

BABEŞ – BOLYAI UNIVERSITY, Cluj-Napoca

FACULTY OF HISTORY AND PHILOSOPHY

**”HISTORY. CIVILIZATION. CULTURE” DOCTORAL
SCHOOL**

DOCTORAL THESIS SUMMARY

**Glass artefacts from the Eastern Carpathian Basin in the
Second Iron Age**

Doctoral advisor:

Prof. univ. dr. Aurel-Gelu Florea

Candidate

Adrian Cătălin Căsălean

CONTENTS OF THE DOCTORAL THESIS SUMMARY

Contents of the doctoral thesis.....	3
Keywords.....	5
Introduction.....	6
Synthetic presentation of the chapters of the doctoral thesis.....	7
Conclusions.....	12
Selective bibliography.....	15

TABLE OF CONTENTS OF THE DOCTORAL THESIS

I. Introduction	1
I.1. Preliminary Aspects: Arguments and Objectives of the Study	2
I.2. Geographic, Chronological, and Cultural Context	7
I.2.1. Definition of the Analyzed Area	7
I.2.2. Chronological System	9
I.2.3. Cultural Context	11
I.3. Research Status of Glass Artefacts	16
II. Research Methodology	21
II.1. Theoretical Basis	21
II.2. Data Quantification	23
II.3. Morphological Analysis of Glass Artifact Categories	24
II.3.1. Beads	24
II.3.2. Bracelets	26
II.3.3. Vessels and Other Restricted Categories	28
II.4. Typological Classifications	19
II.5. Glass Artefacts and Archaeometric Analyses	24
II.6. Terminological Observations	35
III. Glass Beads Discovered in the Eastern Carpathian Basin	38
III.1. Simple Monochrome Beads	41
III.2. Complex Monochrome Beads	59
III.3. Excursus: Faience Beads with Ribbed Profiles in the Context of the Second Iron Age in the Eastern Carpathian Basin	71
III.4. Polychrome Beads with Circular Decoration	74
III.5. Polychrome Beads with Linear Decoration	105
III.6. Polychrome Beads with Combined Linear and Circular Decoration	115
III.7. Beads with Complex Decoration	116
III.8. Amphora-Shaped Beads	124
III.9. Typologically Unclassified Beads	127
IV. Ring Beads ("Ringperlen")	128

V. Glass Bracelets Discovered in the Eastern Carpathian Basin	129
V.1. Group 2	131
V.2. Group 3	132
V.3. Group 5	135
V.4. Group 6	136
V.5. Group 7	146
V.6. Group 8	150
V.7. Group 13	161
V.8. Group 14	163
V.9. Group 15	167
V.10. Typologically Unclassified Glass Bracelets	169
VI. Glass Vessels Discovered in the Eastern Carpathian Basin	170
VI.1. Vessels Made on Sand Cores or Metal Rods	170
VI.2. Vessels Made by Casting and Cold Cutting	172
VI.3. Mosaic Vessels	176
VI.4. Blown Glass Vessels	179
VI.5. Typologically Unclassified Vessel Fragments	193
VII. Sporadically Represented Glass Artefacts	194
VII.1. Phalerae	194
VII.2. Globules	198
VII.3. Tokens	199
VII.4. Windows	200
VIII. Evaluation of Data According to Main Analyzed Categories	201
VIII.1. Beads	203
VIII.1.1. Quantification of Morphological Data	204
VIII.1.2. Chronology	209
VIII.1.3. Geographic Distribution	214
VIII.1.4. Discovery Contexts	221
VIII.2. Bracelets	222
VIII.2.1. Quantification of Morphological Data	222

VIII.2.2. Chronology, Distribution, and Contexts of Glass Bracelet Discoveries.....	224
VIII.3. Vessels	227
VIII.3.1. Functional Categories, Types, Colors, and Applied Decorations	227
VIII.3.2. Chronology, Distribution, and Contexts of Glass Vessel Discoveries.....	229
IX. Results of Archaeometric Analyses	232
IX.1. Glass Beads	234
IX.2. Glass Bracelets	235
IX.3. Glass Vessels	235
X. Conclusions and Perspectives: Interpretation of Data from the Analysis of Glass Artefacts.....	23
6	
XI. Bibliography	244
XII. Catalogue of Discoveries	265
XIII. Illustrations	358

KEYWORDS

Glass artefacts, La Tène, Second Iron Age, Eastern Carpathian Basin, Celtic horizon, Dacian horizon, beads, bracelets, glass vessels, LA-ICP-MS analyses.

INTRODUCTION

In the absence of glass, the present would become difficult to imagine. By studying this category of material, the techniques used by the artisans who created it, and the role it played in the daily and spiritual life of people in the past, we can gain a deeper understanding of contemporary reality. In this context, objects that today seem self-evident and integral to the world we live in acquire a more complex meaning, and their evolution becomes a lesson in human progress.

Within archaeological literature, glass and objects made from this material have been the subject of numerous specialized studies. These have analyzed artefacts according to the historical periods to which they belong, investigating their roles in the lives of individuals, groups, and historical, protohistoric, or prehistoric communities. At the same time, research has also focused on the evolution of glassmaking and glassworking techniques—from the earliest procedures to those common in more recent periods.

This work has focused on the area of the eastern Carpathian Basin, bounded to the east, north, and south by the Carpathian mountain range, to the southwest by the course of the Danube River, and to the west by the Tisza River. This region includes Transylvania, Banat, Crișana, Maramureș, and the eastern part of the Great Hungarian Plain. In this area, glass artefacts constitute a frequently encountered material category among the discoveries at sites dating to the Second Iron Age. Probably due to their small size and poor state of preservation, these objects have remained neglected by researchers and placed on the margins of academic discourse. It is worth noting that starting in the 20th century and continuing into the current one, the number of glass artifact discoveries has increased considerably. These are often mentioned in specialized studies through brief presentations and rarely become the subject of detailed analyses or studies that cover wide geographical areas or entire historical, protohistoric, or prehistoric periods.

Within the defined region, the Second Iron Age is generally marked by the presence of both the Celtic and Dacian cultural horizons. In accordance with these and the period under study, this work opted for the use of the Central European La Tène chronology and terminology, taking into account the adjustments discussed in the scholarly literature. In brief, the chronological system associated with the La Tène period spans from the 5th century BC to the end of the 1st century BC. According to this chronological framework, the Dacian

horizon—which developed between the second half of the 2nd century BC and the beginning of the 2nd century AD—is partially included within this periodization. Thus, in order to maintain the use of a combination of relative and absolute chronology, the period following the end of the 1st century BC is covered by Eggers phases B1 (30/25 BC – AD 50) and B2 (AD 50 – 150), which are used in the relative chronology of the Roman Empire.

Given the current state of research, the development of this doctoral thesis became necessary in the context of studying glass artefacts both at the “macro” level, referring to their distribution, circulation, typology, and chronology across temperate Europe, and at the “micro” level, through the quantification and analysis—under the same lens—of the categories and types of glass objects discovered within the studied spatial and temporal framework. These were further enriched by “nano” level analyses, which include the study of the discovery contexts and their implications, and by “pico” level investigations, which, based on the chemical composition of the pieces, aim to identify the raw glass recipes used to produce the finished objects and the geographical origin of the raw materials employed in their synthesis.

SYNTHETIC PRESENTATION OF THE DOCTORAL THESIS CHAPTERS

The doctoral thesis consists of 13 chapters, of which the introductory chapter—previously summarized—established the spatial and temporal framework of the analysis, the current state of research on glass artefacts, along with the arguments and objectives that formed the foundation of this study.

Chapter II details the methodology underlying the study of glass artefacts. This includes a theoretical component based on the principles developed by N. Crummy regarding the analysis of special finds or "small finds"¹. To streamline the analytical process, an electronic database was developed to quantify all contextual, morphological, typological, and chronological data provided by the studied artefacts.

The first practical stage of the analysis includes the morphological study of glass artefacts and the definition of component parts across different functional categories—primarily items of adornment and those used for storing and consuming food, liquids,

¹ Crummy 2007.

cosmetics, and pharmaceutical substances. Additional, rarer categories are also included, such as game pieces, globules, *phalerae*, and fragments of window glass.

Following the definition of the studied material, its classification relied on the use of several typological systems from the specialized literature. For the category of beads, the typology developed by N. Venclová was used and further refined throughout the work². Glass bracelets were classified according to the typology proposed by Th. E. Haevernick³, while glass vessels were identified using the typology established by C. Isings⁴.

The morphological and typological studies, grounded in the theoretical and chronological framework, are complemented by archaeometric analyses using laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) to examine the chemical composition of the artefacts. The concentrations of the various identified elements were subjected to comparative analyses in order to distinguish between raw materials, fluxes, and colorants used in the production of the objects, as well as to suggest possible areas of origin for the raw materials. Finally, the methodology includes a terminological subchapter dedicated to defining the specialized terms used throughout the thesis.

Chapter III presents and analyzes the category of glass beads. It begins with an overview of the main manufacturing techniques used in bead production and the decorative methods applied to them. A technical discussion highlights the importance of observations regarding the matrix of the artefacts and the orientation of encapsulated particles, which are essential for accurately identifying the processing techniques used on the material.

To facilitate the presentation, the beads have been grouped according to shapes, colors, and types of decoration into several categories, each forming the basis of dedicated subchapters: monochrome beads with simple shapes, monochrome beads with complex shapes, polychrome beads with circular decoration, polychrome beads with linear decoration, polychrome beads with combined linear and circular decoration, beads with complex decoration, amphora-shaped beads, typologically unclassified beads. Within these groups, several distinct types have been identified. Monochrome variants are differentiated based on the shape and color of the pieces, while polychrome ones are classified according to the

² Venclová 1990.

³ Haevernick 1960.

⁴ Isings 1957.

matrix's shape and color in relation to that of the decoration. Throughout the analysis, the presentation of each bead type follows a consistent format: A description of the item, Identification of the manufacturing techniques used, Discussion based on analogies found in the specialized literature, presentation and analysis of the discovery contexts for each bead type within the eastern Carpathian Basin, absolute and relative chronology, geographic distribution, including comparisons with finds outside the studied area. All of this provides the informational basis for the data evaluation phase and the resulting final interpretations. In addition to the categories mentioned, Chapter III also includes **Subchapter III.3**, which is dedicated to faience beads. These are treated separately to clearly differentiate them from glass ornaments. Their analysis concludes with a more detailed discussion of their chronology and distribution.

Chapter IV focuses on the only large-sized ring bead ("ringperlen") that was studied. Both in specialized literature and based on the manufacturing techniques, size, glass quality, and overall shape, these pieces stand apart from the beads discussed in the previous chapter⁵. Technologically, they occupy an intermediate position between simple ring beads and glass bracelets. Moreover, "ringperlen" have a fairly clear chronology at the European level and are considered common items within oppida environments associated with the Celtic horizon.

Chapter V discusses glass bracelets. Similarly to the chapter on beads, the presentation and discussion of glass bracelets begin with a brief overview of the quantity of identified pieces in the studied area, the main typologies for this category, and the primary manufacturing techniques encountered in the specimens examined. Briefly, glass bracelets typically feature one or more profiled ribs on their outer surface. Depending on the number, size, and decoration of these ribs, several groups have been identified, each with chronological significance. Th. E. Haevernick's 1960 typology divides glass bracelets into 15 groups. Since then, this typology has undergone modifications and additions, making these pieces useful chronological markers as well as indicators of the evolution of glassmaking techniques in the Celtic milieu. It also reflects how these techniques, wearing styles, and consumption practices spread into the eastern Carpathian Basin.

Unlike beads, glass bracelets from the studied region have not prompted substantial additions or changes to known European typologies. However, some discovery contexts have allowed the refinement of the chronology for certain types, such as bracelets 6a, 6b, and 8b.

⁵ Venclová et al. 2020, p. 204; Čížmářova 2022, p. 121; Haevernick 1960, p. 40; p. 67-71.

The last two types are found in both the Celtic and Dacian horizons, suggesting a prolonged use of these items even amid cultures with different social organizations and consumption practices.

Chapter VI presents fragments of glass vessels, generally corresponding to the Dacian horizon. The identified forms indicate the use, during the 1st century BC to the 1st century AD, of several vessel types designed for storing, serving, and consuming liquids, food, cosmetics, and pharmaceuticals.

Besides differentiating types based on shape, color, and surface decoration, this chapter also classifies the vessels according to the manufacturing techniques used. Several studies have highlighted the importance of this classification due to the evolution of glassmaking techniques, from pieces modelled on a sand core to those formed by free blowing. These manufacturing techniques carry chronological significance and offer insights into changes in production centers, workshop exchanges, artisans, and raw material sources. Based on the period these vessels correspond to, the circulation and distribution routes of these Mediterranean-style objects can also be detailed.

In the Dacian context, such items were most likely luxury goods, primarily found in the context of fortresses and prestigious buildings. The relatively small number and functional-morphological diversity of these finds support this hypothesis, also revealing possible assimilation of consumption habits and customs through analysis.

Throughout the chapter, several vessel types are analyzed and presented, including those for serving liquids such as *Syro-Palestinian* bowls and cups, some decorated with lotus buds. Others include various polychrome mosaic bowls or ribbed bowls intended for food consumption, liquid storage vessels like bottles, and sanitary vessels such as *unguentaria* and *aryballoi*. Finally, the chapter addresses fragmentary finds that, due to poor preservation, could not be typologically identified.

Chapter VII includes the less common discoveries. The malleability of glass under high temperatures encouraged the creation of various types of objects serving a diverse range of functions. Although encountered sporadically and in small quantities, among the glass artefacts found in the studied area are fragments belonging to *phalerae* and windows, as well as small objects such as tokens and glass beads. Throughout the chapter, attempts were made to identify valid analogies within the specialized literature, which in some cases allowed the

establishment of chronological frameworks. Additionally, through the analysis of discovery contexts, some aspects related to the functionality of these pieces within the context of the second Iron Age in the eastern Carpathian Basin were formulated.

Chapter VIII, entitled "Evaluation of the data according to the main analyzed categories", follows the methodology used throughout this work and aims to quantify the data resulting from the analysis, treating them comparatively. The analysis covers the categories of beads, bracelets, and glass vessels, along with their respective subcategories and types. Thus, the source of written information, as well as graphic and tabular data found in the illustrations, is based on the content of the previous chapters of typological, chronological, and contextual analysis of the pieces in relation to specialized literature and studies that brought them into the academic circuit. The centralized data concerning morphological, typological, chronological, and distribution aspects can also be found in the catalogue and illustrative segments (Chapters XII and XIII).

The content of this chapter discusses comparatively the data obtained from the material analysis, using the same analytical structure for each of the three mentioned categories. Hence, all morphological, typological, chronological, and distribution data of beads, bracelets, and glass vessels are gathered.

By comparing the morphology of these categories and the differences within them, some aspects related to the evolution of forms and decorations, craftsmanship, and primarily the preferences of individuals and communities using such objects were observed. Similarly, the gathering of typological and chronological data allowed visualization over time of all variants of jewelry and vessels, from simpler forms and decorations to more complex ones, indicating on the one hand the transition from simpler to more complex variants, and on the other hand their coexistence in some cases, as well as the reuse of certain types of jewelry. Also, the analysis of the distribution of pieces and their placement on a map covering both the studied area and neighboring ones shows possible access routes, supply and distribution channels of glass goods, as well as the main settlements or, ultimately, necropolises where these objects were used or deposited. Last but not least, according to the known discovery contexts, the specimens from each category underwent an analysis emphasizing how these pieces were used in everyday life and in funerary and ritual deposits within the Celtic and Dacian horizons.

Finally, this chapter dissects the primary information from the material analysis, compares various types and subtypes through the lenses mentioned above, preparing the argumentative foundations for the interpretations stated in the conclusions chapter.

Chapter IX is dedicated to archaeometric analyses. By using laser ablation, a minimally invasive method that identifies a wide range of chemical elements, some aspects regarding the types of raw materials, fluxes, and colorants used in the production of the raw glass from which the finished objects were made could be stated. In summary, by comparing the various chemical elements and the percentage distribution of the primary elements, it was observed that the majority of the analyzed pieces were made using sands typical of beach zones. In few cases, the presence of silicates produced by crushing quartzites can be inferred. Fluxes that help lower the melting temperature to about 1000-1100 °C were mostly provided by natron, with few specimens showing the use of potassium oxide. Regarding coloration, most of the analyzed pieces were blue, exhibiting certain shades. Chemical analysis revealed the use of cobalt, copper, and iron oxides. By comparing the values of primary elements and colorants, the presence of more standardized "recipes" respecting certain proportions of raw materials can also be observed.

CONCLUSIONS

The study of glass artefacts leads us to observe the chronological, social, economic, spiritual, and symbolic implications they fulfilled within the context of the eastern Carpathian Basin during the second Iron Age. All these aspects were interpreted within **Chapter X**, dedicated to the conclusions.

From the analysis of chronological data, an overall presence of glass beads throughout the entire analyzed period is observed, glass bracelets during the LT C1–D1 period, and finally glass vessels from the LT D phase until the first half of the Eggers B2 period. To these are added sporadically found objects mainly from the 1st century AD and the beginning of the 2nd century AD, such as *phalerae*, beads, tokens, and window fragments. By comparing the main categories of glass artefacts and organizing them according to the chronological system used in this work, a series of types of jewelry and later vessels spread over similar periods were distinguished.

Among the beads, complex monochrome forms, polychrome beads with circular decorations, and mosaic beads (types 301–310, 512–517, 555, 902, 906) have been considered in multiple specialized studies as being of Mediterranean origin⁶. With a similar area of provenance, including the Pontic region, the variants of beads with anthropomorphic figures (type 901⁷) and amphora-shaped beads were also considered⁸. Based on the distribution analysis of types 111, 562–567, 569, 809, and faience specimens, a possible origin or at least circulation through the northern and western coasts of the Black Sea can be inferred⁹.

In the absence of a documented glass workshop for the LT C1–LT D period within the analyzed area, the circulation of glass bracelets from Central European zones—where they were more intensively present and probably produced—is assumed¹⁰. Moreover, connections with this last mentioned area are confirmed by type 736 beads and “*ringperlen*”. On one hand, the presence of bracelets in the eastern Carpathian Basin can be explained by the penetration of populations bearing objects specific to the La Tène culture. At the same time, one cannot exclude the maintenance of links or the formation of new forms of interaction with the Central European area, given the influx of bracelets also during the LT C2–D period.

Glass vessels can be viewed in a similar way. Although discoveries of raw glass, crucibles, and blowing tubes at Sarmizegetusa Regia indicate the possible presence of glassmakers, according to research published to date, no workshop dedicated to the production of glass objects has been identified¹¹. Also, the types of vessels present in Transylvania show analogies in the area east of the Carpathians, suggesting through this distribution a circulation of glass vessels from the Mediterranean zone through the Pontic area, reaching the Lower Danube and then the intra-Carpathian regions¹².

The aforementioned categories and types of objects serve as markers of interaction between communities in the eastern Carpathian Basin and nearby regions, as well as more distant areas. The ways in which glass artefacts entered the analyzed area were most likely diverse. Considering the cultural and event contexts, these may include exchange, individual

⁶ Kysela 2020, p. 150, Fig. 68; p. 151–153, with references.

⁷ Karwowski 2005, p. 167; Venclová 1990, p. 96; Rustoiu 2008, p. 57.

⁸ Rustoiu 2015, p. 365, with references.

⁹ See chapter III, t 111, 562–567, 809.

¹⁰ For a distribution of possible workshops in the European area corresponding to the La Tène period, see Venclová 1990, p. 415, Map 9.

¹¹ Iaroslavschi 1981; Florea et al. 2015, p. 21–22; p. 52, Fig. 23; p. 53, Fig. 24; Mateescu-Suciu et al. 2016, p. 100–101; p. 113–114, Fig. 4–5.

¹² Boțan 2015, p. 97–139; p. 150.

mobility, conflicts, looting, stipends, gifts, and diplomatic agreements¹³. Beyond the objects themselves and the routes they traveled, it is important to emphasize the existence of an informational baggage associated with them that most likely influenced and was incorporated into the consumption practices and models of the communities in the eastern Carpathian Basin.

Regarding consumption models, for now, we can observe the integration of the two categories of jewelry, most probably used both for their visual and artistic qualities and for considerations related to their perceived spiritual protective effects. According to the identified functionalities, glass vessels likely led to the integration of sanitary or personal care practices into indigenous consumption models through the use of substances contained in small containers. These vessels offered new ways of serving and consuming food and liquids, as well as storing them. It is not excluded that all these functionalities underwent changes during their use. This was probably the case for containers once their contents were depleted¹⁴.

In conclusion, this work likely represents a step forward in the study of glass artefacts from the second Iron Age in the eastern Carpathian Basin. By bringing most of the objects under one cover, the aim was to analyze each category and align them with typologies present in the specialized literature to create an overview of this material category. The analysis led to the development of chronologies related to jewelry and glass vessels in the studied area, along with an analysis of discovery contexts intended to reveal certain social, economic, and spiritual particularities of individuals and communities from the second Iron Age.

Looking ahead, the study of glass artefacts would benefit from a more substantial number of discoveries with clearly documented contexts, accessible to interdisciplinary analyses aimed at diversifying the range of knowledge related to the objects themselves and the people who used them.

¹³ Cășălean 2018, p. 23-24.

¹⁴ Cășălean 2021, p. 124.

SELECTIVE BIBLIOGRAPHY

- Alekseeva 1975 E. M. Alekseeva, *Antičnye busy Severnogo Pričernomor'ja*, Moskva (Izdatel'stvo Nauka), 1975.
- Alekseeva 1978 E. M. Alekseeva, *Antičnye busy Severnogo Pričernomor'ja*, Moskva (Izdatel'stvo Nauka), 1978
- Alekseeva 1982 E. M. Alekseeva, *Antičnye busy Severnogo Pričernomor'ja*, Moskva (Izdatel'stvo Nauka), 1982.
- Alföldi 1951 A. Alföldi, Römische Porträtmedaillons aus Glas, *Ur-Schweiz* 15, 1951, p. 66-80.
- Alföldi 1957 A. Alföldi, Zu den Glasmedaillons der militärischen Auszeichnungen aus der Zeit des Tiberius, *Ur-Schweiz* 21, p. 80-96
- Andreica et al. 2018 G. Andreica, H. Furcovici, M. Mîndruțău, Ș. Vasilache, Small Finds Discovered at Sarmizegetusa Regia in the Sector „Below the Southern Gate”, În: O. Tutilă, C. Cristescu, N.C. Rîșcuță, A. T. Marc, *Archaeological Small Finds and Their Significance, Proceedings of the International Symposium From Deva-Geoagiu Băi, 23-25 of March 2017*, 2018, p. 61-76.
- Arletti et al. 2010 R. Arletti, G. Vezzadini, S. Benati, L. Mazzeo Saracino, A. Gamberini, Roman window glass: a comparison of findings from three different Italian sites, *Archaeometry* 52, 2, 2010, p. 252-271.
- Avigad 1972 N. Avigad, Excavations in the Jewish Quarter of the Old City of Jerusalem-1971, 3rd preliminary report, *IEJ* 22.4, p. 193-200.
- Barbu et al. 2019 M. G. Barbu, I. A. Bărbat, G. Băeștean, I. L. Barbu, M.-M. Barbu, C.-D. Țuțuianu, A.T. Marc, A. Bălos, A. Gonciar, A. Brown, Raport preliminar privind cercetările arheologice de la Rapoltu Mare-La Vie, campania 2017, *Banatica* 29, I, p. 67-81.
- Bârcă 2006 V. Bârcă, *Istorie și Civilizație. Sarmatii în spațiul est-Carpatic* (sec. I a. Chr. – începutul sec. II p. Chr.), Cluj-Napoca, 2006.

- Bârcă 2022 V. Bârcă, Pătrunderea și așezarea primelor grupuri de sarmați în Câmpia Panonică. Câteva considerații și observații, *Apulum LIX*, Alba Iulia, 2022, p. 55-127.
- Beck 1928 H. C. Beck, Classification and nomenclature of beads and pendants, *Archaeologia LXXVII*, p. 1-74.
- Benadik 1983 B. Benadik, *Maňa. Keltisches Gräberfeld. Fundkatalog*. Nitra, 1983.
- Berciu et al. 1965 I. Berciu, Al. Popa, H. Daicoviciu, La forteresse dace de Piatra Craivii, *Celticum*, XII, p. 115-166.
- Berecki 2008a S. Berecki, The Cronology of the Celtic Discoveries from Transylvania, În: V. Sîrbu, L. D. Vaida, *Funerary Practices of the Bronze Age and Iron Ages in Central and South-Eastern Europe, Proceedings of the 9th International Colloquium of Funerary Archaeology from Bistrița, May 9-11, 2008*, Cluj-Napoca, p. 47-65.
- Berecki 2008b S. Berecki, *The La Tène Settlement from Morești*, Cluj-Napoca, 2008.
- Berecki 2015 S. Berecki, *Iron Age Settlement Patterns and Funerary Landscapes in Transylvania (4th – 2nd Centuries BC)*, Târgu Mureș, 2015.
- Berecki 2021 S. Berecki, *Identity in Landscape. Connectivity and Diversity in Iron Age Transylvania*, BMM XVIII / IEC XXVII, Cluj-Napoca 2021.
- Bietti-Sestieri 1981 A. M. Bietti-Sestieri, Economy and society in Italy between the Late Bronze Age and Early Iron Age, În: G. Barker, R. Hodges (ed.), *Archaeology and Italian Society*, 102, Oxford, p. 133-155.
- Blečić-Kavur, Kavur 2017 M. Blečić Kavur, B. Kavur, Celts on Their Way to the ‘South’ – Once Again Discussing Some Finds from the Balkans, *Folia Archaeologica Balcanica*, 4, 2018, 149–168.
- Boschung 1987 D. Boschung, Römische Glasphalerae mit Porträtbüsten, *Bonner Jahrbücher* 187, p. 193-258.
- Boțan 2015 S. P. Boțan, *Vase de sticlă în spațiul dintre Carpați și Prut (secolele II*

a. Chr. – II p. Chr.), Cluj-Napoca, 2015.

- Bouzek, Domaradzka 2013 Bouzek, J., Domaradzka, L., 2013. 'Emporion Pistiros between Greater Powers: 450–278 B.C. An Attempt to Sketch Its History' . *Studia Hercynia* 17/1, p. 28–35.
- Božič 1981 D. Božič, Relativna kronologija mlajše železne dobe v Jugoslovanskem Podonavju, *Arheološki Vestnik* 23, 2002, p. 315-347.
- Božič 1998 D. Božič, Neues über die Kontakte längs der Bernsteinstraße während der Spätlatènezeit, *Arheološki Vestnik* 49, p. 141-156.
- Božič 2008 D. Božič, *Late La Tène Roman cemetery in Novo Mesto. Ljubljanska cesta and Okranjo glavarstvo. Studies on fibulae and on the relative chronology of the Late La Tène period*, Ljubljana, 2008.
- Bujna 2005 J. Bujna, *Kruhový šperk z laténskych ženských hrobov na Slovensku*, Nitra, 2005.
- Březinová 2002 G. Březinová, Sklo v dobe laténskej, náramok typu 15, In: D. Staššíková-Štukovská, *Hitoria skla 2001. Zborník príspevkov z I. kolokvia o historickom skle z územia Slovenska*. Informátor SAS při SAV, Suplement 6, Nitra, 2002, p. 25-26.
- Březinová 2007 G. Březinová, Glass rings decoration of the La Tène period from Slovakia. Special theme: Glass and silver, *Archaeologia Polona* 45, 2007, p. 35-40.
- Březinová 2018 G. Březinová, *Šperk zo skla a sapropelitu u Keltov na Slovensku*, Nitra, 2018.
- Březinová et al. 2013 G. Březinová, N. Venclová, J. Fráňa, M Fikrle, Early Blue Glass Bracelets in the Middle Danube Region, *Slovenská Archeológia* 61, 2013, p. 107-142.
- Bujna 2005 J. Bujna, *Kruhový šperk z laténskych ženských hrobov na Slovensku*, Nitra, 2005.

- Bugoi et al. 2025 R. Bugoi, D. Măgureanu, M. Chiari, L. Pichon, C. Cristescu, p. Ciobotaru, Between manufacturing and trade: IBA analyses of archaeological glass finds discovered at two Dacian settlements: Sarmizegetusa Regia and Piroboridava, *Nuclear Instruments and Methods in Physics Research* 2025, p. 1-7.
- Buzea 2009 D. Buzea, Olteni „Cariera de nisip” –catalogul pieselor-, În: V. Crișan, V. Sîrbu, *Dacii din Curbura Carpaților*, Sfântu Gheorghe, 2009, p. 29-41
- Callmer 1977 J. Callmer, *Trade beads and bead trade in Scandinavia ca. 800-1000 A.D.*, Bonn-Lund, 1977.
- Čambal, Štrbík 2014 Ř. Čambal , J. Štrbík, Keltské náramky z povodia Malokarpatských potokov, Zborník SNM 108. *Archeológia* 24, 2014, p. 103-126.
- Căsălean 2018 A. C. Căsălean, Glass small-finds discovered at Ardeu-Cetățuie, Balșa Commune, Hunedoara County, În: S. Forțiu, *Arhevest 6. Interdisciplinarity in Archaeology. In Memoriam Marian Gumă*. Szeged 2018, p. 353–372.
- Căsălean 2020 A. C. Căsălean, *Cetatea Dacică de la Cugir. Habitat și Teritoriu*, Cluj-Napoca, 2020.
- Căsălean 2021 A. C. Căsălean, Glass vessels from the middle Mureș valley during the Late Iron Age, în A. Rustoiu, M. Egri, *Community Dynamics and Identity Constructs in the Eastern Carpathian Basin during the Late Iron Age. The impact of human mobility*, Cluj-Napoca, 2021, p. 115-128.
- Căsălean 2022 A. C. Căsălean, Două brățări din sticlă descoperite în situl de la Cugir-Cetate, *Sargetia XIII*, S.N, 2022, 43-54.
- Căsălean et al. 2022 A.C. Căsălean, C.C. Stremțan, C.M.Pușcaș, V. S. Selih, *LA-ICP-MS analysis on late iron age glass vessel fragments discovered at the Dacian fortress from Ardeu, Hunedoara County, Romania*, Poster prezentat în cadrul „ISA, 43rd International Symposium on

Archaeometry 18-22 May”, 2020, Lisabona.

- Chochorowski 1985 J. Chochorowski, *Die Vekerzug Kultur. Charakteristik der Funde*, Warszawa – Krakow 1985.
- Ciugudean 2012 Ciugudean D., Another Roman grave with military equipment from Apulum, in *Apulum* 49, p. 109 – 130.
- Čižmařová 2022 H. Čižmařová, *La Tene Glass Ornaments in Moravia/Skleněné šperky doby latenske na Moravě*, Brno 2022.
- Crișan 1973 I.H. Crișan, Așa-numitul mormânt de la Silivaș și problema celu mai vechi grup celtic din Transilvania, *Sargetia* X, 1973, p. 45-78
- Crișan 1975 I. H. Crișan, Mormântul celtic de la Fântânele-Livadă, în *SCIVA*, tomul 26, nr. 1, București, 1975, p. 41-56.
- Crișan 2000 V. Crișan, *Dacii din Estul Transilvaniei*, Sfântu Gheorghe, 2000.
- Crișan et al. 2003 V. Crișan, V. Sîrbu, C. M. Popescu, Covasna „Cetatea Zânelor”- Un munte din Carpați fortificat de daci, În: V. Cavruc, *Noi descoperiri arheologice în sud-vestul Transilvaniei. Catalog de expoziție*, Covasna, 2003, p. 51-72
- Crișan 2003a V. Crișan, Cetatea dacică de la Jigodin I – Miercurea Ciuc, În: V. Cavruc, *Noi descoperiri arheologice în sud-vestul Transilvaniei. Catalog de expoziție*, Covasna, 2003, p. 111-118.
- Crișan 2003b V. Crișan, Așezarea dacică fortificată de la Merești, În: V. Cavruc, *Noi descoperiri arheologice în sud-vestul Transilvaniei. Catalog de expoziție*, Covasna, 2003, p. 119-128.
- Crișan, Ferenczi 1994 V. Crișan, I. Ferenczi, Așezarea dacică de la Merești (jud. Harghita). Cercetările arheologice din anii 1986-1993, *Acta Musei Napocensis* 31, 1, 1994, 377-432.
- Crummy 2007 N. Crummy, Six Honest Serving Men: a Basic Methodology for the Study of Small Finds, În: R. Hingley, S. Willis, *Roman Finds: Context and Theory*, Oxbow Books, 2007, p. 59-66.

- Cummings 1997 K. Cummings, *The technique of Glass Forming*, Londra, 1980.
- Davidson-Wienberg 1969 G. Davidson-Weinberg, Glass manufacture in Hellenistic Rhodes, *Archaiologikon Deltion* 24, 1969, p. 143-151.
- Dizdar 2006 M. Dizdar, Nalazi staklenih narukvica latenske kulture u Podravini, *Prilozi Instituta za arheologiju u Zagrebu* 23, p. 67-128.
- Dizdar 2015 M. Dizdar, The Boii and their connections with the Scordiscii – contacts between central Europe and south-eastern Pannonia during the La Tène culture. În: M. Karwowski, V. Salač, S. Sievers, *Boier zwischen Realität und Fktion. Kolloquien zur Vor- und Frühgeschichte* 9, Marburg-Lahn, 2013, p. 295-308.
- Drăgan 2020 A. Drăgan, *Living on the River. A study of the Interactions in the Lower Danube Gorge during the Late Iron Age and Early Roman Times*, Cluj-Napoca, 2020.
- Dular 1978 J. Dular, *Podzemelj. Katalog najdb*, Ljubljana, 1978.
- Dumitrașcu, Ordentlich 1972 S. Dumitrașcu, I. Ordentlich, Săpăturile arheologice de la Berindia, *Crisia* 3, 1973, 47–95.
- Eggers 1955 H. J. Eggers, Zur Absoluten Chronologie der Römischen Kaiserzeit im Freiein Germanien, În: H. J. Eggers, J. Werner, *Jahbuch des Römisch-Germanischen Zentralmuseums Mainz*, Mainz, 1955, p. 196-238
- Egri 2012 M. Egri, 'A warrior never dies'. The manipulation of tradition in early funerary contexts from Pannonia, În: S. Berecki, *Iron Age rites and rituals in the Carpathian Basin*, Cluj-Napoca, 2012, p. 503-529.
- Egri 2014a Egri, M., Mediterranean Wine and Dacian Conviviality. Ancient and Modern Myths and Archaeological Evidence, În: Popa, N., C., - Stoddart, S., *Fingerprinting the Iron Age, Approaches to identity in the European Iron Age. Integrating South-Eastern Europe into the Debate*, Oxbow Books, 2014, Oxford & Philadelphia, p. 48-62.
- Egri 2014b M. E. Egri, *Enemy at the gates? Interactions between Dacians and*

- Romans in the 1st century AD*, În: M. A. Janković, V. D. Mihajlović, S. Babić, *The Edges of the Roman World*. Newcastle upon Tyne 2014, p. 172–193.
- Egri 2016 M. Egri, The Beograd 4 horizon in the Scordiscian environment. Chronological delimitation and interpretation, În S. Berecki (ed.), *Iron Age Chronology in the Carpathian Basin*, Cluj-Napoca, 2016, p. 339-356.
- Egri 2019 M. Egri, *Connectivity and Social Dynamics in the Carpathian Basin (1st Century BC – 1st Century AD). An Archaeological Investigation*, Ed. Mega, Cluj-Napoca, 2019.
- Elteren et al. 2009 J. T. van Elteren, N. H. Tennent, V. S. Šelih, Multi-element quantification of ancient/historic glasses by laser ablation inductively coupled plasma mass spectrometry using sum normalization calibration, *Analytica Chimica Acta* 644, 2009, p. 1–9.
- Ferencz 2007 I. V. Ferencz, *Celții pe Mureșul Mijlociu. La Tène-ul timpuriu și mijlociu în bazinul mijlociu al Mureșului (sec. IV-II î. Chr.)*. Sibiu 2007.
- Ferencz, Ciută 2000 I. V. Ferencz, M. Ciută, Finds from Șeușa (Alba county) belonging to middle La Tène, în C. Gaiu, A. Rustoiu, *Les Celtes et les Thraco-Daces de l'est du bassin des Carpates. Les actes du colloque national qui a eu lieu à Bistrița le 16-17 octobre 1998*, Cluj-Napoca, p. 22-50.
- Florea et al. 2015 G. Florea, S. Mustață, R. Mateescu, C. Cristescu, C. Bodó, L. Mateescu-Suciu, E. Iaroslavski, G. Gheorghiu, P. Pupeză, D. Cioată, *Matrița de bronz de la Sarmizegetusa Regia*, Cluj-Napoca, 2015.
- Gaiu 2000 C. Gaiu, Découvertes Latène a Ilișua, département de Bistrița-Năsăud, În: C. Gaiu, A. Rustoiu, *Les Celtes et Les Thraco-Daces de l'est du Bassin des Carpates, Les actes du colloques national qui a eu lieu a Bistrița 16-17 octobre 1998*, Cluj-Napoca 200, p. 189-200.
- Gaiu 2022 C. Gaiu, Arcobadara înainte de romani, *Arhiva Someșană. Revistă de*

Istorie și Cultură. Seria a III-a, XXI, Năsăud, 2022, p. 13-21.

- Gardelková-Vrtelová, Benadik 2021 A. Gardelková-Vrtelová, B. Benadik, *Pohřebiště Palárikovo v kontextu plochých ketských pohřebišť ve středním Podunají*, Nitra-Bratislava, 2021.
- Gebhard 1989 R. Gebhard, *Der Glasschmuck aus dem Oppidum von Manching*, Stuttgart, 1989.
- Georgescu et al. 2021 A. Georgescu, A. C. Ardelean, A. Sărășan, D. L. Ciobotaru, I. Rădac, Ș. Popa, V. Bunoiu, I. Văsăliuț, Crivina Leopoldsberg – A Newly Discovered Iron Age Hilltop Settlement from Southwestern Romania, *Ephemeris Napocensis* XXXI, 2021, p. 121-139.
- Gheorghiu 1994 Gheorghiu G., Obiecte de sticlă descoperite în cisterna de la Sarmizegetusa Regia, În: Mitu S., Gogâltan F. (eds), *Studii de Istorie a Transilvaniei*, Cluj-Napoca, p. 43 – 45.
- Gheorghiu 2005 G. Gheorghiu, *Dacii pe cursul mijlociu al Mureșului*, Cluj-Napoca, 2005.
- Glodariu 1974 I. Glodariu, *Relațiile comerciale ale Daciei cu lumea elenistică și romană*, Cluj, 1974.
- Glodariu, Moga 1989 I. Glodariu, V. Moga, *Cetatea Dacică de la Căpâlna*, București, 1989.
- Grindean et al. 2023 R. Grindean, I. Tanțău, A. Rustoiu, M. Egri, Palynological data from the Iron Age cemeteries at Sâncrai – Darvaș (Alba County), în *Ephemeris Napocensis*, XXXIII, 2023, p. 103-128.
- Grose 1981 D. F. Grose, The Hellenistic glass industry reconsidered, În: *Annales du 8^e Congrès de l'Association Internationale pour l'Histoire du Verre, Liège (AIHV)*, p. 61-72.
- Grose 1984 D. F. Grose, Glass forming methods in classical antiquity: some considerations, *Journal of Glass Studies* 26, p. 25-34.
- Groose 1989 D. F. Groose, The Origins and Early History of Glass, În: D. Klein, W. Lloyd, *The history of Glass*, New York, 1989, p. 9-37.

- Grumeză 2013 L. Grumeză, Roman Beads Found in Tibiscum, În: I.V.Ferencz, N.C. Rișcuța, O. Tutilă-Bărbat, *Archaeological Small Finds and Their Significance, Proceedings of the Symposion: costume as an identity expression*, 2013, Cluj-Napoca, p. 157-178.
- Grumeză, Bârcă 2020 L. Grumeză, V. Bârcă, Glass beads discovered in the Sarmatian cemeteries from south-western Romania, *Archaeology and Early History of Ukraine*, 3 (36), 2020, p. 402-415.
- Haevernick 1960 Th. E. Haevernick, *Die Glasarmringe und Ringperlen der Mittel- und Spätlatènezeit auf dem europäischen Festland*, Bonn, 1960.
- Haevernick 1978 Th. E. Haevernick, Urnenfelderzeitliche Glasperlen, *ZSAK* 35, p. 145-157.
- Haevernick 1981 Th. E. Haevernick, Kleinfunde aus Glas und Stein, În: K. Braun, Th. E. Haevernick, *Bemalte Keramik und Glas aus dem Kabirenheiligtum bei Theben*, Das Kabirenheiligtum bei Theben Bd. IV, Berlin, 1981.
- Haffner 1978 A. Haffner, Mittellatenezeitliche Grabfunde aus Frohnhausen, Krs. Birkenfeld, *Trierer Zeitschrift* 37, p. 49-70.
- Hayes 1975 J. Hayes, *Roman and Pre-Roman Glass in the Royal Ontario Museum. A Catalogue*, Toronto, 1975.
- Hellebrandt 1999 M. Hellebrandt, *Celtic finds from Northern Hungary*, Budapesta, 1999.
- Henderson 2013 J. Henderson, *Ancient glass. An interdisciplinary exploration*, Cambridge University Press, 2013.
- Hunyady 1942 I. Hunyadi, *Keltáka Kárpátmedencében tafelband*, Budapesta, 1942.
- Hunyady 1944 I. Hunyadi, *Keltáka Kárpátmedencében szövegkötet*, Budapesta, 1944.
- Iaroslavschi 1981 E. Iaroslavschi, Au prelucrat dacii sticla?, *Studii dacice*, 1981, p. 166 – 173
- Isings1957 C. Isings, *Roman glass from dated finds*, Groningen – Djakarta 1957.

- Israeli 1991 Y. Israeli, The Invention of Blowing, În: M. Newby, K. Painter *Roman Glass: Two Centuries of Art and Invention*, 1991, p. 46-55.
- Karwowski 1997 M. Karwowski, Keltische Glasfunde im polnischen Gebiet. *Przegląd Archeologiczny* 45, 1997, p. 33-71.
- Karwowski 2004 M. Karwowski, *Latènezeitlicher Glasringschmuck aus Ostösterreich*, Mitteilungen der Prähistorischen Kommission 55, Wien, 2004.
- Karwowski 2005 M. Karwowski, The earliest types of Eastern Celtic glass ornaments, În: H. Dobrzańska, V. Megaw, P. Poleska, *Celts on the margin*, Kraków, 2005, p. 163-171.
- Karwowski 2006 M. Karwowski, Major Questions Concerning Celtic Glass from the Eastern Regions of La Tène Culture, În: *Analecta Archaeologica Ressorviensia 1*, Rzeszów, 2006, p. 133-160.
- Karwowski, Ginalski 2002 M. Karwowski, J. Ginalski, Fragment eines keltischen Glasarmringes aus dem Burgwall „Horodyszcze” in Trepcza bei Sanok, *Acta Archaeologica Carpathica*, 37, 2002, p. 67-83
- Karwowski, Prohászka 2014 M. Karwowski, M. Prohászka, Der mittellatènezeitliche Glasarmring von Komjatice/Komját. Bemerkungen zur den keltischen Armringen der Form „Érsekújvár”, *Acta Archaeologica Carpathica*, 49, 2014, p. 231-248.
- Kotigoroško 1995 V. Kotigoroško, *Ținuturile Tisei Superioare în veacurile III î.e.n – IV e.n. (Perioadele La Tène și romană)*, București, 1995.
- Krämer 1985 W. Krämer, *Die Grabfunde von Manching und die Latènezeitliche Flahgräber in Südbayern*, Frankfurt, 1985
- Kysela 2020 J. Kysela, *Things and Thoughts. Central Europe and the Mediterranean in the 4th – 1st centuries BC*, Studia Hercynia, monographs 1, Charles University, Faculty of Arts 2020.
- Lappe 1979 U. Lappe, Keltische Glasarmringe und Ringperlen aus Thüringen. *Alt Thüringen* 16, 1979, p. 84-111.

- Lazar 2003 I. Lazar, *The Roman Glass from Slovenia*. Ljubljana 2003
- Maráz 1973 B. Maráz, La Tène-kori magányos sírok és kis temetők a Dél-Alföldről. – La Tène-age isolated graves and small cemeteries on the South Hungarian Plain. *Békés Megyei Múzeumok Közleményei* 2, 1973, p. 41-59.
- Mateescu-Suciu 2017 Mateescu-Suciu L. D., Glass Recipients from Sarmizegetusa Regia. Unguentaria and Bottles, *Ziridava* 31, p. 137 – 152.
- Matthäus 1983 J. Matthäus, Perlen mit Zickzackzier, În: O. H. Frey, *Glasperlen der vorrömischen Eisenzeit I*, Mainz am Rhein, p. 1-127.
- Mihailescu-Bîrliba 2016 V. Mihailescu –Bîrliba, Games and Gamers in Dacia, În: *Arheologia Moldovei XXXIX*, 2016, p. 33-57.
- Morin 1913 J. Morin, *La verrerie en Gaule sous l'empire romain*, Paris, 1913.
- Mozsolics 1943 A. Mazsolics, Leletek A Banlakai Kismagyar-Barlangból În: M. Roska, *Közlemények. Az erdélyi nemzeti múzeum erem- és regiségtárából kolozsvár, bastya-u. 2*, Kolozsvár 1943, p.
- Munčaeu 1963 P. M. Munčaeu, Lugovoj mogilnik, În: E. I. Krupov, *Drevnosti Čečeno-Ingušetti*, Moscova, 1963, p. 139-211.
- Mustață 2017 S. Mustață, *The Roman Metal Vessels from Dacia Porolissensis*, Cluj-Napoca, 2017.
- Németi 1988 I. Németi, Necropola Latène de la Pișcolt, jud. Satu Mare I, *Thraco-Dacica* IX, 1-2, 1988, 49-73.
- Németi 1989 J. Németi, *Necropola Latène de la Pișcolt, jud. Satu Mare. II*, în *Thraco-Dacica*, 1-2, 10, p. 75-114
- Németi 1992 I. Németi, Necropola Latène de la Pișcolt, jud. Satu Mare III, *Thraco-Dacica* XIII, 1-2, 1992, 59-112.
- Németi 1993 I. Németi, Necropola Latène de la Pișcolt, jud. Satu Mare IV, *Thraco-Dacica* XIV, 1-2, 1993, 117-129
- Németi 2000 Németi, Celtic glass bracelets and pearls discovered in north-west of

- Romania, în C. Gaiu, A. Rustoiu, *Les Celtes et les Thraco-Daces de l'est du bassin des Carpates. Les actes du colloque national qui a eu lieu à Bistri'a le 16-17 octobre 1998*, Cluj-Napoca, p. 166-171
- Nenna 1999 M. D. Nenna, *Exploration archéologique de Délos XXXVII. Les Verres*, Atena 1999.
- Oliver 1968 A. Oliver Jr., Millefiori Glass in Classical Antiquity, *Journal of Glass Studies* 10, p. 48-70.
- Oltean 2007 I. Oltean, *Dacia: Landscape, Colonization and Romanization*, London – New York – Routledge, 2007.
- Oța, Sîrbu 2019 L. Oța, V. Sîrbu, Only by chance? Sarmatians, Romans, Dacians in Wallachia and Modavia, În: V. Sîrbu, C. Schuster, D. Hortopan (eds.), *Border Guards of the Passes, from the fortresses and the Graves. The Bronze and Iron Ages, Proceedings of the 17th International Colloquium of Funerary Archaeology, Târgu Jiu, Gorj County, 4-7 October 2018*, Târgu Jiu-Brăila, 2019, p. 149-174.
- Párducz 1954 M. Párducz, Le cimetière hallstattien de Szentes-Vekerzug, *Acta Archaeologica Hungarica*. IV, 1-4, 1954, 25-89.
- Párducz 1955 M. Párducz, Le cimetière hallstattien de Szentes-Vekerzug III, *Acta Archaeologica Hungarica* VI, p. 1-22.
- Plantos 2016 C. Plantos, *Importuri elenistice, romane și din mediul „barbar” în așezarea dacică de la Craiva – ”Piatra Craivii” (jud. Alba)*. Teză de doctorat susținută în 2016.
- Pop 2003 H. Pop, Vase romane din sticlă de la Șimleul Silvaniei – Cetate, în *Sargetia XXXI*, 2003, p. 159-166
- Pop, Căsălean 2022 H. Pop/A. C. Căsălean, *Sticla antică din județul Sălaj (secolele IV a. Chr. – II p. Chr.)/Ancient glass from Sălaj County (4th century BC – 2nd century AD)*, Ed. Mega, Ed. Porolissum, Cluj-Napoca – Zalău, 2022.

- Popović 1997 P. Popović, Les perles de verre en forme de vase ou d'amphore sur l'espace entre la mer Adriatique et le Danube. *Starinar* 48, 1997, 165-171
- Potrebica, Dizdar 2014 H. Potrebica, M. Dizdar, Changing Identities of the Iron Age Communities of Southern Pannonia. În: C. N. Popa, S. Stoddart, *Fingerprinting the Iron Age. Approaches to Identity in the European Iron Age. Integrating South-Eastern Europe into the Debate*, (Oxford 2014) 123-141.
- Parlett 1999 D. S. Parlett, *The Oxford History of Board Games*, Oxford University Press, 1999.
- Prior 2015 Prior J. D., *The Impact of Glassblowing on the Early-Roman Glass Industry (circa 50 B.C. – A.D. 79)*, Teză de doctorat, Durham University, mss., <http://etheses.dur.ac.uk/11186/>, accesată la data de 08.02.2025.
- Pupeză 2022 P. Pupeză, Roman games in Dacian sites. Tokens found at Covasna – Cetatea Zânelor, În: S. Nemeti, I. Nemeti, F.-G. Fodorean, S. Cociș, *Est Modus In Rebus, Essays Presented to Professor Mihai Bărbulescu at his 75th Anniversary*, 2022, p. 305-318.
- Pupeză et al. 2009 P. Pupeză, C. Găzdac, R. Zăgreanu, Covasna – „Cetatea Zânelor” – Catalogul pieselor, în V. Căvruc, *Noi descoperiri arheologice în sud-vestul Transilvaniei. Catalog de expoziție*, Covasna, 2003, p. 64-78.
- Råhlander 2020 A chaîne opératoire of concentric circles: A different approach to glass beads, their production and categorisation. In: M. Lewis, M. Arntz, *The Chaîne Opératoire: Past, Present and Future, Archaeological Review from Cambridge*, 35, 2020, 185–198.
- Reinecke 1902 P. Reinecke, Zur Kenntnis der Latène-Denkmäler der Zone nordwärts der Alpen, În *Festschrift zur Feier der fünfzigjährigen Bestehens des Römisch-Germanischen Zentralmuseums zu Mainz* 1902, p. 53-109.
- Roymans, Verniers 2010 N. Roymans, L. Verniers, Glass La Tène bracelets in the Lower Rhine region: Typology, chronology, and social interpretation, în *Germania*

88, p. 195-219.

- Roymans et al. 2014 N. Roymans, H. Huisman, J. Van Der Laan, B. Van Os, La Tène Glass Armrings in Europe. Interregional Connectivity and local Identity Construction, *Archäologisches Korrespondenzblatt* 44, 2014, p. 215-228.
- Rolland 2017 J. Rolland, Tracing the skills and identifying masterpieces in Celtic glass-making: specialization through Haevernick group 15, În: J. Kysela, A. Danielisová, J. Militký, *Stories that made the Iron Age. Studies in Iron Age archaeology dedicated to Natalie Venclová*, Praga, 2017, p. 101-109.
- Rolland 2021 J. Rolland, *Le verre de l'Europe celtique. Approches Archéométriques, technologiques et sociales d'un artisanat du prestige au second Âge Du Fer*, Leiden, 2021.
- Ruscu 2002 L. Ruscu, *Relațiile externe ale orașelor grecești de pe litoralul romanesc al Mării Negre*, Cluj-Napoca: Presa Universitară Clujeană, 2002.
- Rustoiu 1994 A. Rustoiu, O podoabă de coral, sticlă și bronz din așezarea dacică de la Sighișoara – Wietenberg, *Ephemeris Napocensis*, IV, 1994, p. 23-31.
- Rustoiu 1997 Rustoiu, A., *Fibulele din Dacia preromană (sec. II î.e.n – sec. I e.n.)*, Bibliotheca Thracologica, XXII, București, 1997.
- Rustoiu 2008 Rustoiu, A., *Războinici și societate în aria celtică Transilvăneană, Studii pe marginea mormântului cu coif de la Ciumești*, Editura Mega, Cluj-Napoca, 2008.
- Rustoiu 2011 A. Rustoiu, The Celts from Transylvania and the eastern Banat and their southern neighbours. Cultural exchanges and individual mobility', În: M. Guštin and M. Jevtić (eds) *The Eastern Celts: The Communities Between the Alps and the Black Sea*, Koper/Belgrade: Annales Mediterraneae, p.163–170.

- Rustoiu 2015 Rustoiu, A., The Celtic Horizon in Transylvania. Archaeological and Historical Evidence, În: Berecki S., *Iron Age Settlement Patterns and Funerary Landscapes in Transylvania (4th-2nd Centuries BC)*, Mega Publishing House, Târgu Mureș, 2015, p. 9-29.
- Rustoiu 2019 A. Rustoiu, *Archaeological explorations of magic and witch craft in Iron Age Transylvania*, Cluj-Napoca, 2019.
- Rustoiu 2021 A. Rustoiu, Glass beads from the La Tène cemetery at Fântânele-Dâmbu Popii (Transylvania, Romania), în *Monographies Instrumentum 71*, p. 821-830.
- Rustoiu, Babeș 2018 A. Rustoiu, M. Babeș, The Carpathian and Danubian area, În: C. Haselgrove, K. Rebay-Salisbury, P. S. Wells, *The Oxford Handbook of the European Iron Age*, 2018, p. 1-51.
- Rustoiu, Ferencz 2021 A. Rustoiu, I. V. Ferencz, Chronologie der vorrömischen Eisenzeit in Siebenbürgen. Die Archäologie Fließender ethnischer und sozialer Identitäten”. În: E. Sava, V. Iarmulschi, A. Zancu, M. Băţ and O. Munteanu (eds), *Die Chronologie der vorrömischen Eisen- und frühen Kaiserzeit im Mittel und Südosteuropa: Probleme und Perspektiven. Humboldt-Kolleg. Die Chronologie in den archaologischen Forschungen, Chişinău 08-09 November 2018*, Chişinău-Berlin: Bons Offices, 2021, p. 75-90.
- Rustoiu, Ferencz 2022 A. Rustoiu, I. V. Ferencz, Social structures in Late Iron Age Transylvania. Archaeological evidence of social competition and hierarchy, În *PLURAL. Istorie. Cultură. Societate*, vol 10, 2022, p. 115-146.
- Rustoiu, Ursuțiu 2013a A. Rustoiu, A. Ursuțiu, Celtic Colonization in Banat. Comments Regarding the Funerary Discoveries, În: *The Thracians and their Neighbors in the Bronze and Iron Ages, Proceedings of the 12th International Congress of Thracology, Târgoviște 10-14 September*, 2013, p. 323-345.

- Rustoiu, Ursuțiu 2013b A. Rustoiu, A. Ursuțiu, Indigenous and Celtic Garment Assemblages in Banat and the Surrounding Areas at the Beginning of the La Tène Period (Observations Regarding the Silver Spiral Earrings), In: I. V. Ferencz, N. C. Rișcuța, O. Tutilă Bărbat (eds.), *Archaeological Small Finds and Their Significance*, Ed. Mega, Cluj-Napoca, 2013, 77-88.
- Rustoiu et al. 2017 A. Rustoiu, S. Berecki, I. V. Ferencz, Practici funerare în Transilvania în perioada orizontului celtic (La Tène B1/B2 – C1), În: *Istros XXIII*, Brăila 2017, p. 247-275.
- Rustoiu et al. 2021 A. Rustoiu, M. Egri, I. V. Ferencz, Human mobility and cultural and social identity changes in south-western Transylvania. An archaeological approach, În: A. Rustoiu, M. Egri, *Community Dynamics and Identity Constructs in the Eastern Carpathian Basin during the Late Iron Age. The impact of human mobility*, Cluj-Napoca, 2021, p. 31-58.
- Sayre, Smith 1961 E. V. Sayre, R. W. Smith, Compositional categories of ancient glass, *Science* 133, p. 1824-1826.
- Schmidt 2019 K. Schmidt, *Glass and Glass Production in the Near East during the Iron Age. Evidence from objects, texts and chemical analysis*, Oxford, 2019.
- Schönfelder 2007 M. Schönfelder, Zurück aus Griechenland – Spuren keltischer Söldner in Mitteleuropa, *Germania* 85, p. 307-328.
- Sîrbu 1993 V. Sîrbu, *Credințe și practici funerare religioase și magice în lumea geto-dacilor*, Galați, 1993.
- Sîrbu et al. 2007 Sîrbu, S. A. Luca, C. Roman, S. Purece, D. Diaconescu, N. Cerișer, *Vestigiile dacice de la Hunedoara / The Dacian Vestiges in Hunedoara*, Sibiu, 2007
- Sorokina 1987 N. P. Sorokina, Glass Aryballoi (Firts-Third Centuries A.D.) from the Northern Black Sea Region, în *Journal of Glass Studies* 29, p. 40-45.
- Spaer 1987 Some observations on the stratified Mediterranean eye-beads of the

- first millenium BC. In: *Annales du 10e Congres de l'Association Internationale pour l'Histoire du Verre*, Amsterdam 1987, 1–12.
- Stolba, Rogov 2012 V. F. Stolba, E. Rogov, *Panskoye I. The Necropolis*, vol. 2, Aarhus University Press, 2012.
- Stern 2008 E. M. Stern, Glass Production, În: J. P. Oleson, *Engineering and Technology in the Classical World*, Oxford, 2008, p. 520-550.
- Stern, Schlick-Nolte 1994 E. M. Stern, B. Schlick-Nolte, *Early Glass of the Ancient World. Ernesto Wolf Collection*, Ostfildern-Ruit, 1994.
- Szabó 2003 M. Szabó, Perles à masque en verre, În: D. Vitali, *L'immagine tra mondo celtico e mondo etrusco-italico*, Bologna, 2003, p. 255-259.
- Szabó 2005 M. Szabó, A keleti kelták. A késővaskor a Kárpát-medencében, Budapest, 2005.
- Szabó 2006 M. Szabó, Les Celtes de l'Est, În: M. Szabó, *Les Civilisés et les Barbares du Ve au IIe siècle avant J.-C. Celtes et Gaulois l'Archéologie face à l'Histoire*, Bibracte 12/3, Glux-en-Glenne, 2006, p. 97-117.
- Szabó, Tankó 2012 M. Szabó, K. Tankó, *La nécropole celtique á Ludas - Varjú-dűlő*, În: M. M. Szabó, K. Tankó, Z. Czajlik, *La nécropole celtique à Ludas-Varjú-dűlő*. Budapest, L'Harmattan Kiadó, 2012
- Tait 1991 H. Tait, Five thousand years of Glass, Londra, 1991.
- Tankó 2006 K. Tankó, Celtic glass bracelets in East-Hungary, în V. Sîrbu, D. L. Vaida, *Thracians and Celts. Proceedings of the International Colloquium from Bistrița 18-20 may 2006*, Cluj-Napoca, p. 253-263.
- Tempelmann-Maczyńska 1985 M. Tempelmann-Maczyńska, *Die Perlen der römischen Kaiserzeit und der frühen Phase der Völkerwanderungszeit in mitteleuropäischen Barbaricum*, Mainz am Rhein (von Zabern), 1985.
- Urák 2023 M. Urák, Beware of blue eyes? About a string of mysterious Iron Age eye beads in the National Museum of Transylvanian History, *Acta*

Musei Napocensis 60/I, Cluj-Napoca, 2023, p. 11-44.

- Vaida 2006 D. L. Vaida, Celtic finds in North-East Transylvania (IVth – IInd centuries B.C.), în V. Sîrbu, D. L. Vaida, *Thracians and Celts. Proceedings of the International Colloquium from Bistrița 18-20 may 2006*, Cluj-Napoca. p. 295-322.
- Vasiliev 1980 V. Vasiliev, *Sciții agatârși pe teritoriul României*, Cluj-Napoca, 1980.
- Venclová 1990 N. Venclová, *Prehistoric glass in Bohemia*, Praha, 1990.
- Venclová 2016 N. Venclová, *Němčice and Staré Hradisko Iron Age glass and glass-working in Central Europe*, Praha, 2016.
- Venclová, Militký 2014 N. Venclová, J. Militký, Glass-making, coinage and local identities in the Middle Danube region in the third and second centuries BC, În: S. Hornung, *Produktion – Distribution – Ökonomie. Siedlung und Wirtschaftsmuster der Latènezeit*. Iniversitätsforschungen zur Prähistorischen Archäologie 258, Bonn, 2014, p. 387-406.
- Venclová et al. 2009 N. Venclová, V. Hulínský, V. Frána, M. Fikrle, Němčice a zpracování skla v laténské Evropě, *Archeologické rozhledy* LXI, p. 383-426.
- Wilkes 1996 J. J. Wilkes, The Danubian and Balkan provinces, În: A. K. Bowman, E. Champlin, A. Lintott (eds.), *The Cambridge Ancient History. Volume X – The Augustan Empire 43 BC – 69 AD*, Cambridge 1996, p. 545-595.
- Zepezauer 1993 M. A. Zepezauer, *Mittel- und spät- latènezeitliche Perlen. Glasperlen der vorrömischen Eisenzeit III*. Mit Unterlagen von Th. E. Haevernick. Marburger Studien zur Vor- und Frühgeschichte 15, Marburg (Hitzeroth), 1993.
- Zirra 1967 V. Zirra, *Un cimitir celtic în nord-vestul României*, Baia Mare, 1967
- Zirra 1972 Zirra, Noi necropole celtice în nord-vestul României (Cimitirele birituale de la Sanislău și Dindești), *Satu Mare Studii și Comunicări* 2, 1972, 151-205.

Zirra 1976

V. Zirra, Le problème des Celtes dans l'espace du Bas-Danube,
Thraco-Dacica I, 1976, 175-182.