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А R C H A E O L O G Y ՀՆԱԳԻՏՈՒԹՅՈՒՆ АРХЕОЛОГИЯ

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THE ARMENIAN-GERMAN ARCHAEOLOGICAL PROJECT: RESULTS FROM THE EXCAVATIONS IN ARTAXATA 2018–2021

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Key words: Artashat, Ancient Armenia, archaeological prospection, excavation, *Hellenistic, Roman.*

The report deals with the first results of the Armenian-German Artaxata Project (AGAP) which started in 2018.¹ The project focuses on the Lower City of Artashat/Artaxata, the capital of Artaxiad and Arsacid Armenia. So far, the area was investigated by over 30 hectares of magnetic prospection, large-scale excavations in over 400 sqm and selective deep drilling. Several structures of possibly domestic and public functions – in parts with an elaborate character – were uncovered. The project will continue in the years to come with further excavation campaigns.

Introduction: The Armenian-German Artaxata Project (AGAP) was launched in 2018 and focuses on the study of the capital of the Artaxiad and Arsacid Armenian kingdom. It is a collaboration between the Institute of Archaeology and Ethnography of the Armenian Academy of Sciences and the Institute for Classical Archaeology, University of Münster. The primary area of research is the Lower City of Artaxata and in particular – Hill XIII and its surrounding plain. In five campaigns so far, an area of over 30 hectares has been geophysically prospected and extensive excavations started on Hill XIII. Up to now, about 450 square meters of ancient structures have been uncovered and documented. In addition to the three-phase construction on Hill XIII, which dates from the 2nd century BC to the 1st century AD, and the remains of an unfinished Roman aqueduct

¹ The AGAP is funded by the Armenian Academy of Science and the Deutsche Forschungsgemeinschaft. We are grateful to the funders and to all team members of the 2018-2020 campaigns for their enthusiastic ontributions. The project is directed by Achim Lichtenberger (Münster) and Mkrtich H. Zardaryan (Yerevan).

from the early 2nd century AD, traces of older phases from the Urartian period were found. The project will be continued in the coming years.

Artaxata – The capital of Artaxiad and Arsacid Armenia

Artaxata, situated *c*. 10 km south of the modern city of Artashat, in the central part of the Ararat Valley, was founded in the 180s BC by King Artashes-Artaxias I (189-160 BC) as the capital of the Kingdom of Artaxiad Armenia (**Fig. 1**). It was situated on the left bank of the Arax River. Legend has it that the Punic leader Hannibal was involved in the process of founding the city due to its strategic location between the rivers of Arax and Metsamor.² Artaxata quickly developed into an important metropolis and was a royal residence (Strabo 11.1.6).

Under King Tigranes II (96-55 BC), the Armenian kingdom expanded into the southern Levant. In 69 BC during his military campaign the Roman general Lucullus marched to Artaxata (Plut. Lucullus 32). Plutarch calls the city "Armenian Carthage" in this context. This can be interpreted as a reference to Hannibal's participation in the founding of the city as well as to the Armenian antagonism to Rome. Lucullus was defeated by Tigranes II and chased out of the country. In the following periods, the kingdom of Armenia remained disputed between the Romans and Parthians.³

In 58 AD, Corbulo captured the city, but decided to destroy it because of its size and his inability to occupy it (Tac. Ann. 14.23.1; Dio 62, 19-20). After the victory of the Parthians over the Romans, the Armenian Arsacid dynasty was established in Armenia. Their first king, Tiridates I, went to Rome and was confirmed as king by Nero, from whom he received 200 million sesterces as compensation for the previous destruction of Artaxata by Corbulo (Dio 63.6). This money was used to rebuild the city and Artaxata remained the royal residence. Under Trajan and Marcus Aurelius there was a short Roman presence, which, however, ended again at the latest in 186 AD. In the 3rd/4th century AD, the increasing swampiness of the urban area led to the loss of importance of the city. In 368 AD Artaxata was destroyed by Shapur II (Faustus Byz. 4.55) but remained an important trading post in the 5th century (Cod. Iust. IV 63.4). By the 7th century, the once large city had probably shrunk to the size of a fort.⁴

Since the 1970s systematic excavations were undertaken by the Institute of Archaeology and Ethnography of the National Academy of Sciences of Armenia.⁵ The investigations focused mainly on Hills I, IV and VIII as well as some areas on Hills II, V, VII and the 'Complex with Pillars', the north-eastern necropolis and the current project within the 'Riverside District'.⁶ Among the impressive results, the investigation of the *c*. 10 km long city fortifications should be highlighted, as well as the exploration of the dwellings and parts of public buildings, workshops, baths and water supply infrastructure.

The Armenian-German Artaxata Project (AGAP)

The AGAP, a cooperation between the Armenian National Academy of Sciences and the University of Münster, was started in 2018. The major aims of this collaboration, which investigates the 'Lower city' of Artaxata are:

² Strabo 14,6,32; Plut. Lucullus 31; cf. especially Traina 1999–2000, pp.63–64.

³ On the Roman policy towards Armenia see Chaumont-1976 and Marciak-2017.

⁴ Tonikian Cf. The Layout of Artashat and Its Historical Development //Mesopotamia. 27: -1992, pp.161–168. On the history see also the syntheses of Kanecjan-1998; Khachatryan-1998.On Late Antiquity, see also Dignas – Winter-2007, pp. 204–205.

⁵ These excavations were published in: Khachatryan-1981; Arakelian-1982. See also the syntheses: Arakelian-1984; Tonikian-1992; Tonikian-1996; Invernizzi-1998. For the history of research, see Khatchadourian-2008. p.266.

⁶ Zardarian-Akopian-1995. pp.173-180. For the 'Riverside District': Xač'atryan-2005; Zardaryan-2018/2020.

(1) Research into the urbanistics of the city of Artaxata from its Hellenistic foundation to the post-Christian centuries.

(2) Research into the material culture of the city of Artaxata from its Hellenistic foundation to the post-Christian centuries as well as into the 'pre-classical' periods.

(3) Deepening the scientific relations between Armenia and Germany in the field of archaeology.

The main research area – on and around Hill XIII – is located in the plain c. 100 m to the east from Hill I (**Fig. 2**). The stretches c. 125 m in east-west direction and is c. 40 m wide in north-south direction. It rises about 8 m from the plain and with two 'peaks' to the eastern and the western ends it has a saddle-like shape.

In 2018 a magnetic survey which captured 11.2 ha was undertaken on Hill XIII and the adjacent plain to the north and south of it as well as the eastern slopes of Hill I and II. In addition, a test trench was laid out in the central part of Hill XIII on its northern slope. It followed a modern disturbance to get an idea of the stratigraphy. In autumn 2019, based on the results of the magnetogram, large-scaled excavations on Hill XIII were started. It quickly became apparent that the area had been extensively occupied in three successive phases of building activity. To clarify some of the results of the geophysical prospection, boreholes were drilled throughout the area in spring 2020. In Autumn 2020 another excavation campaign was carried out. The trenches on Hill XIII followed the structures that had already been exposed the year before. Most recently – in spring 2021 – a second geophysical survey campaign was carried out with the aim of exploring the area further to the south, which is at massive risk from ongoing development.

Autumn 2018: Magnetic Prospections and test trench A

A total area of 11.2 hectares was magnetically prospected during this first campaign (**Fig. 3** and **4**).⁷ The results clearly show that monumental architecture is to be expected in the Lower City.

Significant building complexes were located without intervention in the ground. Negative magnetic anomalies testified to stone foundations for mudbrick walls. To the south of the dense rectangular building structures on Hill XIII, the layout of a well-planned domestic (?) building emerged. Further south, there are as yet undefined building structures, e.g. a "Hall". It is also evident that the entire area is criss-crossed with regular anomalies, interpreted as roads or canals. Building structures can also be seen at the foot of Hills I and II. A very conspicuous anomaly occurred to the north of Hill XIII, where a line runs in an ENE-WSW direction towards Hill I.

An excavation in a test trench (A), laid out in a recent surface disturbance on Hill XIII, and carried out in parallel with the prospection, revealed a massive layer of melted mudbricks, pottery, bones and archaeobotanical remains.⁸ These are all clear indicators of extensive settlement activity on Hill XIII in antiquity

Autumn 2019: Excavations

Based on the results of the magnetogram, two areas of investigation were defined for the first excavation campaign (**Fig. 5**).⁹ Area 1 describes the eastern side of Hill XIII to examine the rectangular structures found there. Area 2 followed a series of single high negative anomalies north of the hill.

In Area 1 on Hill XIII, a total of 187.5 square metres were uncovered in eight trenches. The features uncovered here – to a large extent bases of quarry stone for mudbrick walls – show three

⁷ For a detailed report see: Lichtenberger – Meyer – Zardaryan--2019, pp. 70–89.

⁸ Lichtenberger – Zardaryan (forthcoming).

⁹ For detailed reports see: Lichtenberger – Zardaryan – Schreiber-2020, pp. 184–227; Lichtenberger – Schreiber – Zardaryan-2021. pp. 245–276; Lichtenberger – Zardaryan – Schreiber (forthcoming).

phases of construction (**Fig. 6–8**). The phases, which partly overlap, indicate a relative chronological sequence. Based on 14C datings, the subsequent structures can be dated to between the 2nd century BC and the 1st century AD. The pottery finds point to a somewhat later dating from the 1st century BC to the 2nd century AD.

In Area 2, the row of single spots with a high negative amplitude proved to be the remains of massive *opus caementitium* blocks. These blocks are interpreted as the remains of the pillars for the arches of an unfinished Roman aqueduct (**Fig. 9**). An OSL analysis was able to narrow down the period of construction between 60 and 460 AD, making it very likely that the aqueduct was built between 114 and 117 AD during the reign of Emperor Trajan and his attempt to establish the province of Armenia. Older structures in form of a wall, some pottery sherds and 14C datings suggest that in this area the aqueduct covered remains from the Urartian period.

Spring 2020: Drilling

In order to better understand the results of the magnetic prospection, boreholes were drilled during the 2020 spring campaign to determine the depth and nature of the traces visible in the magnetogram (**Fig. 10**). It became clear how much the modern landscape differs from the ancient terrain. Post-ancient agricultural use and the change in river courses have had a lasting influence on the area. Even though the results can only be regarded as preliminary so far, it is apparent that the core drilling holds the potential for the reconstruction of the ancient landscape. In addition, another possible aqueduct pillar was found directly in front of Hill I, which could not be reached by regular excavations at a depth of about 3.4 m. The archaeological evidence seems to be in good condition all over the area of investigation and often is situated close to the surface, which makes future excavation work easier to plan.

Autumn 2020: Excavations

Starting from the archaeological features already uncovered in 2019, we focused on Hill XIII in 2020 (**Fig. 11**). The main goal was to examine the building complex, which had previously only been partially uncovered, in more detail. Architectural features from the previously determined three phases were uncovered in the entire eastern area of the Hill. As before, the different phases are predominantly defined by wall features, more precisely by quarry stone bases for mudbrick walls. Here, too, the features of the different phases partly overlap, so that the relative chronological sequence of the year 2019 was confirmed. In addition to the phases I–III, *in situ* traces of the Urartian period were found in the eastern part of the area. It is now clear that on Hill XIII we are dealing with two building complexes of Phases I, II and III separated by an alley. The complexes of the later Phases II and III largely correspond in layout (**Fig 13** and **14**). Based on the pottery finds and the general layout, it can be assumed that the buildings of Phases II and III were of residential use.

The situation is different with the earlier Phase I, which corresponds in general orientation with the later phases above it, but whose layout differs significantly in axis and design (**Fig. 12**). So far, the eastern of the two complexes of phase I consists of a central broad room surrounded by corridors which form a bent entrance and smaller rooms. The decoration of the main room (hall) with elaborated stucco and a podium as well as the remains of a basalt base (?) indicate a prominent status of the complex. A more precise determination of the function is not yet possible. While the building of Phase I was at least partially destroyed by fire and only later built over, the buildings of Phase III seem to have been abandoned in a controlled manner. All three Phases are characterized by a sparse finds, which suggests that also Phase I was cleared and abandoned before being built over again, just like Phase III.

In the eastern part, too, the results of the 14Cdatings correspond to the previous results, so that Phase I begins in the 2nd century BC and is replaced in the 1st century BC by phases II and III

in relatively short sequence. The pottery, on contrast, corresponds to the spectrum, which generally is dated in Artaxata to the period from the 1st century BC to the 2nd century AD.

Spring 2021: Magnetic Prospection

The geomagnetic prospection was continued in the southern area and the prospected area was extended by approx. 22 hectares to a total of approx. 33 hectares (**Fig. 15**). The evaluation of the measurements is still pending. However, there are also clear traces of constructions south of the road to the monastery of Khor Virap. Whether the partly orthogonal negative signals indicate canals or other remains of the water supply must remain open for the time being. All in all, the traces visible in the magnetogram indicate a looser development in this area (or structures which lie much deeper than further north). It is possible that we are dealing with structures similar to the domestic (?) complex located to the south of Hill XIII.

Conclusion: According to the investigations of the AGAP carried out so far, it can be concluded that the area of the Lower City occupied since Hellenistic times. The 14C datings so far point to a period from the Hellenistic foundation of the city to the 1st/2nd century AD, although the chronological framework still requires further elaboration.

Hill XIII shows dense development in three successive phases. While there seems to be a longer period of non-settlement between Phase I and the following Phases II and III, the latter follow each other quite quickly, as the general layout does not change significantly. While the function of the buildings in Phase I remains unclear due to the lack of finds and pending excavation work, the buildings Phases II and III seem to have been residential complexes. Here, too, a final determination of the function has yet to be made, as only small parts of the complexes in the west have been excavated.

The buildings of the last phase were obviously systematically abandoned, which is indicated on the one hand by the lack of finds and on the other hand by the large-scale remains of melted mudbricks all over the area.

Hill XIII was apparently an integral part of the urban area of Artaxata since the Hellenistic foundation and thus within the Artaxiad and early Arsacid phases. The construction history on hill XIII correlated to the construction history on Hill I. There was probably an interruption of building activity in this area in the 1st century AD, which was then only resumed under Trajan and with the impressive attempt to build an aqueduct north of Hill XIII.

Archaeological finds and features in the vicinity of the aqueduct blocks and on Hill XIII testify to the fact that settlement activity in this area of the city can also be expected in previous times, namely the Urartian period.

Excavation activities will be continued in autumn 2021. On the one hand, it will be necessary to examine Hill XIII and the building complexes in more detail, and on the other hand, to explore the plain further south in more detail. In any case, the magnetic prospection indicates that the city area, which covers up to 700 hectares, contains enough archaeological material for decades of investigation.

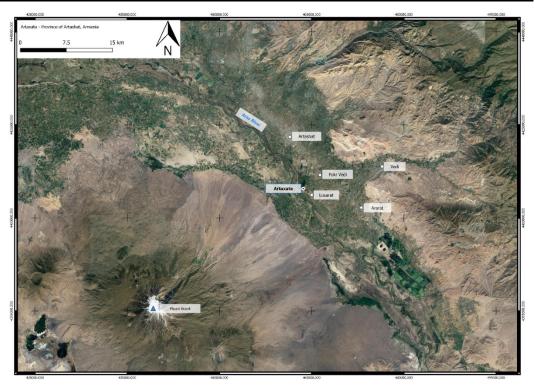


Figure 1: Map of Mount Ararat and the Ararat Plain

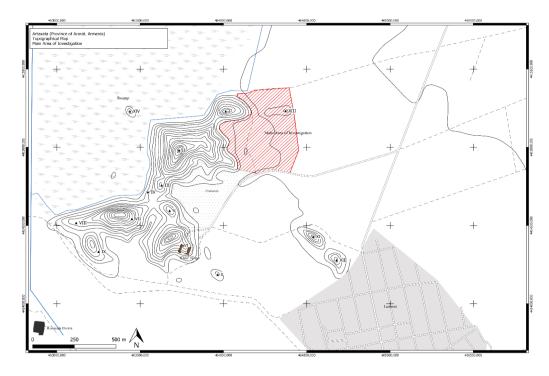




Figure 3: Results of the magnetic prospection in Artaxata 2018 (by Eastern Atlas)



Figure 4: Interpretation of the magnetic prospection in Artaxata 2018 (by Eastern Atlas)

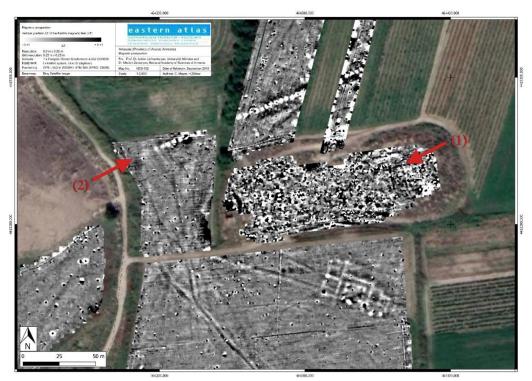


Figure 5: Results of the magnetic prospection in Artaxata 2018 (by Eastern Atlas) and main areas of investigation



Figure 6: Archaeological remains on Hill XIII: Phase I Figure 7: Archaeological remains on Hill XIII: Phase II

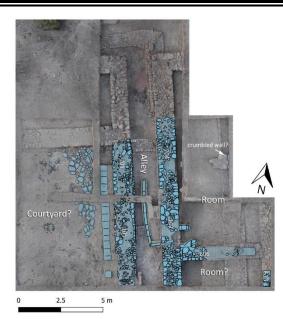


Figure 8: Archaeological remains on Hill XIII: Phase III



Figure 9: opus ceamentitium blocks of an unfinished Roman aqueduct

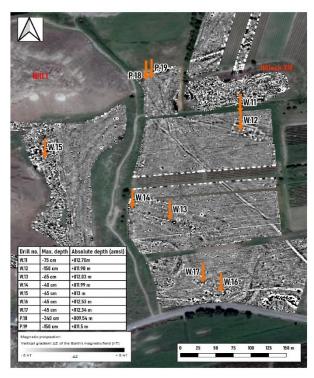


Figure 10: Map showing the locations and depths of all the single drills, plotted on the 5nT magnetic map (Eastern Atlas; N. Noorda)

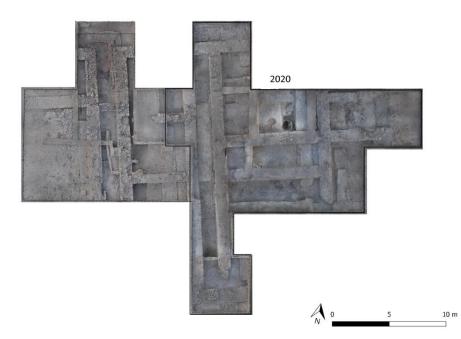


Figure 11: Orthographic photo rendered from a 3D-model with trenches from 2020

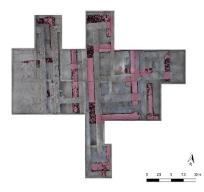


Figure 12: Archaeological remains on Hill XIII after the 2020 campaign: Phase I

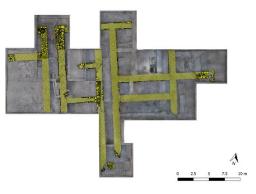


Figure 13: Archaeological remains on Hill XIII after the 2020 campaign: Phase II

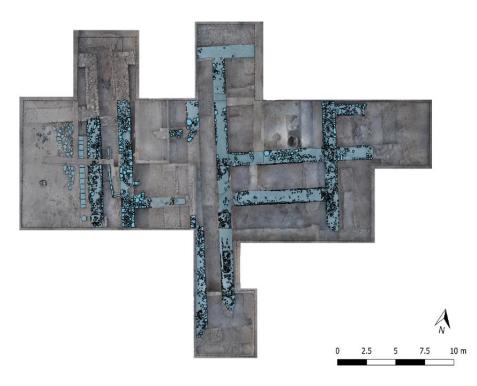


Figure 14: Archaeological remains on Hill XIII after the 2020 campaign: Phase III

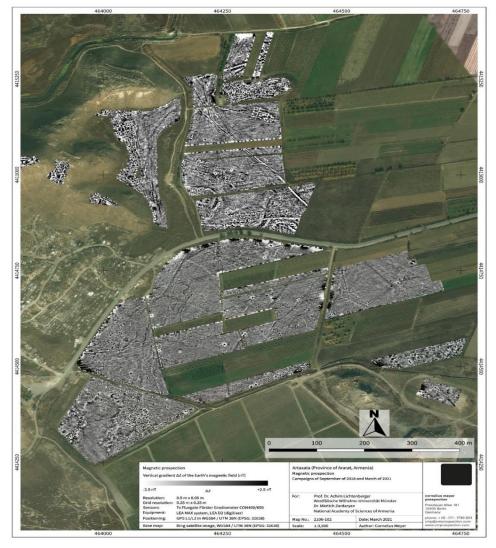


Figure 15: Results of the magnetic prospection in Artaxata 2018/2021 (by Eastern Atlas / cm prospection)

«ԱՐՏԱՔՍԱՏԱ» ՀԱՅ-ԳԵՐՄԱՆԱԿԱՆ ՀՆԱԳԻՏԱԿԱՆ ԾՐԱԳՐԻ 2018-2021 ԹԹ. ՊԵՂՈՒՄՆԵՐԻ ԱՐԴՅՈՒՆՔՆԵՐԻ ՇՈՒՐՋ

Գյուլամիրյան Հ.Ա., Լիխտենբերգեր Ա., Մուրադյան Ս.Ռ., Շրայբեր Տ., Չարդարյան Մ. Հ.

Բանալի բառեր՝ Արտաշատ, Արտաքսատա, հին Հայաստան, հնագիտական հետազոտություն, պեղումներ, հելլենիստական, հռոմեական։ Հայ-Գերմանական «Արտաքսատա» ծրագիրը (ԱԳԱՓ) սկիզբ է առել 2018-ին և միտված է Արտաշեսյան և Արշակունյաց Հայաստանի Արտաշատ մայրաքաղաքի բազմակողմանի հետազոտմանը։ Ծրագիրն իրականացվում է ՀՀ ԳԱԱ հնագիտության և ազգագրության ինստիտուտի և Մյունստերի համալսարանի Կլասիկ հնագիտության ինստիտուտի համատեղ ջանքերով։ Հետազոտման հիմնական թիրախն Արտաշատի «Ստորին քաղաքն» է և մասնավորապես՝ նրա XIII բլուրն ու շրջակա դաշտավայրը։

Անցած հինգ պեղաշրջաններում գեոֆիզիկական ուսումնասիրության է ենթարկվել անտիկ քաղաքի հարթավայրային մասի ավելին քան 30 հա տարածքը և պեղվել է XIII բլրի ու հարակից դաշտամասի շուրջ 450 քմ հատվածը։ Բլրի վրա բացահայտվել են Ք. ա. II դ-ի վերջին – Ք. հ. I-II դդ-ին վերաբերող երեք շինարարական հորիզոններ, իսկ դաշտում՝ Ք. հ. II դ-ի սկզբով թվագրող անավարտ հռոմեական ակվեդուկի հիմքերը։ Այս երկու պեղատարածքներում գրանցվել են նաև ուրարտական շրջանին վերաբերող բնակության հետքեր։ Առաջիկա տարիներին ծրագրի աշխատանքները կշարունակվեն։

АРМЯНО-ГЕРМАНСКИЙ АРХЕОЛОГИЧЕСКИЙ ПРОЕКТ «АРТАКСАТА»: РЕЗУЛЬТАТЫ РАСКОПОК В 2018-2021 гг.

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Ключевые слова: Арташат, Артаксата, древняя Армения, археологические исследования, раскопки, эллинистический, римский.

Армяно-германский проект «Артаксата» (АГАП), задействованный в 2018 г., направлен на многовекторное изучение Арташата – столицы Арташесидской и Аршакидской Армении. Проект осуществляется совместными усилиями Института археологии и этнографии НАН РА и Института Классической археологии Мюнстерского университета. Исследования в основном ориентированы на изучение «Нижнего города» Арташата и, в частности, его XIII холма и сопредельной равнины. За прошедшее пятилетие была проведена детальная геофизическая разведка более чем 30 га равнинной территории города, а также раскопаны более 450 кв. м на XIII холме и прилегающей равнине. На холме выявлены три строительных горизонта, относящихся ко второй половине II в. до н. э. – І-ІІ вв. н. э., а в поле – пилоны недостроенного римского акведука начала II в. н. э. На двух последних участках зафиксированы также следы заселения урартского периода. Исследования в рамках проекта будут продолжены и в дальнейшем.

Bibliography

- 1. Arakelian B. N.-1982. Artashat I. Osnovnye rezul'taty raskopok 1970–1977 gg. [Artashat I. Main Results of the Excavations of the Years 1970–1977]. Yerevan (in Russian).
- Arakelian, B. N.-1984. Les fouilles d'Artaxata. Bilan provisoire // Revue des Études Arméniennes 18. pp.367–381 (in French).
- Chaumont M.-L.-1976. L'Arménie entre Rome et l'Iran. I. De l'avènement d'Auguste a l'avènement de Dioclétien // ANRW 2.9.1. pp. 71–194 (in French).

- 4. Dignas, B., Winter, E.-2007. Rome and Persia in Late Antiquity: Neighbours and Rivals, Cambridge.
- 5. Invernizzi A. (ed.)-1998. Ai piedi dell'Ararat. Artaxata e l'Armenia ellenistico-romana, Torino (in Italian).
- 6. Kanecjan A. G.-1998. Città e insediamentinell'Armenia di etàclassica, in: A. Invernizzi (ed.), Aipiedidell' Ararat. Artaxata e l'Armeniaellenistico-romana. Torino. pp. 3–94 (in Italian).
- Khatchadourian L.-2008. Making Nations from the Ground up: Traditions of Classical Archaeology in the South Caucasus // AJA 112. pp. 247–278.
- Khachtryan Ž. D.-1981. Artashat II. Antichnyj nekropol' (raskopki 1971–1977 gg.) [Artashat II: The Ancient Necropolis (Excavations of the Years 1971–1977)]. Yerevan (in Russian)..
- Khachatrian Ž. D.-1998. Artaxata. Capitale dell'Armenia antica (II sec. a.C.–IV sec.d.C.), in: A. Invernizzi (ed.), Ai piedi dell'Ararat. Artaxata e l'Armenia ellenistico-romana, Torino: pp. 97–158 (in Italian).
- Khachatryan Ž. D.-2005. Archaeological Research in Artaxata // Preliminary Report 2003–2004, Parthica 7: pp. 19–28.
- Lichtenberger, A., Meyer, C., Zardaryan, M. H.-2019. Report on the 2018 Magnetic Prospection at Artaxata / Artashat in Armenia // Archäologischer Anzeiger 2019. pp. 70–89 (in German).
- Lichtenberger, A., Schreiber, T., Zardaryan, M. H.-2021. First Results and Perspectives of a New Archaeological Project in the Armenian Capital Artaxata: From Artashes-Artaxias I to Roman Imperialism. Electrum 28. pp. 245–276.
- 13. Lichtenberger, A., Zardaryan, M. H., Schreiber, T. (forthcoming)-2021. Failed Roman Imperialism: An Unfinished Roman Aqueduct at Artaxata in Armenia, Archäologischer Anzeiger (in German).
- Lichtenberger, A., Zardaryan, M. A., Schreiber, T.-2020. The Armenian-German Artaxata Preliminary Report on the Excavations in Artashat 2019 // AJNES XIV/1–2 2020. pp. 184–227.
- 15. Lichtenberger, A., Zardaryan, M. H. (forthcoming). Preliminary Report of the 2018 campaign of the Armenian-German Artaxata Project, Boreas.
- Marciak, M.-2017. Sophene, Gordyene, and Adiabene: Three Regna Minora of Northern Mesopotamia Between East and West, Leiden–Boston.
- Tonikian, A. V.-1992. The Layout of Artashat and Its Historical Development//Mesopotamia 27. pp. 161– 187.
- Tonikian, A. V.-1996. Architecture of Dwelling Houses of Artashat, Capital of Ancient Armenia: 2nd Century BC–4th Century AD // Ancient Civilizations of Scythia and Siberia 3. pp.15–37.
- Traina, G.-1999–2000. Épisodes de la rencontre avec Rome (IIe siècle av. J.-C.–IIIe siècle ap. J.-C.), Iran & the Caucasus 3–4. pp. 59–78 (in French).
- Zardarian, M. H., Akopian, H. P.-1995. Archaeological Excavations of Ancient Monuments in Armenia, 1985–1990 // Ancient Civilizations of Scythia and Siberia 1, pp.169–195.
- Zardaryan, M. H., -2018/2020. Study of the Classical sites of Armenia during the Years of the Third Republic (1991–2018) // Aramazd 10. pp. 298–326.

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