

THE GLASS FINDS FROM KEREM MAHARAL

NATALYA KATSNELSON

The excavations conducted at Kerem Maharal (see 'Ad and Sa'id, this volume) yielded 227 glass fragments, 64 of which were diagnostic.¹ The glass finds were scattered throughout the site, except for Areas K and L; only a few specimens came from secure contexts. Their state of preservation was very poor.

The early occupation in the Persian and Early Roman periods (Strata XI–IX) did not yield any glass. Most of the datable fragments are assigned to the Byzantine and Byzantine–Early Islamic periods (Strata VIII–VI); no finds could be attributed with certainty to Stratum V. Several fragments were retrieved from the Mamluk (Stratum III) and Ottoman/modern strata (II and I respectively).

Parallels for the Byzantine and Umayyad glass vessels are known from sites in the Carmel plain (Vitto 1996; Jacobson 1999; 2004; Cohen 2000; Gorin-Rosen 2005; 2010; Pollak 2005; Katsnelson 2015) and from Ceasarea (Peleg and Reich 1992). Other published assemblages come from major sites around the Sea of Galilee, e.g., Hammat Gader (Cohen 1997) and Tiberias (Johnson 2000; Lester 2004), as well as from Bet She'an (Hadad 2005; Winter 2011) and other cities of the Decapolis, such as Gerasa (Meyer 1988).

The repertoire is limited, comprising common daily tableware and oil lamps (Fig. 2). The glass is free-blown, mostly in natural hues. A few examples of purple glass are typical of the Mamluk period. The ornamentation comprises simple patterns of applied (Fig. 2:8, 9) and marvered (Fig. 3:10, 11) trails. Small remains of windowpanes were registered in Areas C and B. Several glass-jewelry items are attributed to Strata II–I, including a tiny rounded bead from Area D, made of opaque turquoise glass (not illustrated) and a few bracelet fragments from Areas B and G: one plain (opaque turquoise glass, not illustrated), one twisted (transparent colorless glass decorated with red trail, not illustrated) and two adorned with applied and marvered patches and trails (Fig. 3:12, 13).

Alongside the vessel fragments, leftover-glass debris was found, including two small chunks of greenish blue raw glass (Area G: L509, B5035; Area D: L151, B1506). The chunk from Area D was found together with small fragments of typical Byzantine blown vessels

¹ I wish to thank Uzi 'Ad and Kareem Sa'id for inviting me to publish this material. The glass was restored by Olga Shorr, drawn by Carmen Hersh and photographed by Clara Amit.

and windowpanes, all made of a similar fabric as the chunk (Fig. 1). These finds indicate that a glass furnace may have existed nearby, probably functioning during the sixth–seventh centuries CE.

The Byzantine and Byzantine–Early Islamic Periods (Strata VIII–VI)

Only a few poorly preserved fragments of bluish green bottles, which were found on a floor in Area C (F333, not illustrated), may be associated with Byzantine Stratum VIII. Fragments related to the Byzantine–Early Islamic Strata VII and VI were found in most of the areas, but only few came from structures (Fig. 2:1–8). It was difficult to distinguish between these two strata, because the finds are similar in shape and fabric. The repertoire comprises mainly bottles, wineglasses and oil lamps of traditional Byzantine types that were produced in the Syria-Palestine region from the late fifth to the seventh century CE and remained in use during the Umayyad period (Hadad 2005; Winter 2011).

Stratum VII (Fig. 2:1–6).— This group includes bowls/oil lamps, wineglasses and bottles. All are local types, very common in assemblages of the sixth–seventh centuries CE, also remaining in use later.

Two base fragments (Fig. 2:1, 2) were uncovered on a stone floor (Area B, L214; see ‘Ad and Sa’id, this volume: Plan 2). Fragment No. 1 is part of a high, pushed-in base with a hollow ring, a common bowl type from the Late Roman to the Early Islamic periods. Fragment No. 2 is part of a wineglass, with a characteristic beaded-hollow stem and widely splayed base with a hollow ring. Wineglasses of this type occur mainly in Byzantine assemblages.

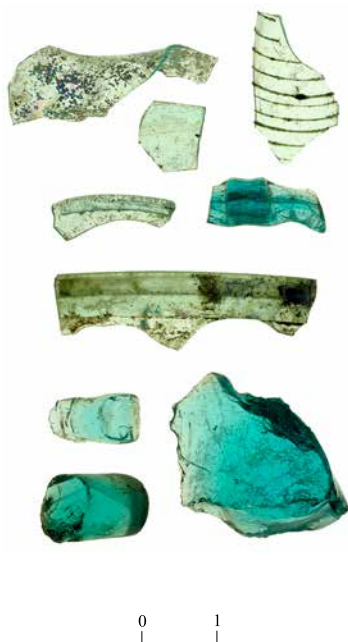


Fig. 1. Byzantine-period glass vessel fragments and chunk.

Similar fragments of both these types were revealed at Horbat Bustan in the Carmel Forest, very likely produced in a single local workshop, which was probably active no later than the sixth century CE (Katsnelson 2015: Figs. 2; 3:8, 9, and see references therein). Other parallels, dated to the Byzantine and late Byzantine periods, are known from Shiqmona (Gorin-Rosen 2010: Fig. 2:5, 6). A small fragment of a flat greenish windowpane, probably dating to the same period, appeared in the same basket as fragment No. 2.

Two rim fragments (Fig. 2:3, 4) were collected above a floor (Area D; L155, see 'Ad and Sa'id, this volume: Plan 4). Fragment No. 3 is part of a massive rim, unevenly folded inward, of a large bottle with a tapering mouth and thick walls. Its shiny, bright, greenish

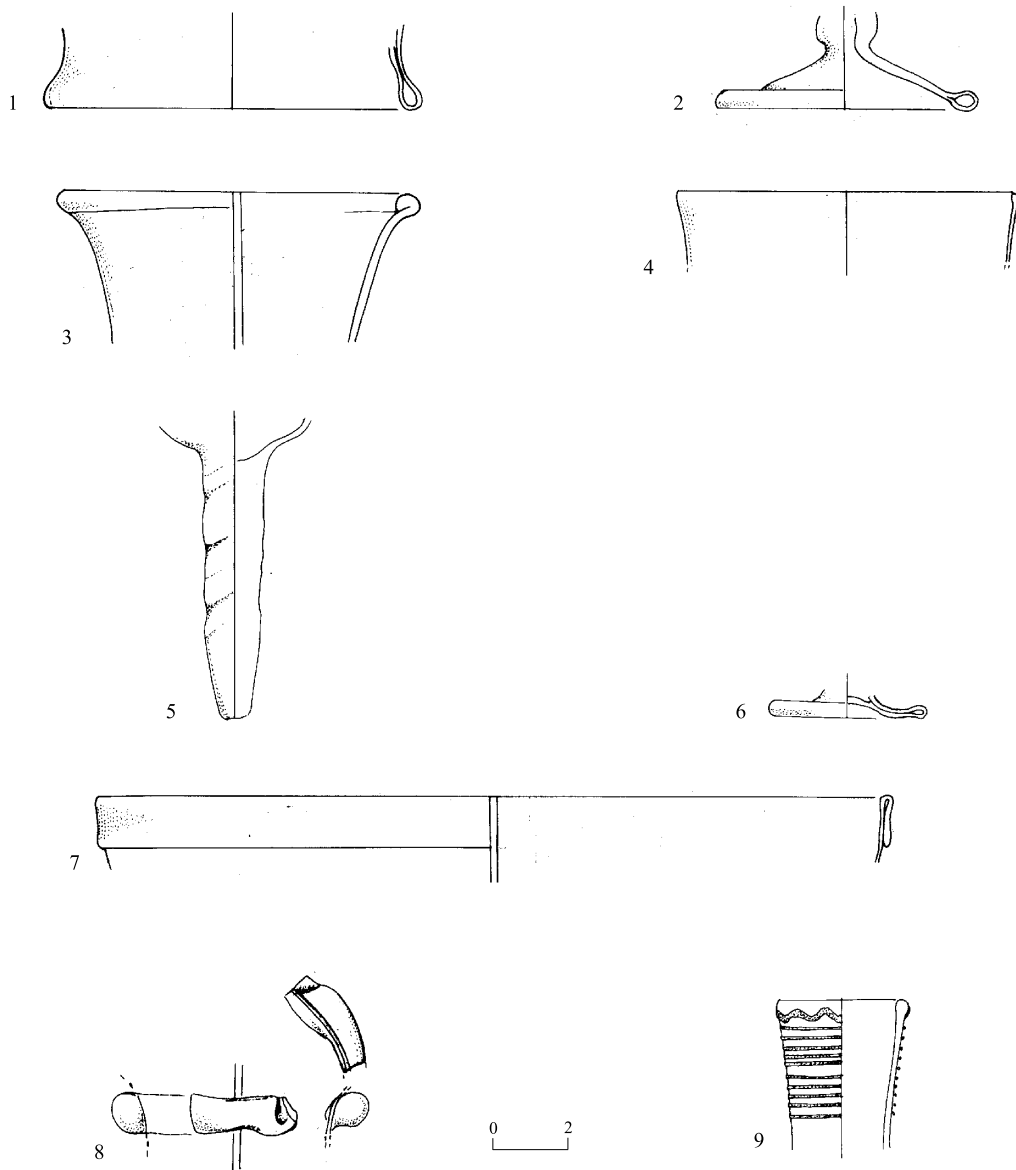


Fig. 2. Glass vessels from Strata VII (1–6) and VI (7–9).

◀ Fig. 2

No.	Vessel	Area	Locus	Basket	Description
1	Bowl	B	214	2058	Base; greenish blue; milky weathering, iridescence, pitting
2	Wineglass	B	214	2058	Base and stem; greenish blue; silver iridescence, pitting
3	Bottle	D	155	1519	Rim and neck; thick walls; deformed greenish blue; shiny, bubbly, minor soil deposits
4	Oil lamp?	D	155	1519	Rim and body (2 fragments); thin walls; almost colorless, iridescence
5	Oil lamp	D	151	1509	Stem and body; greenish; silver weathering, iridescent film; soil deposits
6	Wineglass/ cup	G	509	5035	Base and part of foot; greenish; lime deposit, pitting; pontil scar: 0.8 cm
7	Bowl/oil- lamp	B	215	2050	Rim and body; bluish green; silver-milky weathering, iridescence
8	Bottle	B	217	2036	Neck decorated with trail; greenish blue; shiny; soil deposits
9	Bottle	D	150	???	Rim and neck decorated with trails; greenish blue; turquoise trail; milky weathering, pitting

blue fabric is very similar to the glass of the transitional Byzantine/Umayyad period (in Bet She'an, prior to 749 CE, see Winter 2011:348, Fig. 12.1:15 and further references therein; in Jerash, 661–747 CE, see Meyer 1988: Fig. 13:H). Fragment No. 4 is part of a rounded rim of a vessel with straight thin walls—perhaps another large bottle or a wineglass but more likely a stemmed oil lamp. A similar form with a cup-shaped body and a hollow or solid stem appears in metal polycandela. Straight-sided cups, or possibly oil-lamps, like fragment No. 4, were unearthed in Byzantine Caesarea (Peleg and Reich 1992: Fig. 18:4, 5). A few similar vessels, identified as beakers, lamps or wineglasses, appear in the Byzantine shops at Bet She'an (Agady et al. 2002:484, Figs. 15, 18).

A massive, solid stem of a suspended oil lamp (Fig. 2:5), similar to No. 4, was uncovered. The stem was slightly twisted by tooling. The shape is typical of Late Byzantine–Umayyad assemblages. A rich assortment of such lamps was found in northern Israel, e.g., at Kursi, dated to the sixth–early seventh centuries CE (Barag 1983:38, Fig. 9:10), Ḥammat Gader (Cohen 1997: Pl. II:20, 21); in the synagogues at Ma'oz Ḥayyim (Tzaferis 1982: Fig. 12:1) and Ḥammat Tiberias (Johnson 2000:84, Figs. 22; 23:17–22), and in late Byzantine dwelling caves near the Carmel coast (Gerald Fienkelsztejn, pers. comm.). Lamps with both hollow and solid stems remained in use in Early Islamic cities, e.g., Tiberias (Lester 2004:195, Fig. 7.11:135–141), Bet She'an (Winter 2011: Fig. 12.2:30–32, see references therein) and Jerash (Meyer 1988: Fig. 13:A–C). An additional fragment of a similar lamp, but with a hollow stem, was also registered in Stratum VII (L1001, B1002; not illustrated). It is made of a deep greenish blue glass, has very thick walls and can be attributed to the Byzantine or Umayyad periods.

A small base with a low tubular ring, widely splaying outward (Fig. 2:6), was found above a floor (Area G, F509; see 'Ad and Sa'id, this volume: Plan 5). It may have belonged to a small wineglass or a beaker with a foot base. Similar fragments were unearthed in the debris covering the sixth-century CE mosaic floor at Bet She'arim (Vitto 1996: Fig. 26:9) and at Ḥorbat 'Aqav in the fifth–seventh centuries strata (Ramat Ha-Nadiv; Cohen 2000:168, 173, Pl. II:16).

Stratum VI (Fig. 2:7–9).— A very small rim-fragment of a bowl (Fig. 2:7) was found on a floor (Area B; F215; see 'Ad and Sa'id, this volume: Plan 2). Its characteristic upright, out-folded rim may belong to a bowl or a bowl-shaped oil lamp with three handles on the rim. Similar bowl-shaped lamps were widespread during the Byzantine period and later, and appeared in the synagogue at Ma'oz Ḥayyim (Tzaferis 1982: Fig. 12:3–7); at Kafr Misr, rim fragments—with or without handles—wrongly identified as 'wine glass', dated from the mid-fifth to the early seventh century CE (Onn 1994: Fig. 17:1–3); at Ḥammāt Tiberias, dated to the sixth–seventh centuries CE (Johnson 2000:84, Fig. 23:25, 28); and in the church at Shave Ziyon, dated to the fifth–sixth centuries CE (Barag 1967: Fig. 16:21, 22).

A small fragment of a neck or a mouth of a bottle (Fig. 2:8) was found in a fill below a stone floor (Area B, L217; see 'Ad and Sa'id, this volume: Plan 2). The fragment has an applied massive wavy trail decoration in the same color as the bottle. Similar applied wavy coils on the mouth or neck are very common on bottles dated from the late Byzantine to the Umayyad periods (Winter 2011:348, Fig. 12.1:18–20, see discussion and references therein to Khirbat el-Kerak, Ḥammāt Gader, Jericho and Pella).

The bottle fragment in Fig. 2:9 also has a trailed decoration. It was retrieved from a surface level in Area D but was selected for illustration because of the wavy and horizontal bands of trails, which are typical of late Byzantine–Umayyad bottles. An intact bottle with a similar pattern on its rim and neck was found at Ḥammāt Gader (Cohen 1997:425, Pl. VII: 7). Bottles with trailed necks were unearthed at Khirbat el-Shubeika, originating in burials of the late Byzantine/Umayyad period (Gorin-Rosen 2002:316, Fig. 8:39–42). A similar fragment decorated with horizontal bands was exposed in the Umayyad-period pottery workshop at Bet She'an (Winter 2011: Fig. 12.1:16).

The Mamluk Period (Strata IV–III)

Vessels assigned to the Mamluk period (Fig. 3:10, 11) were collected mainly from Area B. Both fragments are examples of marvered glass. Fragment No. 10 is part of a small hemispherical bowl with a thickened concave base. The ornamentation of trails and prominent ribs radiates from the base to the body. The white opaque trails were pressed into a transparent purple matrix, which was blown into a deeply ribbed mold (Brosh 2005:186). A rim fragment of a similar bowl, possibly a Syrian product of the thirteenth–fourteenth centuries CE, was found at Ḥammāt Gader (Lester 1997:439, Pl. II:16, and see references therein to Yoqne'am and Ḥama). The scar of a roughly cut-off pontil on the underside of

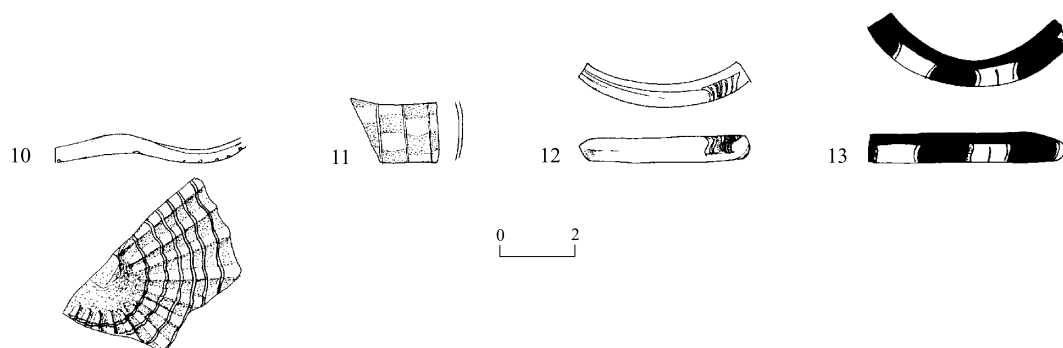


Fig. 3. Glass vessels from Strata IV–III (10, 11) and bracelets from Stratum II (12, 13).

No.	Vessel	Area	Locus	Basket	Description
10	Bowl	B	203	2006	Base and body decorated with trails and ribs; purple; white trails; grayish enamel-like weathering iridescent film, pitting; pontil scar: 1.5 cm
11	Unclear vessel	B	206	2032	Small body fragment; thin walls; purple; white trails; black enamel-like patches; silver iridescence; pitting
12	Bracelet	G	505	5047	Small part decorated with patches and trails; unclear size; obliquely pointed cross section; green opaque with a turquoise surface layer; small patches of weathering; black, brown, yellow and white trails; black ext. with enamel-like weathering; silver-grayish crust of weathering on int., iridescence, pitting
13	Bracelet	G	509	5038	Small part decorated with patches and trails; black, opaque green patches; orange, black and yellow trails; unclear size; roughly semicircular cross section; grayish crust of weathering, pitting; lime deposit

bowl No. 10 contrasts with the elaborate decoration. Such careless finishing is typical of Islamic craftsmanship, also on luxury glass items.

The small body-fragment (Fig. 3:11) of an unclear vessel is made of a free-blown marvered glass decorated with a chessboard-like pattern. A similar fragment of a beaker was found at Bet She'an in the Ayyubid–Mamluk layer above the ruins of the amphitheater, together with Mamluk pottery (Hadad 2005:59, Pl. 50:1025).

Most of the published examples of marvered glass come from excavations in Jerusalem, which was probably one of the largest production centers of this glass in Israel during the Mamluk period (Brosh 2016). A recently-published comparable assemblage from northern Israel was uncovered at the al-Waṭṭa Quarter in Zefat, mostly dated to the fourteenth century CE (Gorin-Rosen 2019: Figs. 6, 7, especially Figs. 6:11 and 7:11, parallel to Nos. 10 and 11 discussed above). Few other parallels include small fragments from Tel Yoqne'am (Gorin-Rosen 2005:109) and Nazareth (Alexandre 2012: Fig. 4.6, 7).

The Ottoman Period and British Mandate (Stratum II)

Two polychrome bracelets (Fig 2:12, 13), presumably manufactured in the Ottoman period, were found in Area G on a plaster floor (Locs 505, 509; see 'Ad and Sa'id, this volume: Plan 5). Their decoration is modest, comprising applied and marvered patches and trails in contrasting colors. Bracelets with similar patterns, dated from the Mamluk period onward, are known from several sites in northern Israel, e.g., Zefat (Katsnelson 2014:156, Fig. 1:15; Gorin-Rosen 2019: Fig. 13), Nazareth (Alexandre 2012: Fig. 4.11:8, 9) and Bet She'an (Hadad 2005: Pl. 54:1110–1113). Based on the simple and quite careless ornamentation, it seems that they were produced in the Hebron region during the late Ottoman period (for further discussion, see Spaer 2001:197–198).

CONCLUSIONS

Although only a small quantity of diagnostic fragments was found in a poor state of preservation, the glass from Kerem Maharal adds important data regarding the glassware from the Carmel plain. The assemblage is very limited, comprising mainly well-known types of the late Byzantine and Umayyad periods (Fig. 2:1–9), as well as a few blown vessels (Fig. 3:10, 11) and tooled bracelets (Fig. 3:12, 13), dated to the Mamluk and Ottoman periods, which were less common in this region.

REFERENCES

- 'Ad U. and Sa'id K. This volume. Remains from the Prehistoric to the Late Ottoman Periods at Kerem Maharal.
- Agady S., Arazi M., Arubas B., Hadad S., Khamis E. and Tsafirir Y. 2002. Byzantine Shops in the Street of the Monuments at Bet Shean (Scythopolis). In L.V. Rutgers ed. *What Athens Has To Do with Jerusalem: Essays on Classical, Jewish, and Early Christian Art and Archaeology in Honor of Gideon Foerster* (Interdisciplinary Studies in Ancient Culture and Religion 1). Leuven. Pp. 423–506.
- Alexandre Y. 2012. *Mary's Well, Nazareth: The Late Hellenistic to the Ottoman Periods* (IAA Reports 49). Jerusalem.
- Barag D. 1967. The Glass. In M.W. Prausnitz. *Excavations at Shavei Zion: The Early Christian Church* (Monografie di archeologia et d'arte II). Rome. Pp. 65–70.
- Barag D. 1983. Glass Vessels. In V. Tzaferis. *The Excavations of Kursi-Gergesa ('Atiqot [ES] 16)*. Jerusalem. Pp. 37–38, 62–63.
- Brosh N. 2005. Islamic Glass Finds of the Thirteenth to Fifteenth Century from Jerusalem—Preliminary Report. In *Annales du 16^e Congrès de l'AIHV (London 2003)*. Nottingham. Pp. 186–190.

- Brosh N. 2016. Mamluk Glass Workshops in Jerusalem: Marvered Glass. In R.A. Stucky, O. Kaelin and H.-P. Mathys eds. *Proceedings of the 9th ICAANE, 9–13 June 2014, Basel 2*. Wiesbaden. Pp. 357–368.
- Cohen E. 1997. Roman, Byzantine and Umayyad Glass. In Y. Hirschfeld. *The Roman Baths of Ḥammāt Gader: Final Report*. Jerusalem. Pp. 396–431.
- Cohen E. 2000. Roman and Byzantine Glass. In Y. Hirschfeld. *Ramat Hanadiv Excavations: Final Report of the 1984–1998 Seasons*. Jerusalem. Pp. 166–176.
- Gorin-Rosen Y. 2002. Excavations at Khirbet el-Shubeika, 1991, 1993: The Glass Vessels. In Z. Gal ed. *Eretz Zafon: Studies in Galilean Archaeology*. Jerusalem. Pp. 288–322 (Hebrew; English summary, pp. 186*–187*).
- Gorin-Rosen Y. 2005. The Glass Vessels. In M. Avissar. *Tel Yoqne ‘am: Excavations on the Acropolis* (IAA Reports 25). Jerusalem. Pp. 103–109.
- Gorin-Rosen Y. 2010. Glass from the Late Byzantine Remains near Shiqmona. *‘Atiqot* 63:209–218.
- Gorin-Rosen Y. 2019. A Mamluk-Period Glass Assemblage from the al-Waṭṭa Quarter, Safed (Zefat). *‘Atiqot* 97:101–153.
- Hadad S. 2005. *Islamic Glass Vessels from the Hebrew University Excavations at Bet Shean* (Qedem Reports 8). Jerusalem.
- Jacobson G.L. 1999. The Glass Vessels from Horvat Sumaqa. In S. Dar. *Sumaqa: A Roman and Byzantine Jewish Village on Mount Carmel, Israel* (BAR Int. S. 815). Oxford. Pp. 333–344.
- Jacobson G.L. 2004. The Glass Vessels from Horvat Raqit. In S. Dar. *Raqit: Marinus’ Estate on the Carmel, Israel* (BAR Int. S. 1300). Oxford. Pp. 242–254.
- Johnson B.L. 2000. Small Finds. In M. Dothan. *Ḥammāt Tiberias II: Late Synagogues*. Jerusalem. Pp. 84–92.
- Katsnelson N. 2014. Glass Finds from the al-Waṭṭa Quarter, Safed (Zefat). *‘Atiqot* 78:153–157.
- Katsnelson N. 2015. The Glass Vessels from Ḥorbat Bustan. In L. Talmi and N. Katsnelson. *Ḥorbat Bustan. HA–ESI 127* (August 9) <http://www.hadashot-esi.org.il/images//Horbat-bustan-App.pdf> (accessed December 13, 2020).
- Lester A. 1997. Islamic Glass Finds. In Y. Hirschfeld. *The Roman Baths of Ḥammāt Gader: Final Report*. Jerusalem. Pp. 432–441.
- Lester A. 2004. The Glass. In D. Stacey. *Excavations at Tiberias, 1973–1974: The Early Islamic Periods* (IAA Reports 21). Jerusalem. Pp. 167–220.
- Meyer C. 1988. Glass from the North Theater Byzantine Church, and Soundings at Jerash, Jordan, 1982–1983. In W.E. Rast ed. *Preliminary Reports of ASOR-Sponsored Excavations 1982–85* (BASOR Suppl. 25). Baltimore. Pp. 175–222.
- Onn A. 1994. The Ancient Synagogue at Kafr Miṣr. *‘Atiqot* 25:117–134.
- Peleg M. and Reich R. 1992. Excavations of a Segment of the Byzantine City Wall of Caesarea Maritima. *‘Atiqot* 21:137–170.
- Pollak R. 2005. Tirat-HaCarmel—The Glass Vessels. *Contract Archaeology Reports* 1:5*–28*.

- Spaer M. 2001. *Ancient Glass in the Israel Museum: Beads and Other Small Objects* (Israel Museum Catalogue 447). Jerusalem.
- Tzaferis V. 1982. The Ancient Synagogue at Ma'oz Hayyim. *IEJ* 32:215–244.
- Vitto F. 1996. Byzantine Mosaics at Bet She'arim: New Evidence for the History of the Site. *'Atiqot* 28:115–146.
- Winter T. 2011. The Glass Finds. In R. Bar-Nathan and W. Atrash. *Bet She'an II: Baysān; The Theater Pottery Workshop* (IAA Reports 48). Jerusalem. Pp. 345–362.

