

On the Almandine Cameo from Kafirqala

 Alimov Navruz Ganisher ugli

Junior Research Fellow, Samarkand Institute of Archaeology named after Y. Gulomov, Uzbekistan

Received: 08 May 2026; **Accepted:** 02 June 2026; **Published:** 29 June 2026

Abstract: The article analyzes the art of processing precious stones that developed in the territory of Central Sogd during the Early Middle Ages, based on a cameo made of almandine discovered during archaeological excavations at the Kafir Kala site near Samarkand. The study provides information about the manufacturing technology of the cameo, the physical properties of almandine, and the locations of its deposits.

Keywords: Central Sogd, Kafir Kala, cameo, almandine, craftsmanship.

Introduction: Historical sources and archaeological evidence indicate that trade, musical culture, fine and applied arts, and various crafts flourished in Sogd during the early medieval period. In particular, such branches of craftsmanship as pottery, blacksmithing, jewelry making, and textile production ranked among the leading industries, serving not only local markets but also being exported abroad through the Silk Road. In recent years, archaeological investigations conducted at Sogdian urban sites, including the Kafirqala archaeological monument near Samarkand, have yielded important evidence concerning the craft tradition of working precious and semi-precious stones.

The Kafirqala (Rivdad) archaeological site, which served as the suburban residence of the rulers of Samarkand, is situated 18 km south of ancient Afrosiab on the right bank of the Dargom Canal [3, p. 93]. The site comprises the three principal components characteristic of early medieval cities: the citadel (ark), the inner city (shahrstan), and the suburban quarter (rabad) [8, p. 73]. The cameo described below was recovered from Rooms 15–16 of the citadel during archaeological excavations. Furthermore, the discovery within the same archaeological layer of coins minted by the Sogdian rulers Okkurt Chamuk (626–655), Tarkhun (700–710), and Ghurak (712–738) [2, pp. 5–6] provides a reliable basis for dating the cameo to the seventh–eighth centuries CE.

METHODS

The study employs historical analysis, comparative classification, iconographic analysis, chronological periodization, and comparison with written sources.

RESULTS

A cameo made of almandine was discovered at the Kafirqala archaeological site. A cameo (Latin: *cammaeus*) is a piece of jewelry featuring a relief image carved into a precious or semi-precious stone. The artifact is roughly rectangular in plan, with smoothly rounded corners. Its reverse side is flat, while the obverse bears a carved depiction of the head of a male figure. The face is elongated and oval in shape, with a low forehead. The eyes are large and oval, with clearly defined eyelids rendered in relief, while the pupils are carefully indicated by small circular depressions. The eyebrows are depicted in a semicircular form. The nose is straight and proportionally small, harmoniously integrated with the facial features. The mouth is small, with well-defined lips that stand out distinctly from the rest of the face. The lower part of the face is finished with a modestly sized chin. Short incised lines representing the hair partially cover the forehead and the upper part of the head, reflecting the hairstyle typical of the Sogdians, commonly described as a “bob” (*kare*) style. A semi-oval neck is also depicted beneath the lower part of the head. The cameo measures 14 mm in height, 9 mm in width at the upper edge, and 5 mm at the lower edge, with a maximum thickness of 7 mm (Fig. 1).



Fig. 1

DISCUSSION

The cameo was crafted with a high degree of artistic skill and in accordance with the principles of symmetry. It may originally have served as an ornamental inlay for a ring made of precious metal or for a larger piece of jewelry, such as a diadem or pectoral. Although its manufacturing technique recalls examples of ancient glyptic art, the hairstyle of the depicted figure is characteristic of representations found in early medieval Sogdian wall paintings, terracotta figurines, and the wooden panels from Kafirqala. This stylistic evidence supports dating the cameo to the early medieval period. In particular, the hairstyle closely resembles those depicted on the wooden panels from Kafirqala. Based on her study of these panels, M. Sultanova identified two principal variants of this hairstyle: a smooth shoulder-length bob (kare) and a traditional shoulder-length kare style [11, pp. 44–45]. Similar kare hairstyles are also represented on Sogdian

terracotta figures [11, Fig. 6; 7, Pls. 25, 28]. A close parallel to the Kafirqala figure can be found in a wooden sculpture discovered in the Upper Zarafshan Valley. Carved from wood and standing approximately one meter in height, the sculpture displays facial features—including the small mouth, chin, and especially the wavy hair—that closely resemble those of the Kafirqala cameo [15, p. 159]. Researcher Y. Yakubov identified this sculpture as representing a Sogdian deity, arguing that Sogdian sculptural art predominantly depicted divine figures, whereas representations of ordinary humans were extremely rare [14, p. 147]. Furthermore, metal figurines with similarly wavy hairstyles have been documented at the sites of Qal'ai Nofin (Tajikistan) [10, Fig. 6] and Jartepa II [4, p. 87], where they have likewise been interpreted as representations of household deities. The manner in which the figure's nose merges with the eyebrows also closely resembles a sculptural figure discovered at the Kampyrtepa site in Surkhandarya Region [6, Fig. 291]. It

is therefore possible that the Kafirqala figure likewise depicts a Sogdian deity.

The art of the cameo—the carving of relief images on precious or semi-precious stones—originated in Greece and Rome during the third century BCE. Owing to the close cultural contacts between the Sasanian Empire and the Roman Empire, this artistic tradition was introduced into Iran during the third and fourth centuries CE. Notable examples of early medieval Sasanian cameo art include the depiction of the confrontation between the Sasanian ruler Shapur I and the Roman Emperor Valerian [17, p. 288], as well as the representation of the Sasanian king Bahram II subduing the bull Nandi [18, Fig. 1], both of which are regarded as outstanding examples of Sasanian glyptic craftsmanship.

Almandine is a mineral belonging to the garnet group and has a hardness of 7–7.5 on the Mohs scale. Its chemical composition is $\text{Fe}_3\text{Al}_2(\text{SiO}_4)_3$, with minor amounts of magnesium (Mg) and manganese (Mn). The mineral is transparent to semi-transparent and typically occurs in shades of red, purplish red, or brownish red, with its coloration determined by varying concentrations of iron (Fe). In nature, almandine is found within a variety of geological formations and rock assemblages, and its crystals are generally relatively small, ranging in size from a few millimeters to approximately 4 cm [12, pp. 47–48]. The name almandine is derived from Alabanda in Asia Minor, where garnets were mined and worked in antiquity. The mineral was first described by Georgius Agricola in 1546 and is also known by the synonym carbuncle [9, pp. 51–53]. Pliny the Elder, writing in the first century CE, remarked that “among red stones, the most beautiful and finest is the carbuncle, for it resembles fire” [12, p. 47]. Since ancient times, almandine crystals have been widely used in necklaces and various forms of jewelry, including rings, ornaments, and pendants. In Al-Biruni’s *Mineralogy*, the stone is referred to as *bidjazi*. According to his account, the finest examples were the garnets from Ceylon (Sri Lanka), prized for their deep ember-like red color, while the most valuable specimens were believed to possess the remarkable property of strongly attracting bird feathers [1, p. 110]. The earliest known almandine seal in Central Asia dates to the Hellenistic period and was discovered at the archaeological site of Ai Khanoum in present-day Afghanistan [16, p. 14].

Almandine deposits have been recorded in the Alps of Europe, Namibia in Africa, Sri Lanka, the Indian state of Gujarat, and the Ural Mountains [13, p. 56]. Within Uzbekistan, occurrences of almandine have been identified at the Sultan Uvays, Langar, and Turlangli deposits [19]. Al-Biruni also noted that, during the

medieval period, almandine was mined from deposits located along the route from Badakhshan to Shikinson [1, p. 111].

The selection of almandine was unlikely to have been accidental, as the stone’s reputed magical properties were highly valued in many cultures. It was believed to protect against the evil eye, assist women during childbirth, alleviate fatigue, and bestow strength and vitality—perhaps owing to its red color, which was associated with blood and fire. Almandine was also thought to enhance self-confidence. In addition, ancient traditions held that carrying the stone while traveling would protect its owner from misfortune on the journey, including material losses, illness, and separation. The mineral was further believed to have the power to calm anger and dispel sorrow and fear. In ancient Greece, almandine was regarded as a symbol of loyalty and love, as well as of joy and even serenity [5, p. 60].

CONCLUSION

In conclusion, several lines of evidence suggest that the Kafirqala cameo was produced locally in Sogd by a skilled artisan. First, the discovery of more than 900 bullae and seals at the Kafirqala site itself demonstrates that seals were actively used in practice, indicating the existence of a well-established tradition of working precious and semi-precious stones in Sogd. Moreover, jewelry and garments adorned with precious stones were widespread among the Sogdian ruling elite and aristocracy. Such ornaments and attire are clearly depicted in the mural paintings of Afrasiab and Panjikent. In addition, scholars who have studied early medieval Sogdian costume have noted that the ruler of Samarkand wore a golden diadem set with seven precious stones and that the headdresses of major city governors and nobles were similarly decorated with gemstones.

Second, the recovery of the cameo from a seventh–eighth-century layer within the citadel of Kafirqala firmly associates the object with the social and cultural environment of that period. Third, the manufacturing technique of the cameo reflects characteristics typical of Sogdian artistic tradition, including the frontal depiction of the face, strict adherence to symmetry, and geometric simplification. Although comparable anthropomorphic representations are also common in Sasanian art, they differ from Sogdian examples in that Sasanian compositions are generally rendered in profile and place greater emphasis on naturalistic representation.

Finally, the anthropomorphic image carved on the cameo conforms to the established iconographic conventions of Sogdian visual art. In particular, the

disproportionately large almond-shaped eyes, the prominent eyebrows merging with the arched nose, the small lips, and the chin tapering downward closely parallel the facial morphology observed in Sogdian terracotta figures and in the wall paintings of Afrasiab and Panjikent. Taken together, these observations suggest that the almandine itself was imported into Sogd through the Silk Road trade network, where it was subsequently fashioned into ornamental objects in accordance with local artistic traditions.

REFERENCES

1. Абу Райхон Беруний. Собрание сведений для познания драгоценностей (Минералогия) / пер. с араб. А. М. Беленицкого. СПб.: 2011. — 600 с.
2. Begmatov A., Berdimurodov A., Bogomolov G., Murakami Tomomi, Teramura Hirofumi, Uno Takao, and Usami Tomoyuki: New Discoveries from Kafir-kala: Coins, Sealings, and Wooden Carvings. 2020. (Electronic resource). — Access mode: <https://Academia.edu>.
3. Бердимуратов А.Э, Индиаминова Ш. А. Буюк ипак йўли: қитъалар ва асрлар оша. — Самарқанд, 2017.
4. Бердимуратов А.Э, Самибоев М.К. Храм Джартепа. - Тошкент, 1999.
5. Гаврилова А. С., Шанина С.А., Елисеева Е.Л., Климова М.В., Климкина О.В., Демин И.О., Пугвакин О.В. Драгоценные камни и минералы. Популярная энциклопедия. Ростов на Дону, Владис, 2011. 208 с.
6. Караматов Х.С. Древние культы Центральной Азии. — Самарқанд-Ташкент: МИЦАИ, SMI-ASIA, 2017.
7. Мешкерис В.А. Коропластика Согда. Душанбе, 1977.
8. Сандибоев А Н. Маймурғ илк ўрта асрларда. — Самарқанд, 2021
9. Солодова Ю.П., Андреев Э.Д., Гранадчиков Б.Г. Определитель ювелирных и поделочных камней. М., изд. Недра, 1989. 213 с.
10. Ставиский Б.Я. Работы Магианской группы в 1959 г. // Труды Института истории, археологии и этнографии им. А.Дониша, т.31. - Душанбе, 1961 (АРТ, вып. 7, 1959).
11. Султанова М.Н., Кубаев С.Ш. Прически раннесредневекового Согда (по материалам резного дерева с Кафиркалы) // Вестник археологии, антропологии и этнографии. № 3 (66) 2024. <http://ipdn.ru>.
12. Путолова Л. С. Самоцветы и цветные камни. — М., 1991.
13. Шуман В. Мир камня. Том 1. Горные породы и минералы. — М., 1986. 215 с.
14. Якубов Ю. Раянесредневековые сельские поселения горного Согда. (К проблеме становления феодализма). - Душанбе, 1988.
15. Якубов Ю.Я. Религии Центральной Азии и Азербайджана. Том II. Зороастризм и верования маздеистского круга. — Самарканд: МИЦАИ, 2017. — 308 с.
16. Adams, N. 'The Garnet Millennium: The Role of Seal Stones in Garnet Studies' in C. Entwistle and N. Adams (eds) 'Gems of Heaven': Recent Research on Engraved Gemstones in Late Antiquity, AD 200-600, BM Research Publication 179, London, 2011.
17. Ritter Nils. Gemstones in pre-Islamic Persia: Social and Symbolic Meanings of Sasanian Seals. In: Gemstones in the first Millennium AD: Mines, Trade, Workshops and Symbolism. - Mainz., 2017.
18. Shayegan Rahim M. The Cameo of Warahrān II and the Kušano-Sasanians. Bulletin of the Asia Institute Volume 30. - Michigan., 2020.
19. www.geoportal-uz.org Mineral resources — Uzbekistan Geoportal