


Located in Israel, the site yielded a variety of beads and pendants of siliceous materials, stone, bone/teeth, and shell. They date to the Late Bronze and Iron ages.
2013  Jewelry from the Iron Age II Levant. Orbis Biblicus et Orientalis, Series Archaeologica 34; https://www.academia.edu/3995425/.
Provides a handy typological structure for jewelry classification as well as a comprehensive and useful catalog for research. In addition, it illustrates the significance, meaning, and functions of jewelry and the development of the jeweler’s craft in the southern Levant during the 1st and 2nd millennia BCE.

As protective amulets, the symbolic potency of the cowrie form was enhanced when it was duplicated in other materials that were often ascribed symbolic meaning of their own. As the form of the shell and not the shell itself was of significance, the use of other materials of symbolic power to produce the cowrie form served to emulate and enhance the cowrie’s amuletic protective powers.

The site produced beads and pendants of various materials including metal, faience, glass, bone, shell, stone, and terra cotta. It was occupied during the Middle and Late Bronze Age, the Iron Age, and the Persian period.

Presents a detailed discussion of the beads and pendants recovered from an Iron Age site in Israel. Materials include stone, bone, shell, terra cotta, faience, and glass.

Golani, Amir and David Ben-Shlomo
Discusses the beads and pendants of various materials recovered from Tel Ashdod, an Iron Age site in Israel.

Golani, Amir and Ehud Galili
2015  A Late Bronze Age Canaanite Merchant’s Hoard of Gold Artifacts and Hematite Weights from the Yavneh-Yam Anchorage, Israel. Journal of Ancient Egyptian Interconnections 7(2):16-29.
Beads were among the gold objects found in sunken ship’s cargo.
Golani, Amir and Benjamin Sass  
This Iron Age site in Israel yielded 24 silver beads which may be divided into four specific types: granule beads (type 1.1), spiral wire beads (type 1.2), hollow spacer beads (type 1.4), and decorated, spherical, hollow beads (type 1.6).

Golani, Amir and Zuzanna Wygnańska (eds.)  
Presents 12 articles dealing with ornaments, principally beads. The individual articles are listed elsewhere in this bibliography.

Gorin-Rosen, Yael  
2009  Glass Artifacts from Tomb 7 at Fardisya (East). *Atiqot* 61:75-82.  
The recovered glass beads include flower-shaped, gold-glass, simple, and polygonal. There were also two stone beads. Israel. In Hebrew with an English summary.

Gorin-Rosen, Yael and Natalya Katsnelson  
Several types of glass beads attributed to the 4th-5th centuries and three possible faience beads were recovered from a site in Israel.

Goring-Morris, Nigel  
Terminal Pleistocene hunter-gatherer marine mollusc assemblages in the Negev and Sinai display a relatively conservative development, whether in terms of the major species represented, their relative frequencies, or their modification. This agrees with lithic studies indicating considerable sociocultural continuity, notwithstanding cultural input from various directions and the identification of various specific groups through time. Israel, Egypt.

Gourley, Dale R.  
Discusses the technology and production of these beads, based on findings from archaeological excavations.
Grajetzki, Wolfram
Discusses body chains – strings of beads worn crossed over the chest. They are best known in
the late Middle Kingdom, ca. 1850 to 1650 BC, but there is evidence that they were already
worn in the First Intermediate Period. They are also attested in the New Kingdom and later.

2014 Tomb 197 at Abydos, Further Evidence for Long Distance Trade in the Middle Kingdom. *Ägypten und Levante / Egypt and the Levant* 24:159-170.
While this article discusses all the beads and other objects found in the tomb, the emphasis is on
an etched carnelian bead that was produced in either the Indus Valley or Mesopotamia and dates
to the late Middle Kingdom of Ancient Egypt.

2014 *Tomb Treasures of the Late Middle Kingdom: The Archaeology of Female Burials.*
University of Pennsylvania Press, Philadelphia.
Beads and pendants as components of various items of female adornment are mentioned
throughout the book. Ancient Egypt.

Green, Jack
2011 The Beads and Pendants. In *El-Ahwat: A Fortified Site from the Early Iron Age Near
Leiden.
Materials include glass, faience, stone, amber, bone, shell, and terra-cotta.

Green, John D.M.
2013 Social Identity in the Jordan Valley during the Late Bronze and Early Iron Ages:
Evidence from the Tall as-Sa‘idiyya Cemetery. *Studies in the History and Archaeology of
The cemetery provides a rich set of archaeological data with which to examine changing aspects
of social identity in death between the terminal Late Bronze Age and Early Iron Age (ca. 1250-
800 BC). This study focuses on “personal” assemblages from the cemetery, particularly clothing
attachments, jewellery, and beads associated with individuals of different age, gender, and status
groups, and examines aspects of identity expression over time.

Groman-Yaroslavski, Iris, Danny Rosenberg, and Dani Nadel
2013 A Functional Investigation of Perforators from the Late Natufian/Pre-pottery Neolithic A
Site of Huzuk Musa – A Preliminary Report. In *Stone Tools in Transition: From Hunter-
Gatherers to Farming Societies in the Near East*, edited by Ferran Borrell, Juan José
Ibáñez, and Miquel Molist, pp. 165-176. Universitat Autònoma de Barcelona, Servei de
Publicacions.
Reports on the analysis of the large collection of flint perforators, beads, and bead production
waste found at a site in Lower Jordan Valley, Israel.
Groman-Yaroslavski, Iris and Daniella E. Bar-Yosef Mayer
Use-wear analysis applied to two carnelian beads from the Middle Pre-Pottery Neolithic B period in southern Israel revealed a manufacturing procedure that corresponds to genuine lapidary technologies of contemporary traditional societies.

Grosman, Leore, Natalie D. Munro, Itay Abadi, Elisabetta Boaretto, Dana Shaham, Anna Belfer-Cohen, and Ofer Bar-Yosef
The majority of the personal ornaments recovered from the site are shell beads, mainly disc and cylindrical. Two double-holed greenstone pendants (or buttons) were also recovered. Israel.

Gubenko, Natalia and Avraham Ronen
Finds include greenstone beads, and shell and bone pendants.

Güçur, Sevil
More on this Bronze Age wreck off the coast of Turkey, but this time in German. Faience bicones were perhaps used as pinheads (fig. 17a).

Gündoğu, Hamza
A very important study of a little-known craft tradition based in the northeastern Anatolian region of Oltu, Turkey, since the late 18th or early 19th century and still employing up to 6,000 individuals. The beads are usually strung on rosaries but were also sewn onto clothing. The raw material is extracted from local mines and the working is carried out in specialist workshops.

Günyol, Gülçin
Reports on the beads of shell, stone, and bone recovered from a site in southeastern Turkey and compares them to material from the Levant. English abstract.
Hachlili, Rachel
In most cases, only single beads were placed with the deceased. Israel.

Haddow, Scott D. (ed.)
Chapter 30 deals with the beads recovered during the 2017 season at large Neolithic and Chalcolithic settlement in southern Anatolia, Turkey.

Haddow, Scott D., Christina Tsoraki, Milena Vasić, Irene Dori, Christopher J. Knüsel, and Marco Milella
Reports on three human teeth from Neolithic Çatalhöyük (7100-6000 cal BC) that appear to have been drilled for use as pendants.

Haerinck, Ernie and Bruno Overlaet
The final report on two cemeteries in Iran. Beads were generally rare although a total of 115 chlorite (?) and two dentalium beads were found in one grave. Other reported materials comprise agate, carnelian, black chlorite, and an unidentified gray stone (pp. 24-25, pl. 54).

The final report on a cemetery in Iran. Beads were found in 8 of the 41 excavated graves: carnelian predominated but frit, glass paste, bronze, silver, ceramic, and unidentified stone beads, perforated shell discs, and a single glass eye bead were also recovered.

Shells beads are among the finds at two cemeteries in Iran.

The finds include shell beads.

The recovered beads are composed of stone (primarily carnelian and limestone), shell, bone, and metal (copper/bronze and silver); western Iran.

Beads were present in a large number of the tombs. Materials include various stones and shells, glass paste, and metal; western Iran.

2010  *Luristan Excavation Documents VIII: Early Bronze Age Graveyard to the West of the Kabir Kuh (Pusht-i Kuh, Luristan).* Acta Iranica 50.
Discusses the beads from Early Bronze Age I-III and IV contexts at a cemetery in western Iran.

2013  *An Early Bronze Age Tomb near Khorramabad (W-Iran).* Herzfeld’s Gilviran Revisited. *Iranica Antiqua* 48:39-76.
Provides details on the tabular and biconical agate beads found at Gilviran in western Iran.

**Hafsaas, Henriette**
Beads, pendants, and amulets were uncovered at various sites in southern Egypt occupied by C-Group people. Materials include faience, stone, bone, ivory, metal, and ostrich eggshell. Of interest is a remnant of a thin leather girdle decorated with beads in a lozenge pattern and a waistband consisting of a triple row of beads around the pelvis and waist of a woman buried at Ashkeit.

**Hakemi, Ali**
1997  *Shahdad: Archaeological Excavations of a Bronze Age Center in Iran.* Istituto Italiano per il Medio ed Estremo Oriente, Reports and Memoirs 27.
Presents charts of the shapes of agate/carnelian, lapis lazuli, gypsum, and metal beads (pp. 655-658). Descriptions and illustrations by grave group, *passim*.

**Hall, Erin**
2016  *Hoard at Tel Megiddo in the Late Bronze Age and Iron Age I.* M.A. thesis.
Department of Archaeology and Ancient Near Eastern Cultures, Tel Aviv University.
A hoard at a site in Israel contained 152+ beads of stone, faience, and metal as well as 2 carnelian pendants.

**Hamilton, Naomi**
Presents detailed analyses of the 1,000+ beads recovered from a very large Neolithic and Chalcolithic settlement in southern Anatolia, Turkey. The materials include dentalium and other marine shells, rare exotic stones such as serpentine, apatite and carnelian, and even metal (lead and copper), all imported to the site. Clay beads were presumably made on-site. There is evidence for bead manufacture. Materials identification in Jackson (2005).

**Hankey, Vronwy**

Discusses 176 beads of local types and materials: stone, amethyst (probably Middle Kingdom Egyptian), lapis lazuli, shell, and glass (pp. 175-177); 14th century BC, Jordan.

**Harper, Prudence O., Evelyn Klengel-Brandt, Joan Aruz, and Kim Benzel**

Separate entries by Joan Aruz, Kim Benzel, and Ralf-Bernhardt Wartke describe and catalog beads (some reused from earlier periods) that were found in rich Old Assyrian and Middle Assyrian graves in Iraq (pp. 44-47, 50-55, 92-97, color. pls. 5-6, 9-11).

**Harper, Richard P.**

A small number of holed shells, glass beads, and a gold-glass bead were found. Israel.

**Harrell, James A.**

This survey builds on the work of Nai Xia (2014) and offers summaries on two aspects of stone beads: 1) the relative amounts of rock and mineral varieties used during each period of Egyptian history; and 2) the changes in bead form, perforation, and polish through time for broad categories of stone.

**Harrison, R. Martin and L.B. Hill**

The site of a 6th-century church in central Istanbul, Turkey, produced numerous small finds including glass beads.

**Harrison, Timothy P.**
Provides brief descriptions of the beads and pendants of various materials recovered from Stratum VI at Megiddo which represents the initial Iron Age (or Iron I) settlement. Israel.

**Hauptmann, A., J. Lutz, E. Pernicka, and Ü. Yalçın**
Brief mention on p. 543 of the mis-identification of bead material from Çatal Hüyük, Turkey, in 1967, as lead.

**Hawass, Zahi**
Describes and illustrates the tomb of an Egyptian priest dating from around 500 BC. The mummy was covered with a beaded shroud made of a great number of glazed (faience) beads.

**Al-Hayyani, Hafidh Hussein**
Article in Arabic on finds made in the earliest of the Late Assyrian capitals in northern Iraq. Most were from intramural graves but others were apparently from occupation contexts. Among the illustrated material are re-strung cowries, a single *Engina mendicaria* shell, collared and spherical gadrooned beads (both presumably faience), large faience rosettes (presumably Middle Assyrian), and plain and banded cylindrical, elongated barrel, and lozenge-shaped beads, most probably chalcedony.

**Healey, Elizabeth and Stuart Campbell**
Attempts to determine whether beads and other obsidian ornaments were produced at two sites (Domuztepe and Tell Arpachiyah) in Turkey and Iraq, or were acquired as finished objects (or both).

**Heimel, W.**
On trade conducted by ancient Mesopotamian states with lands of the Persian Gulf and India. *See* pp. 51f. for lapis lazuli, carnelian, and other stones used for beads.

**Heimpel, W.**
Syria: new readings of 18th-century BC Mari texts suggest necklaces with white and red beads shaped like termites and flies.

**Hellyer, P.**
Illustrates assorted beads from a 3rd-millennium tomb at Sufouh (p. 54), a necklace and disc carnelian beads from a tomb at Dhayah II in Ras al-Kbaimah (p. 70), and banded beads from a tomb at ed-Dur (p. 109), UAE.

**Herrmann, C.**
Discusses molds for standard types of ancient Egyptian faience amulets and drop and date-shaped beads.

**Herzog, Ze’ev**
1985 *Beer-Sheba II: The Early Iron Age Settlements.* Tel Aviv University, Publications of the Institute of Archaeology 7.
A few beads from this site in Israel (pl. 14).

**Herzog, Ze’ev, George Rapp, Jr., and Ora Negbi**
1989 *Excavations at Tel Michal, Israel.* Monograph Series of the Institute of Archaeology of Tel Aviv University 8.
Tel Michal was probably a maritime station for military or commercial use during its periods of occupation, which extended intermittently from the Canaanite period (Middle Bronze Age II, about 2000 BCE) throughout the early Arab Period (9th century CE). Describes the recovered beads and pendants.

**Higuchi, T. and T. Izumi (eds.)**
Agate, silver, bronze, frit, plain, mosaic, and gold-glass beads in a variety of forms (pp. 84-86).

**Hodgkinson, Anna K.**
Deals with the beads and other adornments of glass, faience, and agate from a beadmaking site in Egypt.
Another article on the excavation and finds at the el-Amarna workshop.

**Hoffmann, Birgitta**

**Hoffmann, Birgitta, C. Tagart, and D. Mattingly**
On beads excavated in the Fazzan region of Libya.

**Højlund, Flemming and H. Hellmuth Andersen (eds.)**
Biconical burnished red clay beads that imitate agate/carnelian were found in Early Dilmun contexts. Isolated beads, usually biconical or cylindrical carnelian and greenish or turquoise faience, were found interred with Achaemenid-period snake burials in the Late Dilmun palace. Pierced pearls, spherical and biconical carnelian, single agate and quartz beads, a modified Conus ring, and a variety of colored glass beads were found with Achaemenid burials in the same excavation. Bahrain.

**Holland, Thomas A.**
The beads and pendants (category SF.4.b-c) are described by period: Bronze Age, Hellenistic, and Roman.

**Hoofien, Roni**
2018  The Bead Assemblage of Tel Azekah as a Means for Understanding Trade and Cultural Connections from the Early Bronze Age to the Hellenistic Period. M.A. thesis. Department of Archaeology and Ancient Near Eastern Cultures, Tel Aviv University.
Twenty-five raw materials were recorded through chemical and optical means, as well as by the interpretation of literary, historical, and scientific sources. The origins of most of the materials were traced to Egypt and Mesopotamia, while a few may have come from Jordan, the Indus Valley, Cyprus, Israel, and even from the area surrounding Tel Azeka. In Hebrew with English abstract.
Horn, Maarten


Beads and pendants of various materials are among the items discussed.


Attributed to the period from the second half of 5th to the end of 4th millennium BC, the green jasper pendant is believed to have functioned as an amulet related to malachite.


Several beads and pendants found in Badarian graves in the Qau-Matmar region of Middle Egypt formerly identified as turquoise are actually glazed steatite.


Provides evidence – including elements of Tasian and Badarian burial dress such as beads and pendants – that the Tasian-Badarian divide in the Qau-Matmar region of Middle Egypt is no longer tenable.


2002  The Archaeozoology of Three Early Bronze Age Sites in Nahal Besor, North-Western Negev. In In Quest of Ancient Settlements and Landscapes, edited by E.C.M. van den Brink and E. Yannai, pp. 107-133. Ramot Publishing, Tel Aviv.

The material includes Conus shell beads. Israel.

Hussein, Muzahem M. and Amer Suleiman


A full report in English and Arabic, illustrated throughout in color, on the spectacular finds from Assyrian queens' tombs excavated at Nimrud between 1988 and 1992. The beads are mostly gold but include carnelian, agate, faience, and (reused) etched carnelian. Iraq.

Hüttner, Michaela

Objects in the Ancient Egyptian collection of the Kunsthistorisches Museum Wien include beads (pp. 10-13) and beadwork amulets (pls. 5, 11).

Ibrahim, M. and R.L. Gordon
1987 A Cemetery at Queen Alia International Airport. Yarmouk University Publications, Institute of Archaeology and Anthropology Series I.
Construction uncovered graves of Arab nomads in Jordan with Roman connections of the late 2nd to early 3rd centuries AD. Beads in many materials passim.

Ibrahim, M. and N. Qadi
Discusses 1,000 stone beads, mostly thin discoids, from an Early/Middle Bronze Age tomb in Jordan.

Ilan, David
1992 A MBA Offering Deposit from Tel Dan and the Politics of Cultic Gifting. Journal of the Institute of Archaeology of Tel Aviv University 19(2):247-266.
A brief but admirably detailed publication on 48 Middle Bronze Age beads: carnelian, frit, and rock crystal (pp. 256f., figs. 9-10); Israel.

Ilan, David, Pamela Vandiver, and Maud Spaer
A detailed study of a spherical bead of translucent light green glass that appears to be the earliest glass find recovered so far in Israel. The specimen is attributable to the 1st or 2nd century of the 2nd millennium BC.

Ingram, Rebecca Suzanne
2005 Faience and Glass Beads from the Late Bronze Age Shipwreck at Uluburun. M.A. thesis. Texas A&M University, College Station.
The cargo of the Bronze Age (late 14th century BC) Uluburun shipwreck, Turkey, included approximately 75,000 faience beads and 9,500 glass beads which are thoroughly studied.

Offers an introduction to the faience and wound glass beads found on the shipwreck (late 14th century BC) at Uluburun, Turkey, with an emphasis on manufacture and their role aboard the ship.
Inizan, Marie-Louise
2000 Importation de cornalines et agates de l’Indus en Mésopotamie: Le cas de Suse et Tello.
Discusses the importation of carnelian and agate bead from the Indus Valley to Mesopotamia based on material recovered from two sites in Iraq and Iran, with notes on manufacturing technology.

Inizan, M., M. Jazim, and F. Mermier
Initial data on the hand crafting of carnelian in Yemen.

Insoll, Timothy
Excavations at two mosques of the putative Early Islamic capital of Bahrain, in the area known as Bilaad al-Qadim, yielded beads of agate/carnelian, garnet, hematite, lapis lazuli, glass, frit, wood, and pearl. The total occupation period ranges from the 8th or early 9th century to the 13th-14th centuries. Appendix 7.5 provides a catalog of the beads and pendants; Appendix 7.6 discusses XRD analysis of selected beads.

Iob, Agnese
Deals with usekh collars in funerary wall reliefs and paintings from the Old to the New Kingdom, Ancient Egypt. Many of the collars incorporate beads of gold and faience.

Jackson, B.
Complements Hamilton (2005).

Jackson-Tal, Ruth E.
Eye beads and head-shaped pendants are discussed with numerous references to find spots in the region.
Round, square, biconical, rectangular, squat, ribbed, and cylindrical glass beads were recovered from a tomb in Israel, along with one stone and one faience bead.

Plain, eye, trailed, and crumb glass beads, as well as faience and stone beads, were recovered at HaGolan Street, Khirbet al-Hadra, Palestine. Late Roman and Byzantine periods.

Describes and illustrates the beads of glass, faience, agate, carnelian, and organic seeds coated with clay found at the Tel Barukh Cemetery, Israel. Late Roman and Byzantine periods.

James, Frances W. And Patrick E. McGovern
1993 The Late Bronze Egyptian Garrison at Beth Shan: A Study of Levels VII and VIII. University of Pennsylvania, University Museum Monograph 85.
The beads recovered from this site in Israel include those made of faience, glass, frit, gold, and stone.

Janssen, Jac J. and M. Rosalind
Tiny copper beads (fig. 1) found inside an Egyptian amulet case. Some mention of other beads.

Jasim, Sabah Abboud
1985 The Ubaid Period in Iraq: Recent Excavations in the Hamrin Region. British Archaeological Reports, International Series 267, I & II.
Frit beads (Part I, p. 69; Part II, figs. 64-65).

Granulated gold beads and a soft-stone bead with dotted circle decoration were found in Parthian graves (pp. 74, 76, figs. 8, 11: 7). UAE.

2012 The Necropolis of Jebel al-Buhais: Prehistoric Discoveries in the Emirate of Sharjah, United Arab Emirates. Department of Culture & Information, Government of Sharjah, UAE.
More than 90 tombs dating from the late Palaeolithic to the Pre-Islamic era were investigated and many contained beads and other ornaments made of various materials including stone, shells, gold, and silver.

**Jasim, Sabah and Eisa Yousif**
2018  
*Bronze Age Tombs from Jebel Faya, Emirate of Sharjah. Annual Sharjah Archaeology*  
15(2nd ed.):10-20; https://www.academia.edu/37806378/.

Tomb FAY NE 21 contained several necklaces composed of metal and stone beads. They are assigned to the Umm an-Nar period (2500-2000 BCE).

**Jean-Marie, Marylou**
1999  
*Tombes et nécropoles de Mari.*  
Institut Français d’Archéologie du Proche-Orient, Bibliothèque Archéologique et Historique CLIII.

Beads of carnelian and gypsum were recovered from the site of Mari in Syria.

**Jensen, Victoria Irene**
2019  

Recovered ornaments include amulets and beads of stone, faience, glass, and pottery. Ancient Egypt.

**Jick, Millicent**
1990  
*Bead-Net Dress from Giza Tomb G7740Z, Old Kingdom Dynasty IV, Reign of Khufu.*  

The only ancient Egyptian bead-net dress extant in the world, now reconstructed at the Museum of Fine Arts in Boston.

1996  
A shorter piece on the dress.

**Joukowsky, Martha S.**
1986  
*Prehistoric Aphrodisias: An Account of the Excavations and Artifact Studies.*  
Archaeologia Transatlantica III.

Some beads of various materials from a site in western Turkey.

**Kampschulte, I. and W. Orthmann**
1984  

Excavations at Tawi, Syria, uncovered graves of the 3rd millennium that contained some beads (p. 112, fig. 33, pl. 42 and *passim*).
Kanawati, N., A. El-Khouli, A. McFarlane, and N.V. Maksoud
1984  *Excavations at Saqqara North-West of Teti’s Pyramid*. Vol. I. Ancient History
Documentary Research Centre, Macquarie University, Sydney.
Beads from Old Kingdom tombs, pp. 60-70 *passim*, Egypt.

Kandel, Andrew W., Knut Bretzke, and Nicholas J. Conard
2018  Epipaleolithic Shell Beads from Damascus Province, Syria. *Quaternary International*
464(A):126-140.
The authors hypothesize that the most common shell ornaments excavated at the three sites investigated (Baaz Rockshelter, Kaus Kozah Cave, and Ain Dabbour Cave) signify group identity. They also posit that unique specimens are an indication of personal identity, standing in contrast to the shared group identity shown by the most common shell taxa.

Karklins, Karlis


Kenoyer, Jonathan Mark and Dennys Frenez
Archaeological collections in Oman were documented to determine the range of variation in the finished objects and if there is evidence for local production of carnelian and other hard-stone beads. A comparative analysis with published materials from other regions was also undertaken to document the bead types that might have been obtained through trade networks that linked this region to Mesopotamia, Iran, the Indus Valley region, Afghanistan, Egypt, and Anatolia.

Kertesz, Trude
Describes beads of faience, frit, glass, stone, bone, and plaster, some earlier Iron Age contexts but mostly from a cemetery of the Persian period (525-300 BC). Many parallels given. See also Mienis (2015).

Kiesewetter, Henrike, Hans-Peter Uerpmann, and Sabah A. Jasim
Agate, anhydrite, carnelian, chert, crinoid, limestone, serpentine, various snail shells, coral, pearls, mother-of-pearl, and marine fossil beads were found associated with 5th-millennium-BC burials in southeast Arabia, UAE. Some beads were worn as pendants but the majority were originally entwined in the hair, or formed part of belts, loincloths, dresses, beaded bracelets, and necklaces.

Kılıç, Sinan

Generally used for ornamental purposes, beads probably had multiple functions in the past depending on their color, shape, and size. Evil-eye and prayer beads are good examples of multifunctional use today, as mentioned in a number of folk legends from eastern Turkey. Beads from archaeological contexts should therefore be analyzed not only typologically but culturally as well.

Killick, R.G. (ed.)
Sixteen plain clay and stone beads (pp. 31-34, fig. 26).

Kirk, Susanna
Focused on the vitreous objects (beads being the most common items) from Nuzi, a mid-2nd millennium BC site in Iraq, this project presents the first large-scale study of the preservation and alteration of Late Bronze Age vitreous materials from the Near East. Includes the results of compositional analysis.

Klebinder-Gauss, G.
2007 Bronzefunde aus dem Artemision von Ephesos. Österreichischen Akademie der Wissenschaften, Forschungen in Ephesos XII(3).
Bronze beads and pendants from the temple of Diana of the Ephesians (pp. 109-133, 221-222), Turkey.

Klengel-Brandt, Evelyn, Sabina Kulemann-Ossen, Lutz Martin, and Ralf-Bernhard Wartke
Syria: Iron Age graves with bead necklaces and armlets of stone, bronze/copper, glass, etc. (pp. 64, 66, fig. 13). Early Bronze Age grave with one rock crystal and three carnelian beads (p. 72f.).

Klimscha, Florian

A sealed vessel containing thousands of beads was found at Tall Hujayrat al-Ghuzlan (ca. 4th millennium BC). Most of the beads were made of shell or stone but steatite beads were also present, as were imported ostrich eggshell beads.

Kloner, Amos and Irit Yezerski
2020 A Late Iron Age Rock-Cut Tomb on the Western Slope of Mount Zion, Jerusalem. 'Atiqot 98; https://www.academia.edu/42303286/.

Grave goods include beads made of various materials, such as black amber, amethyst, carnelian, and shells.

Kochavi, M.

Excavations yielded 224 beads, mostly faience discoid or annular of a type paralleled elsewhere in Late Bronze Age Canaan (pp. xxiii, 43, 42).

Kohlmeyer, Kay and Eva Strommenger

Syria: A hoard of more than 1,000 beads, mostly small vitreous (Fritte), and a few carnelian (p. 52, fig. 6).

Koutsoukou, Anthi, Kenneth W. Russell, Mohammad Najjar, and Ahmed Momani

A small number of Iron Age/Hellenistic and later glass, carnelian (?), and shell beads were reported. Jordan.

Kozlowski, Stefan Karol
2002 Nemrik: An Aceramic Village in Northern Iraq. Warsaw University, Institute of Archaeology, Światowit Supplement Series, P: Prehistory and Middle Ages VIII. A synthetic excavation report on one of the earliest settlements yet excavated in Iraq. The site was not sieved as the intention was to excavate practically the whole village. A small number of
simple shell, stone, and clay beads were recovered, particularly from graves (pp. 84-85, pls. CLIV-CLVII).

Krčmářová, Anna
Attributed to the 6th century BC, the collection of precious and finely crafted jewelry known as the Lydian Treasure contains a number of necklaces composed of gold and stone beads. Turkey.

Kroeper, Karla and D. Wildung
Beads from Pre- and Protodynastic graves near Cairo, Egypt (pp. 89f.).

Kröger, Jens
Describes the 46 glass beads recovered from the splendid medieval city of Nishapur in northeastern Iran.

Ktalav, I. and O. Borowski
2010 Molluscs from Iron Age Tel Halif. Tel Aviv 37:31-39.
Most of the recovered marine shells were holed and/or polished, indicating their use as ornaments and amulets, either as pendants or sewn onto fabric. Many were found in association with a textile-producing workshop.

Kucharczyk, Renata
The site yielded a variety of glass beads as well as stone molds used for shaping drawn collared beads, all attributed to the 4th-6th centuries AD. Egypt.

Küçükerman, Önder
Some odd statements, such as glass beads not being vitreous, but good photographs of beads being made in western Turkey.

Kuhn, Steven L., Mary C. Stiner, David S. Reese, and Erksin Güleç
Two sites located on the northern Levantine coast, Üçagızlı Cave (Turkey) and Ksar ‘Akil (Lebanon), have yielded numerous marine shell beads in association with early Upper Paleolithic stone tools. Accelerator mass spectrometry (AMS) radiocarbon dates indicate ages between 39,000 and 41,000 radiocarbon years (roughly 41,000-43,000 calendar years) for the oldest ornament-bearing levels in Üçagızlı Cave.

Kurzawska, Aldona, Daniella E. Bar-Yosef Mayer, and Henk K. Mienis  
Presents the first step of a project that intends to re-evaluate the role of scaphopod (tusk) shells in prehistoric societies in the Levant.

Kutterer, Adelina U. and Roland De Beauclair  
The remains of three individuals uncovered at a substantial Neolithic graveyard of the 5th millennium BC in the Central Region of the Sharjah Emirate, United Arab Emirates, were richly adorned with different kinds of beads found in the head and neck areas.

Larson, Katherine A.  
Presents a detailed account of the various beads and pendants recovered from a site in Israel. The material spans the period from the Bronze Age to the Arab Period. Materials include glass, stone, shell, and bone.

Lechevallier, M.  
On a small collection of stone beads from a Late Natufian settlement at Hatoula, western Judea, Israel.

Leclère, François  
Section 13 of the catalogue discusses the Jewellery which includes beads and pendants of gold, faience, glass, and stone.

**Lester, A.**
Typological discussion with parallels; Early Islamic cylindrical crystal bead, Crusader glass and carnelian beads, and Late Ottoman glass seed, disc, double-faceted, and painted imitations of marvered beads from a burial (pp. 215-217). Israel.

**Levy, Thomas E., Russell B. Adams, and Adolfo Muniz**
The most ubiquitous grave offerings found in the WFD 40 cemetery were beads strung in necklaces, bracelets, and anklets. They were made from a wide variety of minerals as well as bone, coral, shell, and, very occasionally, glass.

**Lilyquist, Christine**
Discusses a gold necklace which was part of a hoard found at Dilbat, Syria, and attributed to the 17th century BC. Much comparative material.

**Limmer, Abigail Susan**
This study reveals that jewelry communicated information about the wearer by its presence or absence, serving as wealth storage and administrative device, displaying gender and status, and functioning as amulets. The beads and pendants recovered from excavations at several sites in Israel are described in Appendix B; the pendants in Appendix E.

**Limper, Klaudia**
The beads from this site in Iraq range from the Uruk period to the Sassanid. Table 1 provides basic data (shape, material, date). Table 2 provides parallels from other sites. Well illustrated. *See* Potts (1991-1992) for a review.

**Lion, B. and C. Michel**
Comments on insect-shaped beads referred to as *rimmatum* and *zumbum* in texts of the early 2nd millennium BC, Syria.

**Lischi, Silvia**
2011 Le Perle di Sumhuram. M.A. thesis. Department of Archaeology, University of Pisa. Towards a typology for necklace beads of shell, glass, stone, metal, and bone recovered at Sumhuram in Oman. The site was occupied from the 3rd century BC until its permanent abandonment in the 5th century AD.


Discusses the beads recovered from the city of Sumhuram (300 BC-AD 500), an important pre-Islamic settlement in southern Oman.

**Lischi, Silvia and Alexia Pavan**

A condensed version of Lischi (2011).

**Lombardi, Alessandra, Vittoria Buffa, and Alexia Pavan**

Presents detailed descriptions of the glass, stone, and shell beads recovered from Sumhuram in Oman.

**Ludvik, Geoffrey E.**

Demonstrates that bead workshop traditions associated with different regions of the Near East and South Asia could be identified in the corpus of the IBA Southern Levant. This was done by defining 21 groups with discrete suites of similar stylistic, morphometric, technological, and mineralogical characteristics among red-orange carnelian beads.

**Ludvik, Geoffrey, J. Mark Kenoyer, Magda Pieniążek, and William Aylward**

Eighteen carnelian and two rock-crystal beads from the site of Troy, Turkey, were studied to better understand lapidary technology and trade during the 3rd-2nd millennium BC in this part of Anatolia.
**Ludvik, G., M. Pieniážek, and M. Kenoyer**


Discusses the beads found at Hattuša in central Turkey and their production technology. The beads were formed from both soft stone, like serpentine and limestone, and also hard stone like lapis lazuli, rock crystal, and agate, carnelian, and onyx.

**Mahé, L.A., T. Richter, and J.T. Stock**


Traces the cultural and biological developments of the Epipaleolithic period leading up to the Natufian and considers the long-term trajectory of culture change, social complexity, and village life in the Near East. Beads enter into the discussion.

**Maréchal, Claudine**


On the ornaments of the Late Natufian culture, an Epipaleolithic culture that existed from 13,000 to 9,800 BC in the Eastern Mediterranean region.

**Maréchal, Claudine and Hala Alarashi**


Presents a thorough discussion of the beads of stone, shell, bone, and ivory from this site in northern Syria which was occupied between 10,200 and 8,000 BC and is the eponymous type site for the Mureybetian culture, a subdivision of Pre-Pottery Neolithic A (PPNA).

**Markowitz, Yvonne and Sheila Shear**


Gives the archaeological context of the earliest surviving (6th Dynasty; 2675-2194 BC) broad collar and details its construction, materials, and restoration. Ancient Egypt.

**Matoïan, Valérie**


Discusses the beads of glass and Egyptian blue recovered from two building sites in eastern Syria.
Matthews, Roger J.
A grave yielded over 100 beads of various materials, including a green stone axe-shaped bead and carnelian which help to date it to Early Dynastic I (p. 246 and fig. 10).

Matthews, Roger J., W. Matthews, and H. McDonald
Gold leaf, diamond-shaped beads, a lapis lazuli date-cluster bead, and 11 carnelian beads form part of a hoard dating probably to the middle of the Akkadian period (pp. 185-186, fig. 8).

Mattingly, David, Marta Lahr, and Andrew Wilson
Garamantian burials uncovered at the Taqallit headland in Libya were found in association with numerous beads of carnelian, amazonite, garnet, ostrich eggshell, coral, faience and glass. Strings of beads were found in situ on the bodies, permitting an accurate reconstruction of the composition of each necklace or belt, and the order and combination of beads used.

McDermott, LeRoy
Deer-tooth pendants and beads used from the Upper Paleolithic onwards may have symbolic meaning because of the resemblance to breast shape. Do they explain the “multiple breasts” or “necklaces” of Artemis?

McDonald, Helen
An important final publication of mainly mid-2nd-millennium material, specifically plain and decorated glass (fig. 223), frit/faience, including red frit (figs. 224-225), stone (fig. 226), clay, bone, and shell (figs. 236, 239) beads, mostly from the reception room of a small palatial building in northeastern Syria.

McGovern, Patrick E.
Dozens of beads cataloged and classified according to Beck’s system. Includes a section on silicate technology and analytical techniques. Jordan.

The 13th-century levels yielded the largest collection of glass and faience jewelry so far found in Late Bronze Age Palestine – more than 1,500 beads and 300 pendants which perhaps adorned a cult statue.

**McGovern, P.E., S.J. Fleming, and C.P. Swann**


Important article on the typology, manufacture, and composition of some 140 beads from a 17th-16th-centuries tomb in northwestern Iran. The 58 glass and frit beads form one of the earliest sizeable groups of these materials yet found. Made locally?

**McMahon, Augusta**

2009 *Once there was a Place: Settlement Archaeology at Chagar Bazar, 1999-2002*. British Institute for the Study of Iraq, London.

Describes the beads and pendants excavated at a northern Mesopotamian site in Iraq. The primary focus is the early 2nd millennium BC (Old Babylonian Period). Materials include faience, shell, stone, and clay.

**McMahon, Augusta (ed.)**


Descriptions of the beads recovered from this major site in Iraq are scattered throughout the book.

**Melandri, Ingrid**


Dating to the XII Dynasty, the anklets are composed of lapis lazuli, carnelian, and turquoise beads with gold spacers and claw-shaped pendants inlaid with semi-precious stones.

**Mellink, Machteld**


Mentions beads from various sites and periods (pp. 131-139). Turkey.

**Merpert, N.Ya. and R.M. Munchaev**


Beads in bone, shell, and many kinds of decorative stone, including the most striking necklace yet known from a Hassuna (6th millennium) site.

**Mershen, B.**

Akab-type beads and laurel-leaf-shaped pendants are among the ornaments recovered from coastal sites.

A structured platform of dugong bones had dispersed within it a number of ornaments. Beads made from shells (Spondylus sp., P. margaritifera, Strombus decorus persicus, Ancila sp., etc.) are present, but the most frequent are the tubular beads with angled distal double perforation, of a type which is very rare in other Neolithic sites of the Gulf. Some of these beads are in soft stone (steatite or chlorite).

Cowrie shell and other beads from an extensive cemetery in Israel, 5th-4th centuries BC. In Hebrew with English summary.

Briefly describes and illustrates the Mamluk period (13th-14th centuries) glass beads of wound and drawn construction excavated at a trading site on the east coast of Egypt.

Discusses shell beads made from the opercula of the land snail Pomatias olivieri that have been found at a Neolithic site (9500-6000 BP) in Nahal Oren, Mount Carmel, Israel, as well as at the Late Roman-Byzantine site (about 300-600 C.E.) of Horvat Raqit, in the same mountain range.

Bronze Age burials were accompanied by perforated marine shells of various species.
Corrects the identifications of some of the shell species as published by Kertesz (1989).

**Milevski, Ianir Isaac**
Deals with localized exchange within the southern Levant. Items dealt with include beads and pendants of shell, ivory, and stone, particularly, carnelian. Israel.

**Miroschedji, P. de**
Handsome necklace from an Acaemenid burial in Iran with granulated beads discussed in some detail (pp. 31f., fig. 6, Pl. IV:4). Other beads *passim*.

**Mitchell, Stephen**
Buldan, Late Roman, and Byzantine tombs with beads (p. 146); 500+ amber beads were found at the Ephesian Artemision, including many in teardrop shape from large necklaces which perhaps adorned the ancient wooden cult statue and may be the predecessors of the famous “eggs” of the later cult image (p. 150). Turkey.

**Mizrachi, Yonathan, Mattanyah Zohar, Moshe Kochavi, Vincent Murphy, and Simcha Lev-Yadun**
Roughly spherical and ovoid carnelian, wood, and unidentified-material beads from a Late Bronze Age tomb (pp. 184-185, fig. 15), compared to beads from Tell el Ajjul and Qadesh.

**Molist, M., I. Montero-Ruiz, X. Clop, S. Rovira, E. Guerrero, and J. Anfruns**
Numerous burials were accompanied by beads and pendants of shell, stone, bone, and copper. A detailed compositional analysis is presented of the copper specimens.

**Moon, Jane**
Excavation of this settlement (early 2nd millennium BC) in Bahrain produced beads of shell (pp. 176-180) and carnelian, chlorite, and clay (pp. 181-187). All are believed to have been locally made. Woolley’s Ur bead typology was employed for descriptions of shape.

Moorey, P.R.S.
This is the first systematic attempt to survey in detail the archaeological evidence for the crafts and craftsmanship of the Sumerians, Babylonians, and Assyrians in Ancient Mesopotamia, covering the period ca. 8000-300 BC. Bead and pendant materials include faience, glass, metal, stone, and shell.


Morrison, H.M.
A detailed study of the 177 beads excavated at the ancient capital of Hadramaut, Yemen, mainly from tombs of the 1st and 4th centuries AD: 54% glass, plus stone (50% carnelian), copper, gold, frit, ceramic, ostrich eggshell, *Conus*, mother-of-pearl, mollusc, and bone.

Al-Mughannum, A.S. and J. Warwick
Beads in a great variety of shapes and materials, mid-2nd millennium (pp. 20f., pls. 27f.); Saudi Arabia.

Mukherjee, Anna J., Elisa Roßberger, Matthew A. James, Peter Pfälzner, Catherine L. Higgitt, Raymond White, David A. Peggie, Dany Azar, and Richard P. Evershed
2008 *The Qatna Lion: Scientific Confirmation of Baltic Amber in Late Bronze Age Syria.* *Antiquity* 82:49-59.
Analyses reveal the Baltic origin of about 90 amber beads and a small container carved in the shape of a lion’s head, luxury gifts in a royal tomb dated not later than 1340 BC. Few Bronze Age sites in Syria have amber; Qatna now has by far the most. The lion head container was locally carved; some beads were probably also cut locally. Analytical techniques and cultural background are expounded in detail.

Müller, H.W. and E. Thiem
Many beads, not only on necklaces but as elements of other ornaments. Large color photographs.
Müller-Karpe, H.
Hundreds of beads of gold and fine stones from a woman’s grave (fig. 4) in Iraq.

Munchaev, R.M. and N.Y. Merpert
Illustrates some of the rich necklaces recovered from burials from the second half of the 3rd millennium BC at Tell Hazan I in Iraq. Materials include stone, shell, and paste.

Muss, Ulrike
2008 Amber from the Artemision at Ephesus in the Museums of Istanbul and Selçuk/Ephesus.
Much of the material discussed is in the form of beads and pendants from a late Geometric – early Archaic context. Turkey.

Al-Nahar, Maysoon
https://www.academia.edu/8513434/.
Discuss the beads of stone, shell, amber, bone, and animal teeth found at two sites in Jordan.

Al-Najafi, Hazim Muhammad
Assyrian site in the Hamrin Basin region of Iraq containing several graves with various beads summarily reported (pp. 36-37).

Nakai, Izumi, K. Tantrakarn, N. Kato, N. Kawai, A. Nishisaka and S. Yoshimura
Transparent glass is rare in Egypt prior to Ptolemaic times. Consequently, the Saqqara beads (which are attributed to the late Second Intermediate Period or the early 18th Dynasty) may be among the earliest glass objects found in Egypt.

Nayeem, M.A.
1998 *Qatar: Prehistory and Protohistory from the Most Ancient Times (ca. 1,000,000 to End of B.C. Era)*. Prehistory and the Protohistory of the Arabian Peninsula 5.
Color plates and a summary description based on published reports of beads from al Da’sa, Ras Abaruk, al Khor, and al Wusail (pp. 211-217).

Negahban, Ezat O.
1991  *Excavations at Haft Tepe, Iran.* University of Pennsylvania, University Museum Monograph 70.
“Several necklaces” found near a possible workshop area at an Elamite site, ca. 1505-1350 BC, include beads of various shapes made of red carnelian and other stones, frit, and Egyptian blue. One bead is shaped like a fly; another like a squirrel-like animal (p. 113, pl. 56).

Chapter 7 is devoted to Jewelry and Ornaments, and provides a detailed catalog of the various necklaces composed of beads and pendants of gold, carnelian, agate, gypsum, transparent stone, frit, glass, fired clay, shell, bone, and “a black substance.” The site is in northern Iran and dates ca. 3000 BP.

Nigro, Lorenzo
Discusses the restoration of a four-strand necklace composed of beads of carnelian, rock crystal, olivine, frit, bone, shell, copper, and amethyst. The study of the materials has made it possible to determine the supply routes which brought them to the site from the Arabian Peninsula and the Red Sea regions.

Northedge, A., A. Bamber, and M. Roaf
1988  *Excavations at Ána Qal’a Island.* British School of Archaeology in Iraq and Directorate of Antiquities, Archaeology Reports 1.
A few beads, 9th-8th centuries BC and Islamic (pp. 132-134, fig. 57).

Novák, M. and A. Oettel
A Parthian-Roman site in Syria produced two glass face beads (p. 332). One face bead (fig. 14) and a necklace apparently of carnelian, glass, and faience (fig. 21) are illustrated in color.

Oates, David, Joan Oates, and Helen McDonald
2001  *Excavations at Tell Brak, Vol. 2: Nagar in the Third Millennium B.C.* British School of Archaeology in Iraq/McDonald Institute Monographs.
A wide variety of beads was recovered from the site of ancient Nagar in Iraq. Materials include gold, silver, stone (carnelian, lapis, rock crystal), faience, frit, and shell.
Ogden, Jack
Contains an extensive section on necklaces and pendants.

A hoard of gold jewelry dating to the 10th century BC includes several granulated gold beads. Results of the analysis of the gold are also provided.

Oguchi, Kazumi
Detailed typological study with tables and illustrations of over 450 beads found in an early-2nd-millennium-BC (Isin-Larsa) structure at a site on the middle Euphrates in Iraq. Carnelian predominates. Other materials include agate, crystal, amethyst, frit/faience, limestone, alabaster/marble, lapis, hematite, amber, turquoise, green stone, ceramic, and bone. Shell and metal beads are considered separately.

Euphrates Dam rescue site, mostly Isin-Larsa or Old Babylon. Brief mention of bronze and gold beads, including a gold bead of five balls joined to create a segmented bead effect (p. 87, figs. 2, 8a). Iraq.

O’Hea, Margaret
Discusses the beads and pendants recovered from Late Hellenistic contexts at a site in northern Syria. Materials include glass, faience, stone, bone, and teeth.

Ohnuma, Katsuhiko and Hirotoshi Numoto
A Late Assyrian adult burial was accompanied by a bronze ring and a necklace of (reused?) discoid and spherical carnelian beads, discoid faience beads, 8 pierced *Engina mendicaria* shells, and several crystal (?) beads (p. 3, pl. 49a).

Omura, Sachihiko
Annual report on archaeological activity in Turkey. Mentions beads of several shapes (pp. 196-197, fig. 8 nos. 8-12). Hittite, period of the Assyrian trading colonies.

**Overlaet, B.**
Several sites in Pusht-i Kuh, Iran, yielded shell beads.

**Özdoğan, Eylem**
The author believes that more meaningful conclusions will be reached concerning Anatolian beads if they are evaluated on the basis of settlements or by focusing on aspects such as individual raw materials, technology, shape, or distribution.

**Özdoğan, M. and H. Parzinger**
The first-named site is Early Neolithic and was manufacturing beads of *Spondylus* shell and malachite before copper began to be exploited. This is the first malachite workshop known in the region, an interesting industry in the archaeologically little-explored region which bridges Europe and the Middle East. Turkey.

**Özgen, I. and J. Oztürk**
Beads reportedly from Lydian tombs at Usak, Turkey: cylindrical and barrel beads of carnelian and banded onyx strung with triangular carnelian and onyx pendants with flat rectangular carnelian spacers; gold granulated beads, tapered reddish-brown stone and lapis lazuli (mistaken for blue glass) beads set as acorn pendants; and a banded agate bead with twisted gold suspension loop, paralleled at Sardis.

**Özgüc, Tahsin and Raci Temizer**
Discusses two treasures hidden in pots under the house floor by their Early Bronze Age owner. The beads are mostly gold and silver with some carnelian and rock crystal; also some quadruple spiral beads. Parallels with other Anatolian sites suggest trade. Turkey.
Panini, Augusto
2007  *Middle Eastern and Venetian Glass Beads: Eighth to Twentieth Centuries.* Rizzoli
Showcases selected specimens of glass beads acquired in West Africa, primarily Mali. The beads
– illustrated in over 700 color images – are divided into two groups based on their likely place of
origin: Eastern Mediterranean and Middle East, and Venice. See Karklins (2008) for a review.

Papadopoulou, Vassiliki
2017  *Shell Ornaments and their Distribution in Northwestern Anatolia during Late Neolithic
and Early Chalcolithic Periods (Mid-7th to Mid-6th Millennia B.C.): The Case of the
Settlements of Aktopraklik Höyük and Barcin Höyük.* M.A. thesis. International Hellenic
University, Thessaloniki, Greece.
Discusses the shell beads and pendants found at two sites in western Turkey, including
manufacturing techniques and trade networks.

Parker, Bradley J., Catherine P. Foster, Jennifer Henecke, Marie Hopwood, Dave
Hopwood, Andrew Creekmore, Arzu Demirerger, and Melissa Eppihimer
2008  *The Upper Tigris Archaeological Research Project (UTARP) and the Curtiss T. and
Mary G. Brennan Foundation: A Preliminary Report from the 2005 and 2006 Field
Seasons at Kenan Tepe.* *Anatolica* 34:103-176.
A site in southeastern Turkey yielded a small ceramic pot filled with metal coils and beads of
shell, rock crystal, and bone. The find is attributed to the Middle Bronze Age.

Patch, Diana Craig
Many of the adornments discussed (such as necklaces, broad collars, bracelets, and amulets)
incorporate beads of various materials. Ancient Egypt.

Payne, Joan C.
Good descriptions of beads in many materials, including organic, threaded on linen and hair (pp.
203-217). Glazed carnelian is a surprise, as is the rarity of faience. Ancient Egypt.

Paz, Sarit
The Institute of Archaeology of Tel Aviv University, Salvage Excavation Reports 8;
https://www.academia.edu/12866009/.
Discusses the beads recovered from several burial caves near Tell ‘Ara, Israel, that date to the
Middle and Late Bronze Age.
Peck, William
On the use of single biconical carnelian beads as amulets in ancient Egypt.

Pellegrino, Maria Paola, Michele Degli Esposti, Marilisa Buta, Enrica Tagliamonte, and Salah Ali Hassan
Beads dominate the ornament group and were made of faience, clay, shell, gold, and various types of stone. The site was occupied from the end of the Wadi Suq period (2000-1600 BC) to the first phases of the late pre-Islamic period (250 BC-AD 400).

Peltenburg, E.J.
Gold, silver, rock crystal, carnelian, shell, and vitreous-material beads from Early Bronze Age tombs.

Finds include a necklace of disc, barrel, biconical, and globular beads made of faience and an unidentified black material found in a late-3rd-millennium tomb.

Peyronel, Luca
Detailed discussion of a bead from an Early Bronze Age site in northern Syria likely imported from India.

Pfalzner, P.
The Middle Bronze Age tomb at Qatna contained bodies that had been interred fully dressed, with hundreds of gold and glass beads. The funerary rituals have been analyzed in detail, since the tombs were unlooted.

Pic, M.
Shell rings and pendants were found in a tomb of the mid-3rd millennium BC excavated in Syria in 1923. Assorted other beads from other contexts are also cataloged.

**Pieni\'\'\'\'j\'\'z\'\'ek, Magda**


Discusses selected examples of jewelry from Troy VI and VII (18th-11th cent. BC), Turkey. Beads include those of faience, carnelian, rock crystal, and glass.


Discusses the body and dress ornaments (beads included) from the Northern Aegean: their socio-political context, repertoire, meaning, and function, based on selected examples. Turkey.


Discusses the cross-cultural connections in the northern Aegean area in the Late Bronze Age, as seen through the prism of personal jewelry (including beads of various materials). Special attention is given to the eastern part of this area, in particular two sites: Troy and Beşik-Tepe, Turkey.

**Pieni\'\'\'\'j\'\'z\'\'ek, Magda and Ekin Kozal**


Middle and Late Bronze Age sites in Turkey and Greece have yielded a great number of dress and body ornaments made of glass, faience, frit, stone, semiprecious stone, metal, ivory, shell, and clay. This article discusses selected aspects related to the meaning and origin of the ornaments, their local production, and role in interregional trade networks and fashions between the Aegean and Mesopotamia.

**Piller, Christian Konrad and Ali Mahfroozi**

Describes the beads and pendants recovered from Late Bronze Age/Early Iron Age contexts at the site. The principal materials are frit and glass, but metal, stone, shell, bone, and jet ornaments are also present.

**Pinch, Geraldine**
A whole chapter on beads (including an unique reed-packet type) describing how various kinds were strung and used in ancient Egypt.

Not only red; see p. 183 for remarks on the blue and green colors of many beads.

**Pinder-Wilson, R. H. and G.T. Scanlon**
Seven barrel-shaped beads decorated with opaque colored threads, ca. AD 900, from excavations at Fustat (Old Cairo), Egypt.

**Pinnock, Frances**
Levels dated 2350-2300 BC yielded 1,045 beads of 14 types, all similar to those from neighboring regions except for one group, which perhaps were part of priestesses’ insignia. Syria.

**Piperno, Marcello**
Beads are used as one of the indicators of relative wealth and social position in a cemetery of the third millennium BC in Iran.

**Pisan, Alessandra, Paolo Biagi, and Giorgio Gasparotto**
Some 374 beads of stone and marine shell were recovered. This paper discusses the chronology, typology, raw materials, manufacturing techniques, and circulation along the southern coast of the Arabian sea during the 5th millennium BP.
Platt, Elizabeth E.

Presents a good overview of the ornaments (beads included) utilized in the Levant region from the stone age to the Arab period.

Politis, Konstantinos D.

Selected beads recovered from Middle Bronze Age cairn tombs are illustrated.


Discusses the beads recovered from Early Bronze Age I, Middle Bronze Age IIA/B, and later contexts.

Pollock, Susan
1987 Abu Salabikh, the Uruk Mound 1985-86. *Iraq* XLIX:121-141.

A few beads are mentioned, mostly shell (pierced univalves) but also one of lapis lazuli (p. 140).


Discusses the social and religious significance of the graves which produced famous assemblages of beads. Iraq.

Popper-Giveon, Ariela

Deals with the recent change in the function and appearance of Bedouin healing beads from handmade, rare, and unique beads to cheap, mass-produced items.

Porat, L.

Five faience beads from a mid-4th-century burial cave in Israel are illustrated on p. 84.

Porter, A.

A mid-3rd-millennium grave in Syria contained over 100 frit, shell, stone, and bone beads, including nine mold-made frit beads representing stylized human faces (p. 9, figs. 9-10).
Postgate, J.N.
Early Dynastic grave with lapis lazuli, carnelian, and frit beads, and a triple spacer (p. 97).

Potts, D.T.
A hoard of jewelry from eastern Saudi Arabia includes gold granulated and stone beads, Hellenistic, ca. 200 BC (?) (pp. 56-67). Agate, carnelian, and frit/faience beads (pp. 67-69, fig. 104).

https://www.academia.edu/9623616/.
A prehistoric mound in the Emirate of Umm al-Qaiwain, U.A.E., yielded a variety of stone beads and pendants, including engraved specimens. They are attributed to the Wadi Suq Period (p. 55) and the Iron Age (pp. 95 and 104).

https://www.academia.edu/17584709/.

Early Bronze Age site Tell Abraq in the United Arab Emirates (UAE), in a land known to Sumerians as Magan, has yielded hundreds of beads of agate, carnelian, paste, steatite, shell, bone, and gold. The few illustrated promise interesting information in the eventual full report. Tin trade linked the site with Bactria, Iran, Elam, Mesopotamia, and the Indus Valley.

Discusses some of the less well-known evidence attesting to the existence of diplomatic links between South Arabia and Assyria in the 7th century BC. Inscribed beads enter into the equation.

Potts, D.T., L. Weeks, P. Magee, E. Thompson, and P. Smart
A perforated cowrie shell (*Cypraea clandestina*) came from a small Iron II site overlooking the Batinah coastal plain, UAE.

Prévalet, Romain
2009 Preliminary Observation on Three Late Bronze Age Gold Items from Ras Shamra-Ugarit (Syria). *ArchéoSciences* 33:129-133.
Describes the technical characteristics of the filigree and granulation of two gold beads, as well as the joining processes that were employed by the craftsmen of a famous Levantine kingdom at the end of the 2nd millennium BC.


A detailed study of the technology and production of gold ornaments, including beads and pendants, in the Eastern Mediterranean during the Bronze Age and the transmission of the techniques.


Presents an overview of the manufacture of gold jewelry in Syria during the Bronze Age, beads included.


Reconstructs the technical processes employed in the 3rd millennium BC to produce a gold bead decorated with filigree and granulation at Tell Banat, Syria.

Pritchard, James B.

Frit beads from houses of the 9th or 8th century BC (pp. 6, 9, fig. 5), Jordan.

Pucci, Marina

Occupied from the Late Bronze Age to the end of the Iron Age (16th-6th centuries BC), this site in Turkey yielded a variety of ornaments including beads, pendants, necklaces, and amulets of stone, shell, glass, and metal.

Pulak, C.

More amber, stone, and faience beads (pp. 24-25).

This Late Bronze Age shipwreck off the coast of Turkey is dated to the late 14th century BC. Various glass beads were found on board (pp. 25-30, 43f.).


Typically Mycenaean beads (e.g., glass relief-beads and faience “grain of wheat” beads as well as 41 amber beads) found on the wreck were probably the property of two Mycenaean individuals, perhaps merchants or diplomats. Turkey.

**Puller, Judith**


A few very early beads of clay, stone, and shell are presented *passim*.

**Quenet, Philippe, Geneviève Pierrat-Bonnefois, Virginie Danrey, Sylvie Donnat, and Denis Lacambre**


Includes a discussion of the lapis lazuli beads, pendants, and seals contained in the treasure which dates to the 19th century BC.

**Quinn, Colin Patrick**


Drawing upon a case study of personal adornment item production and use during the Early Neolithic in the Southern Levant at the site of Dhra’, Jordan, the author utilizes the theoretical framework of costly signaling theory to evaluate how people in the past used particular material culture items (especially beads) to enhance their reproductive fitness. Stone bead production techniques are also discussed.
Raad, Danielle
Patterns of typology, color, and material are systematically explored, and manufacturing methods are reconstructed based on the close examination of perforations, polishing, and tool marks on ten PPNA beads carefully selected as case studies.

Raven, M.J.
Includes information on beads of resin, sometimes confused with amber, from Predynastic to Roman times. Ancient Egypt.

Reade, Julian
A popular survey with good photos of beads from various periods: Neolithic (fig. 12), famous Ur graves (figs. 59-61), Akkadian, long carnelians, etched carnelians, etc., imported from India (fig. 77), and early faience (fig. 80).

Redford, Susan
The catalog itemizes the relatively few beads recovered from excavations at the city of Mendes in the Nile delta. Materials include faience, glass, lapis lazuli, alabaster, and carnelian. Ancient Egypt.

Reese, David S.
Shell beads, especially “conus whorl,” nerita, and cowrie types, bear significantly on trade relations. Jordan.

Several shell species were used as ornament, including cowries, at a Late Bronze Age site near the Red Sea, Israel.

Most of the recovered shells were used for ornament: dentalia and vermetid “beads” and holed shells. Jordan.

1989  Treasures from the Sea: Shells and Shell Ornaments from Hasanlu IVB. *Expedition* 31(2-3):80-86.
Shell beads were found in northwestern Iran in a temple burned in the 9th century. Most were offerings in storage with other beads; some were worn by victims trapped in the fire.

Full survey covering many sites and well illustrating the long-distance movement of shells for adornment from the earliest times.

Middle Assyrian site (1400-1200 BC) with 633 shells, mostly *Arcularia* from the distant Mediterranean; also 9 disc beads and various holed shells.

Includes *Conus*, etc., and Early Bronze Age shell spacer-bars of a type not previously reported from Jordan.

Stone Age shells classified by date, site, and species include some worked as beads, especially dentalium.

Neolithic ornaments made of shells from both the Mediterranean and the Red Sea (138f.).

*Reeves, C.N.*
The earliest colorless glass has previously been thought to date from about a century later than these beads, which are put at 1497-88 BC. Ancient Egypt.

*Rehm, Ellen*
https://www.academia.edu/38512479/.
Thorough survey of Persian jewelry types, 550-330 BC, including a whole chapter on beads with discussion and drawings of over 80 types (pp. 88-111, figs. 63-71).


The earliest-known iron artifacts are nine small beads securely dated to circa 3200 BC from two burials in Gerzeh, northern Egypt. The beads were made from meteoritic iron and shaped by careful hammering the metal into thin sheets before rolling them into tubes. The beads were strung into a necklace together with other exotic minerals such as lapis lazuli, gold and carnelian, revealing the status of meteoritic iron as a special material on a par with precious metal and gem stones.

Rehren, Thilo and E.B. Pusch

The site, dated to ca. 1250-1200 BC, has produced evidence for glassmaking from raw ingredients, rather than using imported glass ingots. There is evidence that some workshops may have specialized in producing certain colors. Glass beads were found on site; also large numbers of faience beads.

Reiche, Andrzej

Tumulus grave SM Q 30 with its 600 beads and other adornments is, so far, one of the richest graves excavated in the As-Sabbiya region. The ornaments were made mainly of shell, mother-of-pearl, and soft stone, but two pierced pearls and a few lapis lazuli beads were also present. The grave is attributed to the Bronze Age based on the presence of a dotted-circles motif carved on a mother-of-pearl pendant.

Reinhardt, Helen
2019 *Glas aus Beirut. Die Glasfunde aus der römischen Therme in BEY 178*. Felix Berytus 1. Three types of glass beads (monochrome and polychrome ring beads and melon beads) and a pendant were recovered from Roman deposits at a site in Beirut, Lebanon.

Reshef, Nadine
The finds range from the Middle Bronze Age to the early Byzantine period. Israel.

**Rezvani, H. and K. Roustaei**
Shell beads are among the finds.

**Rice, M.**
Triangular carnelian beads (probably 8th century BC) and gold beads, perhaps early 2nd millennium (p. 83).

**Robinson, E.D.G.**
Includes a list of beads and pendants now in Sydney, Australia, from the Late Bronze Age Amman airport temple and from Neolithic and Chalcolithic Teleilat Ghassul, Jordan.

**Roehrig, Catherine H.**
Beads from the early Middle Kingdom grave of Wah; e.g., a necklace of hollow gold beads, a faience broad collar, and a lone carnelian bead as an amulet (p. 19, figs. 20-23). Ancient Egypt.

**Rollefson, G.O.**
Analysis of the lithic material recovered from this large Late Pre-Pottery Neolithic B settlement in southern Jordan demonstrated a focus on drill production, ostensibly for the manufacture of beads.

**Rollefson, G.O. and Z. Kafafi**
A small number of beads are reported from early neolithic occupation contexts at this important site and are identified as malachite, tooth, bird bone, *Cerithium*, and possibly coral.


Evidence is presented for the manufacture of ostrich eggshell and imported Red Sea/Mediterranean marine shell beads using flint microdrills at this Early Bronze Age II (ca. 3000-2700 BC) site in Israel which is interpreted as having belonged to pastoral nomads.


Early Bronze Age II (ca. 3000-2700 BC) material from Israel.


Bronze Age, Syria.


Discusses the beads and pendants of various material recovered from Tomb VI at Tell Mishri (ancient Qatna) in Syria.


Presents a re-analysis of material excavated at Tepe Gawra which is dated to 4400-3700 BC. A wide variety of beads and pendants is discussed.


Many beads, mostly frit and glass (pp. 381-383, 391), but also stone and shell, with a few preserved in the original order of stringing, and an ivory squat cone. Also twisted silver wire beads (p. 386, no. 43). Iran.
Ruffle, J.
A reference to bead finds in the earliest settlement periods from around 6800 BC at an oasis in the Western Desert of Egypt (p. 14). These include ostrich eggshell, carnelian, and other stone.

Russell, Nerissa
Ornaments include bone beads (mostly tubular) and pendants, as well as preforms. Also red deer canine teeth. The site is a very large Neolithic and Chalcolithic settlement in southern Anatolia, Turkey.

The major find was a necklace composed of interlocking “chain link” beads that accompanied a female burial at a Neolithic settlement in Turkey.

Reports on the bone beads and pendants, including perforated teeth, recovered in 2008 from a large Neolithic settlement in southern Anatolia, Turkey.

Rutkowski, Łukasz
Illustrates an array of the stone and shell beads recovered from a site apparently dating to the late 3rd and first half of the 2nd millennium BC (Dilmun Culture). For a detailed study of the beads, see Reiche (2010).

Figure 20 illustrates and briefly describes the stone and shell beads recovered from five stone mounds.

The bead set is dominated by microbeads, 70 in all (mostly made of stone of various kinds and colors). The remaining beads are made of shell, stone (including semi-precious stones), and vitreous material.

**Ryholt, Kim**  
1997  A Bead of King Ranisonb and a Note on King Qemaw. *Göttinger Miszellen* 156:95-100.  
An inscription on a glazed steatite bead is the first contemporary attestation of an obscure 13th-Dynasty pharaoh to come to light. Ancient Egypt.

**Al-Sadeqi, Waleed Mohamed Abdulrahim**  
2013  The Ancient Beads of Bahrain: A Study of Ornaments from the Dilmun and Tylos Eras.  
Ph.D. dissertation. Department of Archaeology, Durham University.  
http://etheses.dur.ac.uk/9433/.  
Presents a typology for the beads of the Bronze and Iron ages particular to the Bahrain Islands.

**Saidah, Roger**  
Amethyst, rock crystal, jasper (?), clay, and spotted glass (?) beads (pp. 184-185, pl. 30) in Lebanon.

**Saleh, A.-A.**  
1983  *Excavations at Heliopolis, Ancient Egyptian Dunû*. Vol. II. Cairo University, Faculty of Archaeology.  
Faience beads over the face of the mummy of a woman, perhaps serving as a mask.

**Salles, Jean-François**  
Beads of various periods (including fine Hellenistic specimens) from an island off Kuwait.

**Samei, Siavash and Karim Alizadeh**  
Faunal remains are among the most abundant types of remains recovered at KSH Phases IV and V (ca. 2800-500 BCE), where bone and antler were cached and then shaped into tools that were used to manufacture other objects like beads.

**Sarkhosh, Curtis, V. Simpson, and St John Simpson**  
Trailed glass beads from Early Iron Age graves at Kaluraz in northwest Iran (p. 191); carnelian and silver (?) beads, gold lotus palmette pendants, and a Bes-head pendant from Achaemenid
burials also in northwest Iran (pp. 188-189); and glass-paste melon beads are reported from a 1st- or 2nd-century vaulted subterranean tomb excavated at Gelalak, southwest Iran (p. 191).

**Sass, Benjamin**
2002  An Iron Age I Jewelry Hoard from Cave II/3 in Wadi el-Makkuk. *Atiqot* 41(2):21-33. This site in Israel produced 10 beads of carnelian, jasper (?), shell, paste, and glass.

**Sass, Benjamin and Gilad Cinamon**

**Scandone Matthiae, Gabriella**

**Scanlon, George T. and Ralph Pinder-Wilson**
2001  *Fustat: Glass of the Early Islamic Period. Finds Excavated by the American Research Center in Egypt 1964-1980*. Altajir World of Islam Trust, London. A suspiciously small number of glass beads (totaling only 17, plus a rock crystal octagonal bicone from a 10th-century pit and a faceted carnelian cuboid) was apparently found in these extensive excavations in Old Cairo, Egypt (pp. 118-123, color pl. VII). The most significant of these were eight roughly spherical beads found in two 10th-century contexts; measuring ca. 2 cm across they were decorated with marvered polychrome canes.

**Schaub, T.R. and W.E. Rast**
1989  *Bab edh-Dhra: Excavations in the Cemetery Directed by Paul W. Lapp (1965-67)*. Reports of the Expedition to the Dead Sea Plain, Jordan I. Eisenbrauns, Winona Lake, IN. Numerous beads with many materials and shapes represented; Early Bronze Age, Jordan.

**Schaunsee, M. de**
2001  A Note on Three Glass Plaques from Hasanlu. *Iraq* 63:99-106. Comments on the decorative inlays on the exterior of a crude, possibly locally made, stone footed goblet excavated in the 9th-century-BC level IVB at Hasanlu (northwest Iran). It has pre-formed glass floral inlays, set either between re-used tubular Egyptian Blue, spherical, or barrel-shaped carnelian and glass barrel beads, and usually banded with inlaid gold strips. Similar floral inlays found at Assyrian sites in Iraq are believed to come from Phoenicia or southern Syria.
Scheftelowitz, N.

Schiestl, Robert
Compares three similar metal pendants from Ancient Greece and Egypt, with descriptions of the stone beads comprising several necklaces found with the specimen from Tell el-Dab’a in Egypt.

Schmidt, Conrad and Stephanie Döpper
Various beads were associated with burials.

Illustrates the stone and shell beads recovered from sites in northern Inner-Oman that date to the late 4th and early 3rd millennia BC (Hafit period).

Schmidt, E.F., M.N. Van Loon, and H.H. Curvers
A wide variety of beads of various materials dating to the Bronze and Iron ages were recovered at a number of sites in western Iran.

Schoske, Sylvia
Ancient Egypt: see no. 116 with remarks on bead belts as the professional costume of dancing girls; no. 117 on the meaning of bead collars; and no. 122, a fertility idol with hair made from beads of unbaked mud.

Schwartz, Glenn M., Hans H. Curvers, Sally Dunham, and Barbara Stuart
Many beads were found (pp. 331-332). Two exceptional gold beads are illustrated: one a flat triangle with raised star design, the other flanged and with double collars of wire (p. 332, fig. 9; p. 334, fig. 14). Vessels of Early Bronze IV type date perhaps ca. 2300 BC.

Seligman, J., J. Zias, and H. Stark

Brown and dark blue glass and faience melon beads, a fluted brown glass bead, and stone bead from a late 4th- or early-5th-century cave tomb, Israel.

Şenyurt, Hasan K.

Among the grave goods found with a burial in Turkey were 19 beads of glass (including an amphora-shaped specimen), frit, bone, and stone.

Sevin, Veli and Ersin Kavakli
Preliminary report on an Urartian cemetery, Turkey. Beads were worn on necklaces, attached to bracelets, earrings, and pin-pendants. Biconical, spherical, cylindrical, elliptical, lentoid, disc, and barrel shapes were found. Most common materials were agate, carnelian, plain and decorated marvered glass, and frit. Amethyst, rock crystal, bronze, bone, and “faience” were less common. Perforated shells (Conus, Cypraea, and Dentalium) were rare (pp. 29, 37-44, 55-57).

Shaham, Dana and Anna Belfer-Cohen

Proposes that the pendants were worn about the hip to provide a rhythmic sound while dancing. Israel.

Al-Shams, Majid Abdullah

Shaw, Ian and Robert Jameson

Highly organized mines of a material used principally for beads; Middle Kingdom, ancient Egypt.
Sheftelowitz, Na’ama
A useful detailed analysis with identifications, illustrations, and one color photograph of beads (2 shell) from a late neolithic occupation; Early Bronze Age tombs and occupation (17, mostly decomposed, thus “white” faience); Middle Bronze Age tombs and occupation (116, with a wider range of materials); and Iron Age contexts (14, various materials).

Sherratt, Susan
Beads are included in a discussion of the definition and relative values of the various “vitreous materials” in the Eastern Mediterranean and Dynastic Egypt.

Shortland, A.
Presents an analysis of a rare antimony bead from 3rd millennium BC levels at Jerablus Tahtani, near Carchemish in Syria.

Simak, E.
Spindle whorls are sometimes mistaken for beads. This survey shows the variety of shapes, colors, and decorations to be found among them.


Simpson, St John
1998 Wooden Rosary Bead Manufacture in Late Ottoman Palestine. Bead Study Trust Newsletter 31:5.
European traveler’s accounts from the 18th and 19th centuries provide details on the subject.

Reports on beads recovered from sites in western Iran and the incorporation of such old beads into modern jewelry in the region.

Provides a brief history of beadmaking at Hebron, West Bank, Palestine.

**Simpson, St John and Andrew Meek**

Beads are included in the discussion.

**Sode, Torben**
1996  *Anatolski Glasperler*. THOT, Copenhagen.
Ethnographic study of glass beadmakers in western Anatolia (Turkey). In Danish with English summary.


Presents a detailed account of the beadmaking process as practiced today in western Anatolia, Turkey.

**Sode, Torben and Ulrich Schnell**

Describes the continuing manufacture of faience beads in the village of Qourna, near Luxor, together with the method and an analysis of the ingredients used.

**Solecki, Ralph S., Rose L. Solecki, and Anagnostis P. Agelarakis**

Discusses the beads of stone, gastropod shells, crab claws, and copper recovered from this site in Iraq. An appendix presents a detailed report on the beads prepared by Peter Francis, Jr. (2004).

**Sowada, Karin**

Chapter 4 presents a corpus of Egyptian imports in Canaan. Materials include beads of faience, shell, carnelian, calcite, quartz, lapis lazuli, and copper. Ancient Egypt.

**Spaer, Maud**
Presents a catalog of 647 small glass objects including beads and pendants. A shortcoming is that all of the material appears to have been donated and therefore lacks sound provenance data. See Francis (2002) for a review.


**Spatz, Ashton J.**


**Spencer, Neal**


**Spoor, Richard H. and Pieter Collet**

Spurr, S., N. Reeves, and S. Quirke
Exhibition catalog. A cloth doll has fine blue faience beads in her hair (p. 18). There is also a graduated blue faience globular-bead necklace (p. 19) of the kind worn in the hair, especially by dancing girls, and carrying associations of sensuality and fertility. Both Middle Kingdom, ancient Egypt.

Steimer-Herbet, Tara
Cemeteries of the 3rd and 2nd millennia BC yielded 1,000+ beads: carnelian discoids, clay and bone beads, also small beads of chlorite paste whose small perforations suggest they were used on clothing or in the hair.

Stern, Edna J.
Plain, molded, and trail-decorated glass beads are illustrated on p. 125 from a burial cave in Israel dated by associated finds to the early 4th-early 5th centuries AD. In Hebrew with English summary.

Stiner, Mary C.
This study considers the cultural and ecological contexts of marine shell ornament use at Riparo Mochi on the Ligurian coast of Italy (5 assemblages, 36-9 kyr BP), and at Üçağızlı Cave on the Hatay coast of Turkey (7 assemblages, 41-17 kyr BP). Both sites contain long Upper Paleolithic artifactual and faunal series, including the earliest phases.

Stiner, Mary C. and Steven L. Kuhn
Discusses criteria used to distinguish early mollusc-shell beads from other kinds of shells in archaeological deposits, focusing on evidence from the site of Üçağızlı Cave in Turkey. Upper Paleolithic beadmakers at this and other sites clearly preferred certain forms of shell for ornamental purposes, although the reasons for that selectivity remain obscure.
Stiner, Mary C., Steven L. Kuhn, and Erksin Güleç  
Ten early Upper Paleolithic layers in Üçağızlı Cave I (41-29 uncalibrated ky BP) on the Hatay coast of southern Turkey preserve a rich and varied record of early upper Paleolithic life, including the production and use of large numbers of shell ornaments. This study examines shell bead production, use, and discard in relation to site function and the diversity of on-site human activities.

Stone, Elizabeth C. and Paul Zimansky  
2004 *The Anatomy of a Mesopotamian City: Survey and Soundings at Mashkan-Shapir.* Eisenbrauns, Winona Lake, IN. 
The “final report” on investigations of a major city in southern Iraq occupied during the early 2nd millennium BC. The small number of beads recovered are tabulated and briefly discussed; most are carnelian spheres, larger elongated hematite beads, and grey/black stone disc spacers, plus a single lapis bead, a multiple spacer bead made of steatite (pp. 119-120), and several beads made of shell (p. 132). Frit beads were noted as rare.

Stricker, Thomas, Karlis Karklins, Mark Mangus, and Thaddeus Watts  
Chemical analysis of a unique black bead found in Turkey that depicts the four phases of the moon reveals it most likely originated in the Fichtelgebirge region of Bavaria at some time prior to the early 19th century.

Strouhal, Eugen  
Beads, mostly bone and glass, but also shell, wood, and stone (pp. 223-227, figs. 151-152). Egypt.

Summers, G. and F. Summers  
An ivory inlay showing an animal frieze, decorated with amber beads and set with small reflective plates of silver or tin behind each, was excavated at this large fortified Late Iron Age, possibly Median, site in central Turkey.
Sumner, William M.
Discusses the stone, shell, gold, and organic beads of the Banesh Period (ca. 3400-2600 BC) levels in Operation ABC at Malyan.

Szelag, Dariusz
A settlement in northern Syria dated primarily to the second half of the 3rd millennium BC yielded a collection of beads and pendants made of shell and nacre, mostly from funerary contexts.

The beads found in association with the pendants are illustrated.

Tabaza, Khalil
Discusses folk jewelry, including necklaces composed of beads of various materials, worn in Jordan during the 19th and the first half of the 20th century.

Tal, Oren and Itamar Taxel
Numerous glass, carnelian, faience, and wooden beads (some found in groups, indicating their original use in necklaces) were found at several sites in Israel.

Tala’i, Hassan and Ahmad Aliyari
Presents a general discussion of the beads recovered from graves attributed to the 12th-8th centuries BC. Materials include stone, paste, glass, and metal (bronze and iron).
Talbot, G.C.  
Full publication of the material from the Pre-Pottery Neolithic to the Roman period. Palestine.

Talon, P. and K. van Lerberghe (eds.)  
Beads of various materials from various sites in Syria are illustrated and discussed.

Taniguchi, Y., Y. Hirao, Y. Shimadzu, and A. Tsuneki  
Analysis of three turquoise-blue beads revealed that they were an alternative to and imitation of natural turquoise beads. They are formed of an apatite core with a turquoise color obtained probably by the heating of manganese or iron compounds. The microstructure and chemical composition of the beads indicate the use of mammal tooth or tusk, possibly “odontolite” (fossil ivory).

Taniichi, T.  
A study of spacer beads from various sites in the Middle East: Nozi in Mesopotamia, Alalakhen in Syria, Megiddo, Hazor, and Tell Abu Hawan in Palestine, Bogazkïy in Anatolia, and Kordlar Tepe in Iran.

Tate, Jim, Katherine Eremin, Lore G. Troalen, Maria Filomena Guerra, Elizabeth Goring, and Bill Manley  
Describes the necklace and also provides information concerning its production techniques and the composition of the metal.

Testa, P.  
Unusual set of 24 plaque beads with hieroglyphs which, when put together, form an inscription for a cult or funerary purpose. Ancient Egypt.

Then-Obluska, Joanna  
Analysis of the bead and pendant assemblage from Berenike provides not only a preliminary typology and chronology, but contributes to the study of the multicultural character of this Red Sea port from the Ptolemaic through the early Byzantine period. Materials include organics, semiprecious stones, and manmade materials.


Attributed to the 4th century, the tumuli yielded over 500 beads and pendants. In addition to ostrich eggshell of Nubian Desert origin, Red Sea shells and glass beads of Eastern Mediterranean and South Asian origin are present. A few beads are modern European intrusions. Egypt.


The Harbor Temple assemblage is dominated by South Asian glass beads dating from the 4th through early 6th centuries AD, but the bead finds from the presumed temenos show much greater variety in both type and date, the latter spanning the centuries from the 1st to the 5th centuries AD.


More than 200 beads and pendants were found in seven trash middens at a 4th/5th-6th centuries AD settlement site in the Eastern Desert of Egypt. Various materials and forms are represented.


Reports the results of morphological and technological analysis of beads and pendants recovered from a site in Egypt occupied during the Early and Late Roman period. Materials include shell, coral, ostrich eggshell, faience, and glass, including gold-in-glass.

**Then-Obluska, Joanna and Laure Dussubieux**


Reports on an interdisciplinary study of 35 beads found mostly at Quseir port sites in Egypt; Roman Myos Hormos (1st-3rd c. AD) and Late Ayyubid-Mamluk Quseir el-Qadm (13th-14th c. AD) periods.
Then-Obluska, Joanna and Alexandra D. Pleša
2019  Roman to Islamic Beads and Pendants from Matmar and Mostagedda, Middle Egypt.
Sixty-four bead objects (primarily necklaces) found between 1927 and 1931 by Guy and
Winifred Brunton in funerary contexts assumed to date from Late Dynastic to early Islamic
times are reexamined, thus allowed for a revision of Brunton’s initial chronology.

Thrane, Henrik
2001  Excavations at Tepe Guran in Luristan: The Bronze Age and Iron Age Periods. Aarhus
University Press.
Beads of carnelian, shell, and “frit/glass” (pp. 112-114, pls. 66-68) from western Iran.

Thuesen, Mette Bangsborg
2018 The Stone Bead Production at Shubayqa 6 and the Meaning of Personal Ornamentation
The site is a Late Natufian and Pre-Pottery Neolithic A settlement in northeastern Jordan.

Thuesen, Mette Bangsborg and Moritz Kinzel
2018 Stone Beads from Shkārat Msaied. Neo-Lithics 1:e3-e7;
https://www.academia.edu/37705599/.
Discusses the beads and bead manufacturing waste recovered from an Early/Middle Pre-Pottery
Neolithic B settlement in southern Jordan.

Toffolo, Michael B., E. Klein, R. Elbaum, A.J. Aja, D.M. Master, and E. Boaretto
2013 An Early Iron Age Assemblage of Faience Beads from Ashkelon, Israel: Chemical
Composition and Manufacturing Process. Journal of Archaeological Science
40(10):3626-3635.
The microstructure and chemical composition of eight faience beads from an early Iron Age
(12th century BCE) assemblage found in the ancient city port of Ashkelon (Israel) were
determined by means of FTIR spectrometry, pXRF, microRaman, and SEM-EDS analysis. The
results are compared with published data on Egyptian and Near Eastern artifacts.

Tomashevska, Marija
2019 Sacred Floral Garlands and Collars from the New Kingdom Period and Early Third
Intermediate Period in Ancient Egypt. 1550 B.C. - 943 B.C. Leiden University, Master
Thesis Classics and Ancient Civilizations; https://www.academia.edu/41392607/.
Includes a discussion of faience collars that imitate fresh flower garlands, and shows a floral
garland that has faience beads incorporated in it.

Török, L.
1988 Late Antique Nubia: History and Archaeology of the Southern Neighbour of Egypt in the
A silver bead bracelet, a late antique Egyptian import, was found with the burial of a queen (p. 121).

Tsoraki, Christina
Burial fill in the North Area of a large Neolithic and Chalcolithic settlement in southern Turkey contained anklets and bracelets composed of various stones, but primarily carnelian. Some comments on manufacturing techniques.

Tsuneki, Akira
The evidence suggests that imitation turquoise beads and those of serpentinite were produced at this early Pottery Neolithic period site in Syria.

Tsuneki, Akira and Yutaka Miyake (eds.)
1998 Excavations at Tell Umm Qseir in Middle Khabur Valley, North Syria. Report of the 1996 Season. University of Tsukuba, Institute of History and Anthropology, Department of Archaeology, Tsukuba, Japan.
Quartz, turquoise, unidentified white stone beads, and locally made holed shells were found at a Halaf occupation site (pp. 109, 120).

Tubb, J.N.
Stone, shell, and faience beads from a Jordan valley site. Conical calcite beads came from a waist ornament (p. 49).

Tucker, D.
Perhaps a craftsman’s hoard; includes stone, shell, glass, and faience beads.

Tuncer Manzakoğlu, Bilgen and Saliha Türkmenoğlu Berkan
Investigates the role of culture, geography, and history in the myth of the evil eye bead in Turkey.
The recovered ornaments include beads and pendants made of shell and stone.

University of Pennsylvania
1997 Searching for Ancient Egypt: Art, Architecture, and Artifacts. Dallas Museum of Art. Lavishly illustrated in color, this book presents a spectacular collection of archaeological and artistic treasures covering the extent of Egyptian art from the Predynastic period of the 4th millennium BCE to the Greco-Roman period of the 4th century CE. Includes splendid necklaces of garnet, carnelian, amethyst, beryl, and faience, as well as cowrie beads.

Valdés, C.
Two 3rd-millennium tombs in Syria yielded carnelian, rock crystal disc, obsidian disc, frit, dentalium, and cowrie and other shell beads.

van Loon, Maurits
1983 Hammâm et-Turkmân on the Balikh: First Results of the University of Amsterdam’s 1982 Excavation. Akkadica 35:1-23.
Middle Bronze Age II child burials in Syria with necklaces or bracelets of segmented and other faience beads, also a gold bead (p. 6, fig. 9A).

The finds include mosaic glass beads.

van Loon, M. and D. Meijer
As van Loon (1983).

Vanhaeren, M., F. d’Errico, C. Stringer, S.L. James, J.A. Todd, and H.K. Mienis
Perforated marine gastropod shells at the western Asian site of Skhul and the North African site of Oued Djebbana indicate the early use of beads by modern humans in these regions. Analyses of sediment matrix adhered to one Nassarius gibbosulus from Skhul indicate that the shell bead comes from a layer containing 10 human fossils and dating to 100,000 to 135,000 years ago,
about 25,000 years earlier than previous evidence for personal decoration by modern humans in South Africa.

**Vanthuyne, Bart**

The clay molds uncovered at Amarna, the short-lived late-18th-dynasty capital located in Middle Egypt, include those for the production of a variety of pendants.

**Vassilika, Eleni**

Included is a multi-tubular, late-18th-dynasty faience bead decorated with *ankh* and *djed* hieroglyphs, now British Museum EA 74323 (p. 194, no. 12). Ancient Egypt.

**Veldmeijer, André J.**

Discusses the beads of glass, faience, and a variety of semi-precious stones that adorn the footwear. Includes an image of an 18th-Dynasty wall painting that depicts beadmaking (p. 151).

**Veli Yenisoganci, H.**

Reports 72 beads of various stones, Hellenistic or Roman (p. 217, pl. 6). Turkey.

**Verduci, Josephine**

Among the objects discussed are shell and granular metal beads of Iron Age I-IIA periods (ca. 1200-900 BC) found at sites in the southern coastal plain of Israel.


By examining various categories of metal jewelry (beads and pendants included) from the study area, this study contributes to the debate about the relations and exchanges that affected the region during the pivotal Early Iron Age.
Verhoeven, Marc
This site in Syria produced a translucent light red “butterfly” bead.

Contains a brief account, with bibliography, of the use of beads and pendants in the region: necklaces, bracelets, anklets, ear and hair ornaments, sewn onto cloth, clothing fasteners, etc. (pp. 240f.).

Vidale, Massimo
Deals with the production of beads from quartz, various semi-precious stones, faience, and organic materials found in Operation ABC at Tal-e Malyan, site of the Elamite royal city of Anshan. They date to the Banesh Period (ca. 3400-2600 BC).

Vogelsang-Eastwood, G.M.
The first specialist account of a fascinating subject: the pharaoh’s beaded tunics, kilt, and sandals beautifully illustrated. The sandals may be the very pair mentioned as a gift from the king of Mittani. Ancient Egypt.

Voigt, Mary M.
Shell and stone beads (pp. 260-263, fig. 117). Possible drill for manufacture (pp. 243f.).

Wachsmann, S.
A thorough reassessment of the Egyptian frescoes that show beads as a medium of contact with the Aegean (see esp. pp. 54f., 74f).

Wakita, S. et al.
Miscellaneous agate, greenstone, unidentified stone, clay, frit, and glass beads from Iron Age contexts (pp. 32, 36-38).

**Walker, Bethany J.**
2001 *Bangles, Beads and Bedouin: Excavating a Late Ottoman Cemetery in Jordan.* Essays in Economic & Business History 19.
Discusses the material from Tall Hisban which is attributed to the late 19th century.

Objects buried with ca. 19th-century Bedouin burials in Jordan include necklaces of cowrie, agate, carnelian, jasper, ceramic, and glass seed beads and mother-of-pearl pendants.

**Wartke, Ralf-B.**
A history and reassessment of this important Middle Assyrian grave in Iraq, with color photographs of its large and famous assemblage of beads, now rearranged.

More on the necklaces and individual beads found in tomb 45. Materials include lapis lazuli, carnelian, onyx, jasper, and gold.

**Weeks, Lloyd, Charlotte Cable, Kristina Franke, Claire Newton, Steven Karacic, James Roberts, Ivan Stepanov, Helene David-Cuny, David Price, Rashad Mohammed Bukhash, Mansour Boraik Radwan, and Hassan Zein**
From Iron and Bronze Age contexts, beads are plentiful across the site and materials include marine shell, ceramic, frit, ivory, bone, gold, glass, lead, eggshell, and a variety of semi-precious stones such as carnelian, agate, soft stone, alabaster, and quartz. Bead blanks and unworked fragments of exotic semi-precious stones suggest that beads were being manufactured at the site.

**Weinberg, Gladys D. (ed.)**
Some beads are mentioned in Chapter 8.
Wenn, C.C., K. Bortheim, E. Cappelletto, H. Indgjerd, and H. Kiesewetter
2015 To the Bottom – Final Excavations in area B of the East Necropolis (Hierapolis, Turkey).
Nicolay Arkeologisk Tidsskrift 126:21-27.
Highlights two bead types from Roman contexts: a black glass bead with two parallel holes and ribbed impressions on the surface, and a cylindrical hexagonal bead in green glass from a bracelet or necklace.

Whitcomb, D.S.
Metropolitan Museum of Art, New York.
Describes beads of various materials from a Sasanian fortress in Iran (p. 177, figs. 69-70).

Wilkinson, A.

Williams, Bruce B.
Beads of various materials, including some sewn onto leather garments, furnish evidence for trade southwards and with Egypt (pp. 83-94).

Beads include those of faience, metal, stone, shell, bone, and clay.

Beads of faience and ostrich eggshell; discoid, segmented, and star-shaped.

The recovered beads were relatively few in number but quite varied. Materials include glass, faience, metal, stone, and ostrich eggshell.
Beads include those of glass, faience, metal, stone, and ostrich eggshell. Amulets are also dealt with.


Bead materials include glass, faience, metal, stone, and ostrich eggshell.

**Woods, Gillian Margaret**


This work covers the Western Desert to the Nile Valley during the period ca. 6500-3750 calBC and determines the aetiology and nature of early Predynastic (Badarian, ca. 4350-3750 calBC) belief systems. Part of the discussion focuses on the beads found with burials, especially those of glazed steatite, many of which were used to create what appear to be belts. Ancient Egypt.

**Wright, Katherine I. (Karen)**


Discusses the massive evidence for the production of beads made of green, red, and black “Dabba marble” at the Late Neolithic sites of Jilat 13 and 25 in eastern Jordan.


Presents a thorough discussion of the stone, shell, bone, and clay beads from a very large Neolithic and Chalcolithic settlement in southern Anatolia, Turkey.

**Wright, K.I., P. Critchley, A.N. Garrard, R. Bains, D. Baird, and S. Groom**


Stone bead production and exchange in Wadi Jilat and the Azraq Basin, Jordan.

**Wright, Katherine I. and Andrew Garrard**

Discusses evidence for stone bead production and use at six seasonally occupied aceramic neolithic campsites in the Wadi Jilat region of eastern Jordan. Most of the beads were made from a local colored stone, so-called “Dabba Marble,” but varieties of flint, silicified sandstone, white limestone/chalk, white quartz/calcite were also used. Long-distance imports were limited to two beads of malachite and turquoise, and a small number of Red Sea shells and mother-of-pearl beads.

Wygnańska, Zuzanna

Shell beads predominate but there are also examples of those made of pearls, stone, bone, bitumen, ostrich eggshell, and faience. Most of the ornaments can be placed in a broad time span covering the 5th through the 3rd millennium BC.

2019  A Break in Cultural Legacy: Child Grave Inventories from Tell Arbid, Syria, in Transition from EBA to MBA. *Levant*; https://www.academia.edu/41063812/.

Personal adornments (including stone and metal beads) from late EBA child graves display a strong cultural affinity with those of the 3rd millennium BC, and are indicative of a distinctive social identity for their users. This differs from that of the population that continued to use the same burial ground in the early 2nd millennium BC.

Wygnańska, Zuzanna and Daniella E. Bar-Yosef Mayer

Using ARCANE database, this study aims to better our understanding of Early Bronze Age beads as artifacts of economic and exchange networks, technological advances, and symbolic values from a broad region of the Near East, western Iran included. The beads are discussed chronologically and include those of stone, frit/faience, metal, bone, and shell.

Wyllie, Cherra and Frank Hole

Features reconstruction drawings of beaded headdresses and bone and shell jewelry based on archaeological data from burials at el-Wad, Mallaha, and Hayonim (radio-carbon dated to the Mesolithic Period ca. 12,500-9,500 BCE) in Israel.

Xia, Nai
Based on a Ph.D. dissertation written some 70 years ago, this book presents a detailed analysis and thorough study of the unique collection of Ancient Egyptian beads in the Petrie Museum of Egyptian Archaeology in London. Sections deal with the technical methods of beadmaking, classification, and chronology. See Karklins (2017) for a review.

**Yahalom-Mack, Naama**


Includes descriptions of the glass, faience, and stone beads. Israel.

**Yahalom-Mack, Naama and Amihai Mazar**


The beads recovered from a site in Israel are made of stone (including semi-precious stones such as carnelian), glass, and faience.

**Yamazaki, Seria**


Personal adornments from 160 tombs of the Middle Kingdom of Egypt were studied to clarify their regional diversity with quantitative analysis. Analysis revealed that necklaces, collars, single string bracelets, and broad bracelets were the most popular adornments. In Japanese with English abstract.


Aims to reveal the meaning of personal adornments depicted in *frise d’objets*, masks, anthropoid coffins, “Paddle dolls,” and truncated Middle Kingdom female figurines. The indication is that each object bore different kinds of personal adornments. In Japanese with English abstract.


Concentrates on the regional variability of personal adornments by analyzing hundreds of tombs located in Egypt. “Ideal” assemblages and colors of the adornments for funerary rituals are examined through iconography such as *frise d’objets*, mummy masks, and anthropoid coffins.

**Yassine, Khair**

Discusses over 400 beads from an Iron Age cemetery in Jordan (pp. 111-131).

**Yelözer, Sera**


Discusses the beads made of various stones and minerals, animal bone and teeth, sea and freshwater shells, clay, and copper recovered from an aceramic Neolithic settlement in central Turkey.


Summarizes evidence on the raw materials, colors, and types of beads at this site in central Turkey occupied from 8200 to 7400 BC and discusses the implications of changes in ornamentation through time.

**Yelözer, Sera and Rozalia Christidou**


The principal ornaments at the site are beads made from small mammal and bird bones and marine shells, and deer canine tooth imitations made from mammal bones.

**Yelözer, Sera and Devrim Sönmez**


The aim of this contribution is to identify changes and/or continuity in this aceramic Neolithic community through the study of personal ornaments such as beads and necklaces.

**Yokoyama, Tomonori, Yasunobu Akiyama, Kyoko Yamahana, Takashi Asaka, Masashi Higuchi, and Masahi Sato**


Reports on the method of manufacture, dating, and composition of the sulfur beads comprising a necklace in the Ancient Egyptian and Near Eastern Collection at Tokai University. In Japanese with English abstract.
Turquoise and white stone beads are reported from primary (Archaic Hassuna) occupation levels at this important site in central Iraq. The report also summarizes the evidence for the spectacular Neolithic cemetery found in Level I which included turquoise, “onyx” (possibly agate), and “tubular shell” (dentalium) beads found in children’s graves.

Yule, Paul and Gerd Weisgerber
A grave in a Bronze Age cemetery excavated at Qorin es-Sahhaimah, Oman, contained over 350 enstatite microbeads, two shell beads, and a sole carnelian (p. 146, fig. 8).

Presents a brief overview of the beads recovered from Samad Period graves at a cemetery in Oman.

Zuckerman, S.

Detailed catalog of 47 Middle Bronze II/Achaemenid period stone and faience beads, principally from Iron II levels, discussed according to material. Israel.