

GLIMPSES OF GOLD: MATERIAL EVIDENCE OF CROSS-CULTURAL CONNECTIONS IN A ROCK CRYSTAL CHESS SET AND A COUNTESS'S SEAL (10TH-11TH C.)*

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The remains of a sparkling, gold-like substance on medieval rock crystal chess pieces at the Cathedral of Ourense and on the seal of Emessindis at the Cathedral of Girona are published here for the first time. It will be shown that analysis of these unexpected discoveries opens new avenues for investigating the ownership of cross-cultural objects in Iberia, especially by ruling women, during the central Middle Ages.

Key words: Chalcedony; chess; cross-cultural objects; golden metals; Islamic art; rock crystal; seal; women

DIVISAR EL DORADO. EVIDENCIAS MATERIALES DE LAS CONEXIONES INTERCULTURALES EN UN AJEDREZ DE CRISTAL DE ROCA Y EL SELLO DE UNA CONDESA (SS. X-XI)

Los restos de una brillante sustancia metálica parecida al oro en el ajedrez medieval de cristal de roca en la Catedral de Ourense y en el sello de Emessindis en la Catedral de Girona se publican aquí por primera vez, descubrimientos inesperados que abren nuevas vías para investigar la propiedad de tales objetos interculturales en Iberia, sobre todo por gobernantes femeninos, durante la plena Edad Media.

Palabras clave: Calcedonia; ajedrez; objetos interculturales; metales dorados; arte islámico; cristal de roca; sello; mujeres.

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Introduction: mining medieval Iberian treasures

In the course of investigating ecclesiastical treasures across northern Spain, a dual discovery at the Museu-Tresor de la Catedral de Girona and at the Museo Catedralicio de Ourense has

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opened new interpretative frameworks for medieval women's ownership of cross-cultural hard-stone objects. Close examination of a tenth-century rock crystal chess set and of the chalcedony seal of Emessindis of Carcassonne, Countess of Barcelona (d. 1058)² has for the first time brought to light evidence that these luxury items were once decorated with a metallic substance to give the appearance of gold. Coincidentally —or perhaps not?— both the seal and the chess pieces are likely to have been manufactured in Islamic lands, providing material evidence of long-distance trade or diplomatic ties, and further, these works can be associated with countesses ruling in Christian territories at the east-west extremes of the Iberian Peninsula in the tenth and eleventh centuries. In a final parallel, these objects are entirely absent from the contemporaneous written record. The artifacts therefore act as precious material documentation, in answer to the silence of the textual sources.

Rock crystal chess pieces: from an Islamic origin to tenth-century Galicia

The eight surviving chess pieces from a rock crystal set in Ourense, which in the nineteenth century moved from the monastic treasury of Celanova to the Cathedral of Ourense, are well known to scholars of art from the Islamic world [fig. 1].³ None of the studies that address the Ourense set —which now consists of a bishop, a knight, a rook, and five pawns— has indicated that they once bore a metallic substance to create the look of gold.⁴ However, the presence of a shiny metal on the crystal surface became clear during on-site research campaigns in late 2020 [figs. 2 and 3]. Initial observations were confirmed first with a handheld digital microscope, which showed different types of surface working, including raised areas that were deliberately abraded to hold the metals, contrasting with beveled designs that had been incised and smoothly polished to reveal the transparent heart of the stone [figs. 4a-b]. X-ray fluorescence testing was then carried out on three pieces with significant survival of the metals, verifying that a substance composed of lead and copper —and on two of the pawns also zinc— had been applied to the abraded surface, creating the appearance of gold. Iron was also detected, but at least part of its presence could be due to surface dirt as well as impurities within the make-up of the rock crystal itself.⁵ These chemicals appear in a range of percentages on the different points tested on each of the three chess pieces, presumably according to irregular rates of survival; in no case, however, was gold found. It may be that this combination of metals, rather than true gilding, was designed for use on objects like chess pieces that were intended to be handled because such an alloy might have resisted wear from repeated touch better than gold leaf.⁶

² The spelling of her name varies in modern scholarship (Ermesèn, Ermessenda, Ermesinda), as it did in her charters: Ermes(s)indis, Emes(s)endis, Hermes(s)indis, Ermesinda. These variations, compounded by not yet having examined the stone firsthand, led to my errors in transcription and in identification of the material in Martin, 2015. For the present study, I have elected the spelling Ermessindis because it is the most frequently used in her charters. See Gil, 2004.

³ Valdés Fernández has written extensively about these and other rock crystal objects of the Iberian Peninsula; see especially Valdés / Zamorano, 2018; Valdés, 2004; Casamar / Valdés, 1999.

⁴ By comparison, in her study of the many rock crystal chess pieces of The al-Sabah Collection, Freeman Fahid, 2018: 326, n.65, states only that when the pieces in Kuwait were “examined by Jeremy Johns and Elise Morero in December 2012... a minute trace of gold was found” on three of them (cats. 74.2, 77, 80.1). No further technical analysis was reported for objects in this collection.

⁵ I am grateful to Dr. Xosé Lois Armada of the Instituto de Ciencias del Patrimonio, CSIC, in Santiago de Compostela, who carried out this first phase of metals analysis on the Ourense chess pieces and provided the initial results discussed here. Further campaigns are planned to continue applying x-ray fluorescence testing to items in the treasury at the Cathedral of Ourense.

⁶ This suggestion is owed to Jitske Jasperse, whose recent work encourages art historians to take the sensory nature of small objects into account as part of any investigation of material evidence. See Dempsey / Jasperse, 2020.



Fig. 1. *Rock crystal chess pieces*, Museo Catedralicio de Ourense (photo: Therese Martin).

When observed in a beam of raking light, the rock crystal set at Ourense belies the impression of grime or damage seen in previously published photographs.⁷ Beyond the wear to be expected on objects over a millenium old, I contend that what has generally been perceived as breakage or dirt should instead be recognized as primarily the survival of metallic ornamentation on a surface deliberately roughened to facilitate its adhesion. Not all rock crystal chess sets would originally have borne this sort of “gilding”, perhaps, as Deborah Freeman Fahid recently suggested, in order to distinguish between the two players’ pieces on the board.⁸ However, it is likely that overcleaning has eliminated the metallic decoration from many medieval rock crystal chess pieces, especially those that have emerged on the art market in recent decades.⁹ This has contributed to a misperception of the initial appearance of works whose incised foliate patterning and deliberate surface abrasion compare closely to that on the set preserved through some nine centuries at the monastery of Celanova, in the northwestern Iberian region of Galicia. Most of the metallic substance on the eight pieces left of this set has been worn away by centuries of touch, yet a tool as common as a handheld digital microscope allows us to glimpse their original brilliance [see figs. 4a-b]. The commanding presence of rock crystal with a gold-like enhancement would have been amplified when sixteen chess pieces were arrayed on each side of the board and displayed in the elite settings of a thousand years ago.

As for the place of manufacture of the set now in Ourense, for the purposes of the present study it is enough to state that through both style and raw material, the tenth-century Christian owners of these objects would likely have been aware of their provenance from faraway lands governed by Muslims,¹⁰ regardless of how clearly they were able to draw distinctions between Fatimid and

⁷ Freeman Fahid, 2018: 314, “It has been remarked that the Celanova pieces are in notably poorer condition than the other two groups of rock crystal chessmen in Yuso and Lleida (and those in Kuwait) with damaged surfaces”. Her phrasing suggests a lack of first-hand observation of the Ourense/Celanova set.

⁸ Freeman Fahid, 2018: 326, n.65.

⁹ See, for example, the piece identified as a king or queen that in 2016 failed to make its opening bid of 30,000-50,000£ at the Sotheby’s Arts of the Islamic World auction (<http://www.sothebys.com/en/auctions/ecatalogue/2016/arts-islamic-world-116220/lot.96.html>). In style and workmanship, this object is closely related to the Ourense set, but on it little trace of surface decoration remains.

¹⁰ The “geographic resonance” (Martin, 2019: 10) of objects from the Islamicate world is also documented in tenth- and eleventh-century Hispania by the use of the Latin term *arrotomas irakes* for rock crystal vessels of Islamic manufacture, as studied by Casamar / Valdés, 1996.



Fig. 2. *Rock crystal chess piece (pawn)*, Museo Catedralicio de Ourense (photo: Therese Martin).

Fig. 3. *Rock crystal chess piece (rook)*, Museo Catedralicio de Ourense (photo: Therese Martin).



Abbasid art. Recent scholarship on rock crystal objects has opened the origins question, which previously had focused on Fatimid Cairo, highlighting material remains with stylistic similarities in Baghdad and other parts of the Islamic East.¹¹ And of course, across the medieval world chess

¹¹ On the varied origins and dating of rock crystal manufacture in Islamic lands, see the studies and extensive prior bibliography in Hahn / Shalem, 2020; especially relevant for the present article are those by Morero et al., Pilz, Porter,

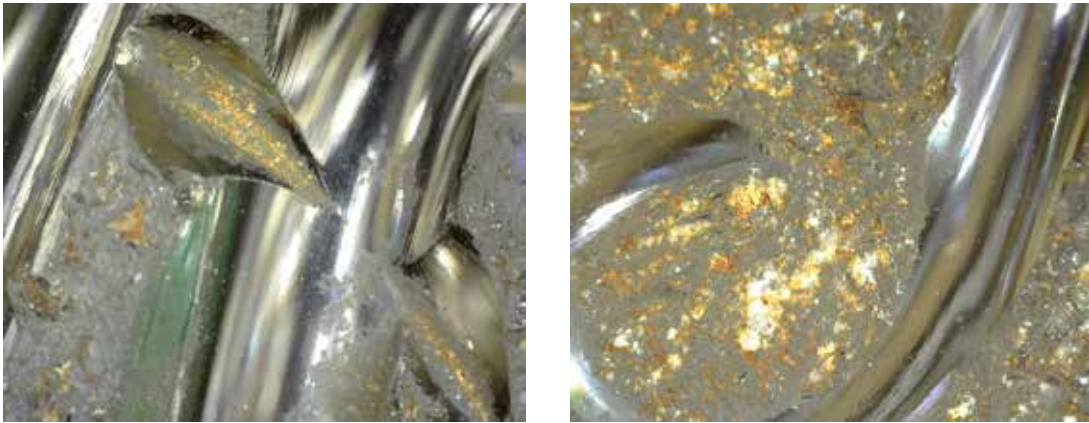


Fig. 4a-b. Details of metallic substance on rock crystal chess pieces, Museo Catedralicio de Ourense (photos: Therese Martin).

was a game of the ruling elite; the display of such a magnificent set in northwestern Hispania thus connected its owners to that larger world.¹² This would certainly have been so when the rock crystal set was used by the noblemen who ruled as abbots of Celanova, perhaps matching their skills with high-ranking visitors to the monastery. No doubt this was also the case in the chess set's proposed comital context, before the pieces arrived at that monastic setting.

Prior to the founding of Celanova, the previous owner of the chess set may have been Countess Ilduara Eriz (d. c. 958), as was suggested by José Camón Aznar when he first brought these pieces to scholarly attention in the 1930s.¹³ Camón Aznar rightly held up Ilduara's key role in the 938 foundation of the monastery where her eldest son Rosendo (Rudesindus, d. 977) would eventually govern as its second abbot.¹⁴ Ilduara's detailed donations of 938 and 942 are associated with the luxury liturgical goods now known as the treasury of San Rosendo, despite the fact that none of the surviving items at the Cathedral of Ourense can be matched to the lavish gifts of textiles, metalworks, and, according to Valdés and Zamorano, objects originating in the Islamic east.¹⁵ It could be objected that if the rock crystal chess set is not listed among the endowments in the written record, then a connection to Ilduara cannot be proven; however, a personal gift from mother to son—a marker of his elite lineage—would rarely be found within the written memory preserved by a monastic archive. Rock crystal chess sets generally appear in testaments and inventories, not in foundational charters.¹⁶ For the tenth and eleventh centuries, donations to a new ecclesiastical establishment in Hispania tended to present the liturgical objects that would fulfill its ritual needs, along with textiles, expensive bedding, and fine tableware.¹⁷ Other portable goods with high exchange value, especially silver, gold, or precious gems, could also appear in foundation charters, but the absence of chess sets suggests a different type of value, perhaps more symbolic than pecuniary as a marker of the owner's noble status.

Pradines, and Shalem. See also Valdés / Zamorano, 2018: 430-432, who propose Madinat al-Zahra' (Córdoba) as another potential site of rock crystal working within an Islamic context.

¹² Makariou, 2005.

¹³ Camón Aznar, 1936-1939: 404. The pieces had previously been catalogued in the 1929 *Exposición Internacional* in Barcelona as "arte fatimí, al parecer" (cat. 1164).

¹⁴ Concerning Ilduara, the essential study is Pallares, 1998: 96-100, who argues that the rich endowment of Celanova could not have represented more than one-fifth of Ilduara's extensive wealth. For Celanova, see Andrade, 1995: docs. 2 and 4, I: 7-13, 17-21.

¹⁵ Valdés / Zamorano, 2018: 420, in which *concas aeyrales* and *arrodomas aeyrales* are read as Iraqis.

¹⁶ For chess in inventories of the monastery of Ripoll, see Duran-Porta, 2017.

¹⁷ On Celanova's and other monastic foundational donations, see the important study by Rodríguez, 2013. For luxurious liturgical goods in the foundation charter of San Isidoro de León, see Martín López, 2007 and Martin, 2019.

Rock crystal chess pieces in eleventh-century Catalan counties

Countess Ilduara Eriz was “probably the richest person in Galicia”, in the words of Jeffrey Bowman.¹⁸ As the proposed aristocratic owner of the Ourense chess set, she initiates the pattern that is documented in the following century for lost or scattered groups of rock crystal chess pieces, especially those from Àger in the Catalan County of Urgell, now divided mainly between the Museu de Lleida and The al-Sabah Collection (on loan to the Kuwait National Museum).¹⁹ The provenance of the Àger pieces is unusually well traced: a number of chess sets, which had been willed in 1068 by the noblewoman Arsenda of Àger to her husband Arnau Mir de Tost, were in turn recorded around 1071 in the inventory of the widower. This noble couple had founded Sant Pere de Àger where the rock crystal pieces would remain until the nineteenth century.²⁰ As Francesc Fité pointed out, Arsenda’s will demonstrates the high value she placed on her board games. In order for her *tabulas* to be kept complete rather than being sold off piecemeal to cover her charitable donations, Arsenda directed her executors to raise a sum of money by selling other items, highlighting among them a valuable mantle described as a pelisse lined with ermine together with its silk surcoat.²¹

At the ecclesiastical settings of both Àger and Celanova, the chess pieces appear to have been maintained together as functional sets. There is no evidence at either site that individual pieces were repurposed, as happened with other surviving rock crystal chess pieces that have come down to the present day as decorative additions to reliquaries especially in Spanish and Germanic lands, such as at San Millán de la Cogolla, Saint-Maurice d’Agaune, and Hildesheim, or in the Ambo of Henry II at Aachen.²²

Beyond the parallel with Ilduara, this record of a Catalan couple as eleventh-century owners and donors of chess echoes the documented gift of their near-contemporary, Emessindis of Carcassonne, countess of Barcelona —she of the seal mentioned at the start of this study— in whose 1058 testament *eschacos cristalinus* were left to the monastery of Saint-Gilles-du-Gard in Nîmes.²³ Emessindis’s rock crystal chess set does not survive, nor do any of the other pieces mentioned as bequests in the object-dense codicil to her will, among them her “best breviary” (*obitimum briuarium*), which could mean that she owned multiple books, or the sword belonging to her grandson Sancho, which she had been holding in pawn for him.²⁴

Countess Emessindis (c. 972-1058) and her remarkable hardstone seal

At present, the only material possession that can be associated with Countess Emessindis is a diminutive hardstone object of outsized importance. A seal in the treasury of Girona Cathedral bears Emessindis’s name incised in reverse twice, the Latin *ERMESIDIS* above and Arabic *ارميسند* below, laid out equally across the curved oval face of the stone [fig. 5]. Epigraphically, the Latin script fits comfortably with an eleventh-century date, especially in the shapes of the S, M, and E, and in the module of the majuscule letters. In the Arabic, as Mariam Rosser-Owen pointed out, the letter *sīn* (s) has been deliberately extended so that the Arabic iteration of her name main-

¹⁸ Bowman, 2020: 205.

¹⁹ Freeman Fahid, 2018: 163, states that of the 116 Islamic rock crystal chess pieces in her study, fifty-six are now in Kuwait; thirty pieces from ecclesiastical treasuries are in Spain and sixteen in Germany, and the rest are in isolated museums. For the paths taken by fifteen pieces from Àger to Paris to Kuwait, see pp. 170-174.

²⁰ The fundamental study of the Àger pieces is Fité, 1984. See Abenza Soria 2018: 117-209, for a detailed consideration of Arsenda’s patronage. Duran-Porta, 2017: 183, holds that the “*eschachos/escabs...de cristallo*” of Arsenda and Arnau should be understood as chess pieces, not complete sets; he associates the donation to Sant Pere de Àger with the Cabrera dynasty.

²¹ Fité, 1984: 303-304: “*meam pelliciam de alfanech cooperta de fresco cum capa de oztorino facta cum fresco vendant supra dicti mei elemosinarii, et de illud precium sint perseveratas predictas tabulas*”.

²² Hahn / Shalem, 2020; Freeman Fahid, 2018: 314-319; Kluge-Pinsker, 1991.

²³ The codicil to Emessindis’s testament is among her 192 documents transcribed by Gil, 2004: 532-533.

²⁴ Gil, 2004: 532-533, “*Et dimissit Sancio, suo nepoti, spatam illius, quam habebat in pignore et quinquaginta mancusos*”. Presumably the fifty gold pieces also left by Emessindis to Sancho were intended to guarantee that her grandson would not find himself in the situation of having to pawn his sword again.



Fig. 5. *Seal of Ermessindis*, Museu-Tresor de Girona; viewed from various perspectives under differing lighting (Therese Martin).

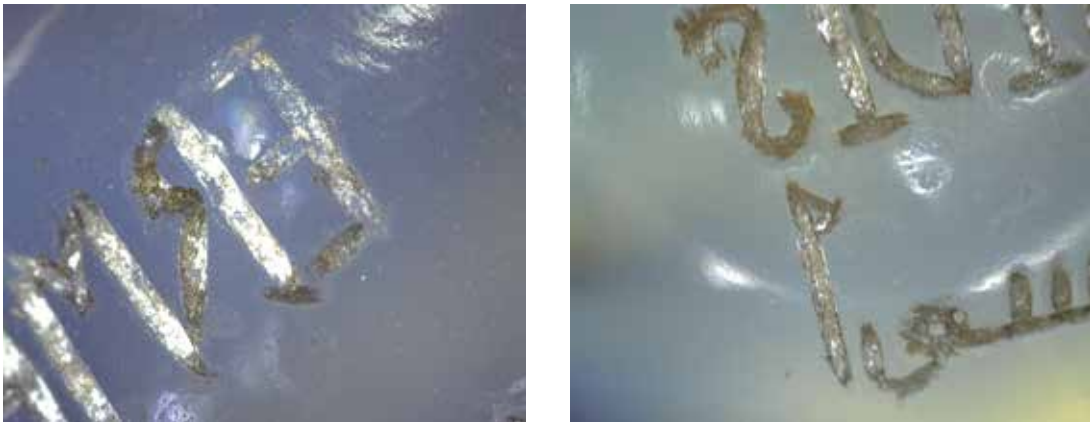


Fig. 6a-b. *Details of metallic inlay on seal of Ermessindis*, Museu-Tresor de Girona (photos: Therese Martin).

tains parity with the abbreviated Latin.²⁵ Identified as chalcedony, the stone's mutable appearance—difficult to capture, ever changing as the light shifts—accords well with the typical milky blue tones and white striations that made chalcedony much appreciated for beads and seals in both Christian and Islamic societies throughout the Middle Ages.

²⁵ My thanks go to Vincent Debiais, Mariam Rosser-Owen, Julian Raby, and Esra Akin-Kivanc for their observations on the Latin and Arabic inscriptions. Debiais emphasized the difficulty of dating exclusively through paleography, especially on small objects, but in his opinion the shapes and sizes of the Latin letters on Emessindis's seal suggest a chronology in the central Middle Ages, particularly the tenth and eleventh centuries. Raby and Akin-Kivanc both favor an eleventh-century date for the Arabic inscription. However, Labarta, 2017: 293-295, evinces skepticism about the bilingual inscription, dating it post-thirteenth century at the earliest.

Firsthand research in July 2019, during which I was able to examine and photograph this stone, revealed that a metallic substance had been applied within the inscription [figs. 6a-b].²⁶ If a golden effect on rock crystal befits each of those luxury materials, the application of a gold-like substance precisely within the incised lettering of a seal seems much harder to justify. After all, if the seal were to be pressed into a malleable material like molten wax or soft clay, surely the metal decoration would pull away during repeated usage. In fact, it is the very discovery of these golden traces, along with the lack of surface wear observed through the imaging of a digital microscope, which suggest that Emessindis's seal may not have been intended to function as such. Direct observation thus opens a new avenue into this precious object's meaning and provenance.

Beyond the presence of a metallic inlay, let us consider just what is missing from the inscription on this artifact: the countess's title. In light of the absolute ubiquity of the title *comitissa* in hundreds of charters, extending through all of Emessindis's long lifetime of rule, it is curious that her seal should bear nothing but a dual iteration of her name. Also surprising is that the specialized literature in which this seal appears has scarcely delved into the reasons behind either the absence of the countess's title or the extraordinary presence of her name in two languages.²⁷ As countess of Barcelona, Girona, and Osona, a plethora of documentation survives for Emessindis, far more than for other Iberian rulers of the tenth and eleventh centuries outside the Catalan counties, like Iduara Eriz in Galicia.²⁸ However, in no other written source does Emessindis's name appear in Arabic, and in all documents save that of 1057 (discussed below), her title is always present. She was born around 972 to the counts of Carcassonne and by 992 she had married Count Ramón Borrell of Barcelona.²⁹ For the next sixty-five years she ruled as countess, first at the side of her husband (d. 1017), then during the minorities of her son Berenguer Ramon I (d. 1035) and her grandson Ramon Berenguer I (d. 1076). Yet surviving charters make clear that she also continued to wield real authority throughout the full course of her long lifetime, regardless of which male member of her family held the title of count. The octogenarian countess was finally forced from power by her grandson and his third wife Almodis de la Marche (d. 1071), but Emessindis retained her title except in the fateful charters of the summer of 1057 in which she sold to *domno Raymundo, gratia Dei comiti et marchiioni, et domne Almodi, nutu Dei comittisae* all her territorial rights for one thousand ounces of gold, swearing fealty to them.³⁰ However, in September of that same year when Emessindis dictated her testament, she once again named herself *Ermessindis, gratia Dei comitissa*.³¹ Thus on the seal, the absence of her ubiquitous title and the presence of golden ornamentation are evidence that there is more to this precious object than first meets the eye.

As for the bilingual inscription, it is exceptionally rare among medieval Iberian seals and therefore is open to diverse interpretations.³² Perhaps it may hint at a familiarity with Arabic on the part

²⁶ X-ray fluorescence testing has not yet been done to determine the composition of the metals used on the seal, but it is hoped that we will be able to carry out this and other types of technical analysis within the Treasury project at Girona Cathedral in the near future.

²⁷ Bautier, 1990-1991: 137-138, in a brief section entitled "Anneaux sigillaires de comtesses en Catalogne au XIe siècle", notes only that "*se lit la légende ERMESINDIS, sans autre titre, accompagné du même nom en caractères arabes. C'est visiblement un petit sceau 'privé', bien que la comtesse ait, comme on sait, joué un rôle politique d'une extraordinaire importance*". He mistakenly attributes the second of the two signets mentioned in this section to Countess Guisla, stating that he did not examine the carnelian stone but that "*san doute là aussi le nom de la dame*". In fact, as others have shown, the Arabic inscription on the carnelian seal is a typical Islamic amulet; see the recent corrected transcription by María Antonia Martínez Núñez in Martin, 2015: 132.

²⁸ Bowman, 2020: 212, 205, rounds the count of Emessindis's charters up to "nearly 200", by comparison with "roughly two dozen records related to Ilduara Eriz".

²⁹ For a historical perspective, see the studies by Aurell, especially 1995. For Emessindis's connections to art and architecture, see Abenza Soria, 2018: vol. I, pp. 210-331, vol. II, pp. 822-864.

³⁰ Gil, 2004: vol. II, pp. 522-528. On Almodis, whose direct correspondence with 'Alī b. Mujāhid, ruler of the taifa kingdom of Denia, has been partially preserved, see Bowman, 2020; Bruce, 2009; Wolff, 1989.

³¹ Gil, 2004: vol. II, pp. 530-531.

³² Bilingual seals are not particularly common in the Middle Ages in general, but they do exist where distinct cultures were in contact. For an overview of seals in Iberia, see Menéndez Pidal, 2018; for Greek-Arabic seals, see Cheynet, 1997 and Akin-Kivanc, 2020; for Hebrew-Latin seals, see Lehnertz, 2019. Labarta, 2011: 202, includes an example that

of Emessindis, or at least the capacity to recognize her name in that language. However, no evidence has survived to indicate that she ever signed her name in Arabic, as would later be done on a small number of charters by King Pedro I of Aragón and Navarra (r. 1094-1104) and in 1157 by Viscount Berenguer Reverter of Barcelona (r. 1142/44-1158).³³ Regardless of Emessindis's possible competence in Arabic, I would like to propose that the seal may represent a diplomatic gift from an Arabic-speaking ruler. The lack of a title suggests to me that the countess was unlikely to have commissioned this object for herself. Rather, I think that this artifact can best be understood as material evidence of Emessindis's interactions with an Islamic counterpart, perhaps a ruler of one of the taifa kingdoms after the breakup of the Cordoban caliphate in 1031. Scholars such as Martin Aurell and Travis Bruce have noted the diplomatic contacts between Emessindis and Mundhir b. Yahyā, ruler of Zaragoza, and more extensively with Mujāhid of Denia; however, identifying a specific source for this gift is beyond the scope of the present article.³⁴ With its simple inscription in two languages, the chalcedony seal as a whole speaks the cross-cultural language of Iberian rulership.

Medieval Islamic seals and amulets

Although signets are not unknown in the broader Christian contexts of Emessindis's day, their rare survival contrasts strikingly with the "many thousands", in the words of Venetia Porter, that have come down to us from medieval Islamic contexts.³⁵ Examples of Islamic-manufactured seals that bear only the owner's name in reverse make compelling comparisons with Emessindis's seal. Whether designed to serve as functional seals or as talismanic amulets,³⁶ these well-known objects allow us to look anew at Emessindis's stone. Though difficult to date precisely because the vast majority have come down to us through collections rather than excavations, a multitude of seals bearing only the owner's name in Arabic on a variety of semiprecious stones originated in Islamic lands from the ninth to twelfth centuries. Often oval in form, many are slightly smaller and flatter than Emessindis's stone, but those that share the cabochon shape with hers "are generally associated with early forms of Arabic script",³⁷ pointing toward similar chronologies.

Drawn from many possible examples of the more than 800 Islamic seals held by the British Museum, the following selection highlights works with characteristics comparable to Emessindis's stone, including the use of chalcedony, as in the case of a cabochon-shaped seal engraved with the name "Maḥmūd" on its rounded top [fig. 7]. Seals owned by women are also well known, as evidenced by that of "Umm Naṣr bint Tamīm" [fig. 8] in carnelian, although women's names

she dates post-1030, possibly of rock crystal. Excavated from a necropolis in Islamic Lorca, this seal, set in a ring found on the right hand of the adult male owner, bears his name Allus engraved in Hebrew characters on the first line, while on the second line, "trusts in God" appears in Arabic. For the Lorca excavation, see Sánchez Gallego et al., 2009-2010: esp. pp. 203-205 for a color photograph; they propose instead reading of the inscription in Aramaic and Arabic as "Servant of the Only God", with a date before the mid-eighth century.

³³ For Pedro, see Simon, 1993: cat. 146. For Berenguer, see Carreras y Candi, 1904: 214-215; Baiges et al., 2010: 1605-1606, doc. 1011. The wife of Berenguer Reverter of Barcelona has been considered another possible candidate with whom the chalcedony seal might be associated. In favor of this option is the viscount's familiarity with Arabic; against it are his consort's lesser role as viscountess and the couple's lack of a connection to Girona Cathedral that would account for the seal's logical survival at this site. Further, Aurell, 1995: 221 n58, states that Reverter's wife was named Arsendis, not Ermessindis.

³⁴ Aurell, 1995: 62-63; Bruce, 2009: 7. These diplomatic ties are investigated in the larger study I currently have underway on medieval Iberian art and rulership.

³⁵ See Porter, 2011, and Labarta, 2018. Both studies concern stones bearing Arabic inscriptions held by public museums, which were gathered from various private collections of the seventeenth to nineteenth centuries. For this reason, few of these stones can be traced to any concrete person or place, and their dating is roughly grouped by epigraphic style, following in general the chronological organization established by Kalus, 1981. However, see also Labarta, 2017, which includes a small number of seals excavated from reliably dated contexts.

³⁶ On the amuletic qualities of Islamic seals, see Savage-Smith, 2004.

³⁷ Porter, 2011: 16.



Fig. 7 (left). *Seal of Maḥmūd*, British Museum (photo: Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International, CC BY-NC-SA 4.0 license).

Fig. 8 (above). *Seal of Umm Naṣr bint Tamīm*, British Museum (photo: Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International, CC BY-NC-SA 4.0 license).

are found far less frequently than men's.³⁸ I would argue that works like these —without any identifier beyond the individual's name laid out horizontally along its length— offer the closest equivalent to Emessindis's seal. What is more, this type of seal has been recovered from controlled excavations on the Iberian Peninsula, situating them solidly within eleventh- and twelfth-century Andalusi contexts. Ana Labarta has recently drawn attention to a number of archaeological finds from this period, including a collection of eight amulets in a woman's burial in Córdoba, as well as other seals and amulets from excavations in the southern peninsula, from Algeciras to Castelo de Paderne (Portugal).³⁹ It is thus possible to state that objects of this type were known and in use across al-Andalus in Emessindis's day.

Amuletic stones that bear phrases in Arabic designed to offer protection for the owner, which were likely worn close to the body, are also relevant to Emessindis's seal. In particular, some of those studied by Porter appear to show the remains of a golden metallic inlay, as can be seen in a square seal made of lapis lazuli engraved with the word “*al-mulk*” (sovereignty) twice, in positive above and negative below [fig. 9], as well as rock crystal examples with more complex inscriptions that acted as “murmur incantations” (*warwaha*) [fig. 10].⁴⁰ The play of legibility/illegibility exemplified in these two amulets imbued such talismans with protective qualities. Among the Islamic seals at the British Museum are multiple examples in which the inscriptions, engraved in reverse, have been filled with a sparkling, reflective material that is reminiscent of gold, just like the infill in Emessindis's seal, yet this material goes unremarked in the museum's catalogue as well as in Porter's volume, beyond the general phrase in the latter that “some of the inscriptions were obscured by inlays”.⁴¹ It would be useful to analyze and compare the chemical make-up of the metallic decoration on all of these objects, for the very presence of an inlay suggests a function beyond the practical: that is, the significance of these works, including the one bearing Emessindis's name, would have been in their amuletic character.⁴² They appear to have been created for the purpose of enacting sealing more as a ritual or

³⁸ Transcriptions by Porter, 2011: Chpt. 2, *Names*, pp. 35-49, 71. The four examples selected for the present study are nos. 135 (BM 1878,1220.69); 49 (BM 1893,0426.161); 289 (BM OA+ 14279); A160 (BM Marsden Collection1).

³⁹ Labarta, 2017: 193-198, with detailed bibliography for each seal.

⁴⁰ Porter, 2020: 255. For rock crystal seals and amulets, see also Porter, 2011:178-180, “Rock Crystal Seals Inscribed in ‘Linear Kufic’”. In addition to the two square seals illustrated in the present article, there are also many amulets in the typical oval or round seal shape.

⁴¹ Porter, 2011: 185. For some examples of seals dated by Porter to the ninth-twelfth centuries with inscriptions in which an apparently “golden” inlay can be made out, see nos. 48, 66, 72, 208, 283, 289, 337, 363.

⁴² It is also possible that a form of “gilding” could have been added to the inscription when Emessindis's seal was incorporated into an altar frontal (discussed below), much as Kornbluth, 1995: no. 9, has observed for a Carolingian seal



Fig. 9. *Islamic amuletic seal (with metallic inlay?)*, British Museum (photo: Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International, CC BY-NC-SA 4.0 license).



Fig. 10. *Islamic amuletic seal (with metallic inlay?)*, British Museum (photo: Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International, CC BY-NC-SA 4.0 license).

symbolic binding than a pragmatic one. What is more, we do not know if Emessindis's stone may once have been set as a signet in a ring; the fact that it has been drilled through suggests use as a bead or pendant at some point in the object's history.

Meaningful locations: Emessindis's seal in the Cathedral of Girona

Of all the objects belonging to Emessindis, only the bilingual seal bearing her name survives as a material witness of her rulership. The space in which it was preserved —Girona Cathedral— allows us to draw with relative confidence a connection between the stone and this individual, as the cathedral was one of the most favored beneficiaries of the countess's generosity, both during her long rule and in her testament. Girona was also the seat from which her brother Pere Roger ruled as bishop for forty years, and it was the site at which she chose to be buried, as manifested in the 1058 codicil to her will.⁴³ The cathedral's 1038 consecration charter is but one of the many occasions of her generosity to this site, and it concludes with the following significant gift: "Sig+num of Countess Emessindis, who, on that day in honor of God and the Mother Church, bestowed three hundred ounces of gold for the construction of a golden altar frontal".⁴⁴ That frontal survived until the War of Spanish Independence (1808-1814) and various descriptions had been recorded through the early modern period,⁴⁵ but it is not until Jaime Villanueva's travels to Girona c. 1806 that we catch clear sight of Emessindis's seal in its meaningful placement on the frontal she funded: at the feet of the enthroned Virgin. Villanueva relates that in the center of the altar frontal was a mandorla or, as he put it, an oval:

inserted into an eleventh-century reliquary. However, in the case of Emessindis's stone, I find the parallel more compelling with the abovementioned Islamic amuletic seals that bear (presumably original) golden traces in their inscriptions.

⁴³ Gil, 2004: II: 532.

⁴⁴ Gil, 2004: II:446-451 at 451, "*Sig+num Ermessendis, comitissae, quae eadem die ad honorem Dei et matris ecclesiae trescentas auri contulit uncias ad auream construendam tabulam*". For a detailed historiography of the altar frontal and seal, see Abenza Soria, 2020. I am grateful to the author for having sent me a copy of her study before the publication appeared at the end of 2020.

⁴⁵ Roig y Jalpi, 1678: 207. In his description of the Girona Cathedral altar frontal, the author mentions seeing on "vna celidonia el nombre de ERMESENDIS, que es el de la Condessa de Barcelona, muger del Serenissimo Conde D. Raymoundo Borrel, y madre del Conde Berenguer Borrel", but Roig does not pinpoint the exact location. Abenza Soria, 2020: 15, states that this is the earliest written documentation attesting to the survival of the seal on the frontal.

with the figure of Our Lady. At the feet of this oval is another tiny one with the enamelwork representation of a seated lady, around which reads: GISLA COMETISSA FIERI IUSSIT. This was the second wife of Count Berenguer, son of Emessindis; she carried out the desires of her mother-in-law, *whose name can be seen inscribed in a stone to the right as you look at the little oval, which reads ERMESINDIS*.⁴⁶

The diminutive object was thus placed to be clearly legible on this highly visible and symbolically freighted location. Verónica Abenza Soria has recently suggested that the public placement of the seal on the altar frontal acted like a textual portrait that authenticated Emessindis's gift of three hundred ounces of gold for the making of the very work in which her stone was inserted.⁴⁷ Later, after the frontal was dismantled in the nineteenth century, the cathedral preserved the seal as a key document for both Emessindis's history and the institution's own.

Conclusions

What, then, are the larger conclusions that can be drawn from bringing these disparate hardstone objects together for comparative analysis? Even for works as well known in specialized historiographies as Emessindis's seal and rock crystal chess pieces from the Islamic world, the present study highlights the crucial importance of firsthand observation. If a return to the archive/collection is always essential, it is especially so when changing technologies, building upon growing bibliographies, allow a concomitant shift in methodological frameworks to open up new historical perspectives. To understand fully the metallic enhancement on the Ourense chess set, it would be important to learn whether this sort of "gilding" can be observed on the many other rock crystal artifacts in ecclesiastical and civil collections, and then to carry out x-ray fluorescence testing. Comparative knowledge of the metals' chemical make-up might point to new chronologies or contexts for the making and use of medieval objects.

Sparked by the unexpected dual discovery of a golden metallic substance hidden in plain sight, this study also pushes back against the too-common assumption that written documentation always offers a more reliable window onto the medieval past than does visual evidence. And this despite the fact that scholars fully understand that charters were written for specific reasons, that chronicles record only certain occurrences, and that archives preserve the sources that suit their autobiographies. Of course, it is also true that institutions select which objects to preserve, not as supplementary illustrations but as chapters in the story they decide to tell. Concerning written sources, Bowman contrasts the radical difference between Emessindis's prominence in contemporary charters with her absolute absence from only slightly later chronicles.

How would the monks of Ripoll commemorate one of the dynasty's most dynamic figures who lived a century earlier? Do the chroniclers tell the same story about Countess Ermessenda's activities that the nearly 200 charters do? When we turn to the relevant sections of the *Gesta* to answer these questions, we find nothing. The countess who dominated the political landscape of Catalonia for the first half of the eleventh century, controlled vast tracts of territory, presided over judicial assemblies, had cathedrals consecrated, and bore a comital title longer than her husband, son, or grandson is not mentioned. The *domina* vanishes.⁴⁸

⁴⁶ Emphasis mine. Villanueva, 1808: XII:180-181, "... un frontal de oro ... cuyo centro ocupa un óvalo con una imagen de nuestra Señora. Al pie de este óvalo hay otro pequeñito, en que está figurada de esmalte una señora sentada, y al rededor se lee: GISLA COMETISSA FIERI IUSSIT. Esta fue la segunda muger del Conde Berenguer, hijo de Ermesindis, la cual ejecutó los deseos de su suegra, cuyo nombre se ve entallado en una piedra al lado derecho del que mira el ovalito, donde se lee: ERMESINDIS". Guisla de Lluçà was doubly related to Emessindis, first as daughter-in-law through her marriage to Berenguer Ramon and later as niece through Guisla's second marriage to Udalard, viscount of Barcelona, who was the son of Ramon Borrell's sister Riquilda. The strategies behind these tightly interwoven marital ties are clarified by Aurell, 1991.

⁴⁷ Abenza Soria, 2020: 19.

⁴⁸ Bowman, 2020: 212, "The *Gesta comitum Barcinonensium* or *Deeds of the Counts of Barcelona* was composed at the monastery of Santa Maria de Ripoll, probably in the 1180s", thus at most a century after Ermesinida's death.

It is my contention, therefore, that women like Emessindis and, even more like Ilduara Eriz, would not disappear so completely if the material record were more generally taken into account, reckoning works like a bilingual seal and a rock crystal chess set as evidence of real historical significance.⁴⁹ “Documents” like these bespeak a clear connection to a cross-cultural source; they confirm that contact existed, even if charters to that effect are scanty or altogether absent. In sum, to ignore the visual sources while focusing only on the *words* of the past is to look back with one eye closed, rejecting the richness that comes with seeing the history of the Middle Ages through the full three-dimensionality of its material record.

BIBLIOGRAPHY

- Abenza Soria, Verónica Carla (2018): “EGO REGINA: Patronazgo y promoción artística femenina en Aragón, Navarra y Cataluña (1000-1200)”. PhD diss., Universitat Autònoma de Barcelona, 2 vols.
- Abenza Soria, Verónica Carla (2020): “¿Patronazgo en cuestión o cuestión de patronazgo? Ermessenda de Carcassone y el desaparecido frontal de altar de la catedral de Girona: el enigma de su piedra sigilar”. In: *Locus Amoenus*, 18, pp. 5-26.
- Akin-Kivanc, Esra (2020): *Muthanna / Mirror Writing in Islamic Calligraphy: History, Theory, and Aesthetics*. Bloomington: Indiana University Press.
- Andrade Cernadas, José Miguel (ed.) (1995): *O tombo de Celanova: estudio introductorio, edición e índices*, 2 vols. Santiago de Compostela: Consello da Cultura Galega, 1995.
- Aurell, Martin (1991): “Jalons pour une enquête sur les stratégies matrimoniales des comtes Catalans (IXe-XIe s.)”. In: *Symposium internacional sobre els orígens de Catalunya (segles VIII-XI)*. Barcelona: Reial Acadèmia de Bones Lletres, vol. 1, pp. 281-364.
- Aurell, Martin (1995): *Les noces du comte. Mariage et pouvoir en Catalogne (785-1213)*. Paris: Publications de la Sorbonne.
- Baiges, Ignasi J. / Feliu, Gaspar / Salrach, Josep M. (dirs.) (2010): *Els pergamins de l'Arxiu Comtal de Barcelona, de Ramon Berenguer II a Ramon Berenguer IV*, vol. IV. Barcelona: Fundació Noguera; Lleida: Pagès Editors.
- Bautier, Robert-Henri (1990-1991): “Notes sur des usages non diplomatiques du sceau”. In: *Revue Française d'Héraldique et de Sigillographie*, 60-61, pp. 127-139.
- Bowman, Jeffrey (2020): “Record, Chronicle and Oblivion: Remembering and Forgetting Elite Women in Medieval Iberia”. In: Barton, Simon / Portass, Robert (eds.): *Beyond the Reconquista: New Directions in the History of Medieval Iberia (711-1085)*. Leiden: Brill, pp. 201-231.
- Bruce, Travis (2009): “An Intercultural Dialogue between the Muslim Taifa of Denia and the Christian County of Barcelona in the Eleventh Century”. In: *Medieval Encounters*, 15, pp. 1-34.
- Camón Aznar, José (1936-1939): “Las piezas de cristal de roca y el arte fatimí encontradas en España. Lote del monasterio de Celanova”. In: *Al-Andalus* 4, 2, pp. 396-405.
- Carreras y Candi, Francisco (1904): “Relaciones de los vizcondes de Barcelona con los árabes”. In: *Homenaje a d. Francisco Codera en su jubilación del profesorado: estudios de erudición oriental*. Zaragoza: Mariano Escar, pp. 207-215.
- Casamar Pérez, Manuel / Valdés Fernández, Fernando (1996): “Arrotomas Irakes”. In: *Homenatge a mossèn Jesús Tarra-gona*. Lleida: Ajuntament de Lleida, pp. 67-88.
- Casamar Pérez, Manuel / Valdés Fernández, Fernando (1999): “Saqueo o comercio. La difusión del arte Fatimí en la Península ibérica”. In: *Codex Aquilarensis* 14, pp. 133-160.
- Cheyne, Jean-Claude (1997): “Byzantine Seals”. In: Collon, Dominique (ed.): *7000 Years of Seals*. London: British Museum, pp. 107-124.
- Dempsey, Karen / Jasperse, Jitske (eds.) (2020): “Multisensorial Musings on Miniature Matters”. In: *Getting the Sense(s) of Small Things/Sinn und Sinnlichkeit kleiner Dinge*, special issue, *Das Mittelalter. Perspektiven mediävistischer Forschung* 25, 2, pp. 249-270.
- Duran-Porta, Joan (2017): “Nuevos datos sobre la temprana difusión del ajedrez en los Pirineos, y una reflexión sobre las piezas de Àger”. In: *Espacio, Tiempo y Forma, Serie VII, Historia del Arte*, 5, pp. 171-187.
- Fité i Llevot, Francesc (1984): “El lot de peces d'escacs de cristall de roca del Museu Diocesà de Lleida, procedents del Tresor de la Col·legiata d'Àger (s. XI)”. In: *Acta Historica et Archaeologica Mediaevalia*, 5-6, pp. 281-312.
- Freeman Fahid, Deborah (2018): *Chess and Other Games Pieces from Islamic Lands. Dar al-Athar al-Islamiyyah, The al-Sabah Collection, Kuwait*. London: Thames & Hudson.
- Gil i Roman, Xavier (2004): “Diplomatario de Ermesèn, condesa de Barcelona, Girona y Osona (c. 991-1 de marzo de 1058)”. PhD diss., Universitat Autònoma de Barcelona.
- Hahn, Cynthia / Shalem, Avinoam (eds.) (2020): *Seeking Transparency: Rock Crystals across the Medieval Mediterranean*. Berlin: Gebr. Mann Verlag.
- Jasperse, Jitske (2020): “Of Seals and Siblings: Teresa/Matilda (d. 1218), Queen of Portugal and Countess of Flanders”. In: *Journal of Medieval Iberian Studies*, 12, 3, pp. 317-343, open access: <https://doi.org/10.1080/17546559.2020.1805120>
- Kalus, Ludvik (1981): *Catalogue des cachets, bulles et talismans islamiques*. Paris: Bibliothèque National.

⁴⁹ Along these lines, see Martin, 2016; Jasperse, 2020; Lester, 2020.

- Kluge-Pinsker, Antje (1991): *Schach und Trictrac: Zeugnisse mittelalterlicher Spielfreude in salischer Zeit* (Römisch-Germanisches Zentralmuseum). Sigmaringen: Jan Thorbecke Verlag.
- Kornbluth, Geneva (1995): *Engraved Gems of the Carolingian Empire*. University Park, PA: The Pennsylvania State University Press.
- Labarta, Ana / con la colaboración de Barceló, Carmen (2017): *Anillos de la Península Ibérica, 711-1611*. Valencia: Graficas Alhori.
- Labarta, Ana (2018): "Glíptica en grafía árabe del Museo Arqueológico Nacional". In: *Boletín del Museo Arqueológico Nacional*, 37, pp. 295-308.
- Lehnertz, Andreas (2019): "Two Seals of Muskinus the Jew (Moshe b. Yehiel, d. 1336), the Archbishop of Trier's *Negotiator*". In: Whatley, Laura J. (ed.): *A Companion to Seals in the Middle Ages*. Leiden: Brill, pp. 242-263.
- Lester, Anne (2020): "Possession, Production, and Power: Reading Objects in the Material Field". In: *Medieval Feminist Forum*, 56, 1, pp. 204-220.
- Makariou, Sophie (2005): "Le jeu d'échecs, une pratique de l'aristocratie entre islam et chrétienté des IXe-XIIIe siècles". In: *Les Cahiers de Saint-Michel de Cuxa*, 36, pp. 127-140.
- Martin, Therese (2015): "Contribuciones del mecenazgo multicultural a la autoridad de las élites femeninas en la península ibérica (ss. X-XI)". In: Díez Jorge, M^a Elena (ed.): *Arquitectura y mujeres en la historia*. Madrid: Editorial Síntesis, 2015, pp. 115-144.
- Martin, Therese (2016): "The Margin to Act: A Framework of Investigation for Women's (and Men's) Medieval Art-Making". In: Therese Martin (ed.): *Me fecit. Making Medieval Art (History)*, special issue, *Journal of Medieval History*, 42, 1, pp. 1-25.
- Martin, Therese (2019): "Caskets of Silver and Ivory from Diverse Parts of the World: Strategic Collecting for an Iberian Treasury". In: Martin, Therese (ed.): *The Medieval Iberian Treasury in the Context of Cultural Interchange*, special issue, *Medieval Encounters*, 25, 1-2 (2019), pp. 1-38, open access: <https://doi.org/10.1163/15700674-12340037>
- Martin López, María Encarnación (2007): "Un documento de Fernando I de 1063: ¿Falso diplomático?" In: *Monarquía y sociedad en el reino de León: De Alfonso III a Alfonso VII*. Fuentes y Estudios de Historia Leonesa 118. León: Centro de Estudios e Investigación San Isidoro, vol. 2, pp. 513-540.
- Menéndez Pidal, Faustino (2018): *Los sellos en nuestra historia*. Madrid: Real Academia de la Historia, Boletín Oficial del Estado.
- Morero, Elise / Johns, Jeremy / Procopiou, Hara / Vargiolu, Roberto / Zahouani, Hassan (2020): "Relief Carving on Medieval Islamic Glass and Rock Crystal Vessels: A Comparative Approach to Techniques of Manufacture." In: Hahn, Cynthia / Shalem, Avinoam (eds.): *Seeking Transparency: Rock Crystals across the Medieval Mediterranean*. Berlin: Gebr. Mann Verlag, pp. 51-66.
- Pallares, María del Carmen (1998): *Ilduara, una aristócrata del siglo X*. Sada: Publicación do Seminario de Estudos Galegos.
- Pilz, Marcus (2020): "Beyond Fatimid: The Iconography of Medieval Islamic Rock Crystal Vessels and the Question of Dating". In: Hahn, Cynthia / Shalem, Avinoam (eds.): *Seeking Transparency: Rock Crystals across the Medieval Mediterranean*. Berlin: Gebr. Mann Verlag, pp. 169-182.
- Porter, Venetia (2011): *Arabic and Persian Seals and Amulets in the British Museum*. London: British Museum (rev. ed. 2017).
- Porter, Venetia (2020): "Early Seals and Amulets Made from Rock Crystal". In: Hahn, Cynthia / Shalem, Avinoam (eds.): *Seeking Transparency: Rock Crystals across the Medieval Mediterranean*. Berlin: Gebr. Mann Verlag, pp. 251-256.
- Pradines, Stéphane (2020): "Madagascar, the Source of the Abbasid and Fatimid Rock Crystals: New Evidence from Archaeological Investigations in East Africa". In: Hahn, Cynthia / Shalem, Avinoam (eds.): *Seeking Transparency: Rock Crystals across the Medieval Mediterranean*. Berlin: Gebr. Mann Verlag, pp. 35-50.
- Rodríguez, Ana (2013): "À propos des objets nécessaires. Dotations monastiques et circulation d'objets dans le royaume de Léon dans le Haut Moyen Âge." In: Feller, Laurent / Rodríguez, Ana (eds.): *Objets sous contraintes: Circulation des richesses et valeur des choses au Moyen Âge*. Paris: Publications de la Sorbonne, pp. 63-89.
- Roig y Jalpí, Juan Gaspar (1678): *Resumen historial de las grandezas y antigüedades de la ciudad de Gerona, y cosas memorables suyas Eclesiásticas y Seculares, allí de nuestros tiempos, como de los passados*. Barcelona: Jacinto Adreu.
- Sánchez Gallego, Rubén / Chávet Lozoya, María / Ayaso Martínez, José Ramón (2009-2010): "Estudio de un anillo con sello: indicador arqueológico del ritual de enterramiento islámico y evidencia documental del primer asentamiento musulmán en Lurqa (Lorca, Murcia)". In: *Estudios sobre el Patrimonio, Cultura y Ciencia Medievales*, 11-12, pp. 195-214.
- Savage-Smith, Emilie (2004): *Magic and Divination in Early Islam*. Aldershot: Ashgate Variorum.
- Shalem, Avinoam (2020): "On Medieval Rock Crystal Sources and Resources in the Lands of Islam". In: Hahn, Cynthia / Shalem, Avinoam (eds.): *Seeking Transparency: Rock Crystals across the Medieval Mediterranean*. Berlin: Gebr. Mann Verlag, pp. 101-116.
- Simon, David L. (1993): "Copy of Donation of Pedro I". In: *The Art of Medieval Spain, A.D. 500-1200*, exh. cat. New York: Metropolitan Museum of Art, pp. 292-293.
- Valdés Fernández, Fernando (2004): *Las figuras de ajedrez y cristal de roca del Museo Catedralicio de Ourense*. Ourense: Grupo Francisco de Moure.
- Valdés Fernández, Fernando / Zamorano Arenas, Ana María (2018): "Madinat al-Zahra' y la cronología de los cristales de roca egipcios conservados en España". In: *Madrid Mitteilungen*, 59, pp. 409-438.
- Villanueva, Jaime (1808): *Viage literario a las iglesias de España*, vol. XII. *Viage à Urgell y à Gerona*. Madrid: Real Academia de la Historia.
- Wolff, Philippe (1989): "Deux maitresses femmes dans la Marche d'Espagne au XIe siècle: Ermessende et Almodis". In: *Media in Francia: recueil de mélanges offert à Karl Ferdinand Werner, à l'occasion de son 65e anniversaire par ses amis et collègues français*. Paris: Maulévrier, pp. 525-537.

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