

Research Workflows with SciSpace and Undermind

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Outline

- How AI-based research assistants work
- SciSpace
- Undermind
- Takeaways



AI tools for academic research



- Proliferation of tools, due to which it is difficult to assess their quality and sustainability
- Various functions (writing assistance, searching, summarization, text and image generation, etc.)
- Natural language search in different languages
- Conversational approach
- Usually paid access, freemium at best
- Limited coverage (more OA content)
- Better performance in English
- Bias

scite_

perplexity



Consensus

Research starts here

Academic services are introducing AI tools

JSTOR's AI research tool

Get to know our AI research tool, part of a growing suite of AI-enabled features on JSTOR designed to enhance—not replace—the research process. Developed in collaboration with our community and offered free to JSTOR-participating institutions, the tool helps users engage more deeply with JSTOR's trusted corpus.

ScienceDirect AI: Eureka, every day.

ScienceDirect AI is a workflow companion that enables researchers to instantly surface, cite, compare and explore trusted evidence from deep within the peer-reviewed literature. It makes knowledge discovery more efficient, practical and rewarding.

[Book a demo](#)

[Individual academics and students: Try it for free for 7 days ↗](#)

Web of Science Research Assistant

A generative-AI-powered tool that helps you quickly find the right content and easily navigate complex research tasks

Shape the future with Dimensions AI Assistant

Scopus AI: Think bigger. Move faster. Act with confidence.

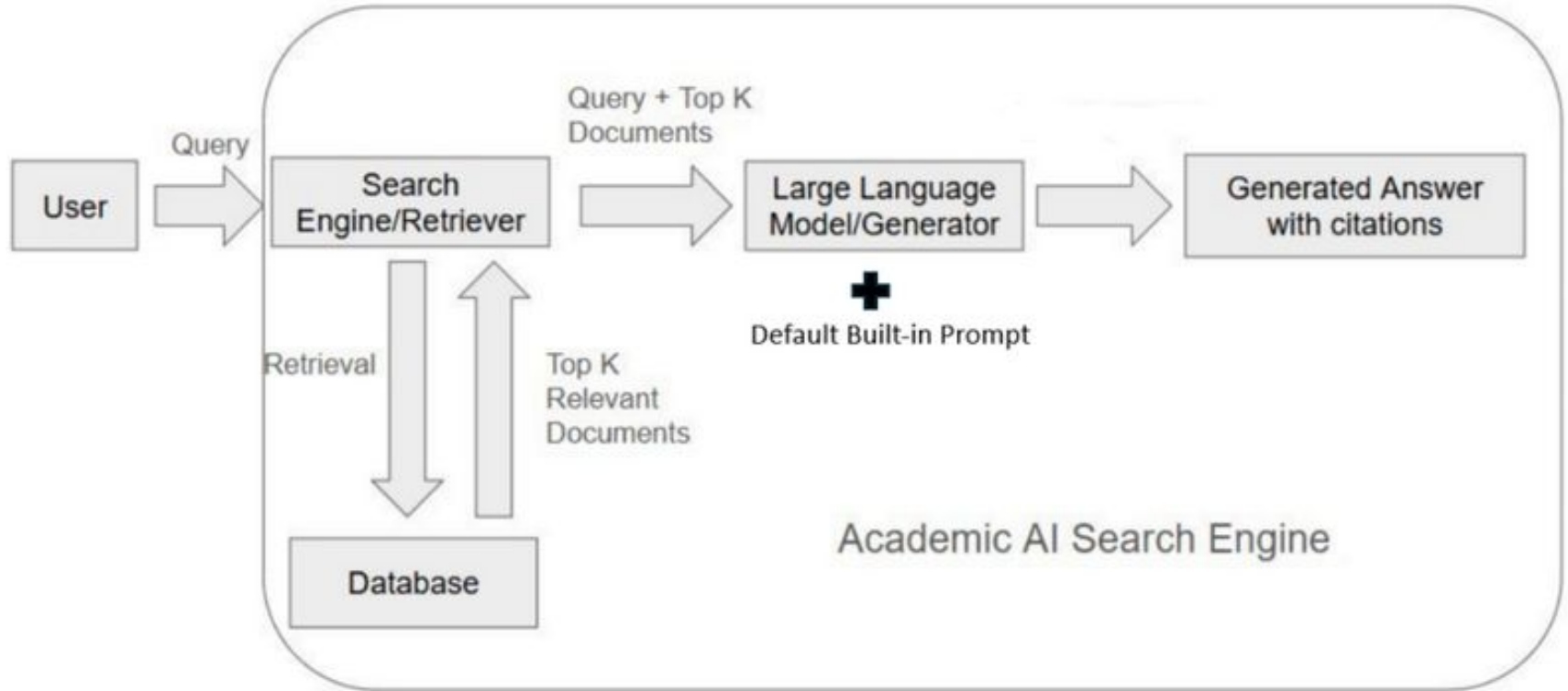
Scopus AI combines trusted, peer-reviewed content with sophisticated AI to deliver faster, deeper insights.

Built for academic workflows, it accelerates discovery, identifies patterns and supports strategic thinking—all while championing academic rigor.

LLM + Retrieval-Augmented Generation (RAG)

- Workflow
 - A user types a research question into the tool.
 - The tool first searches trusted academic databases available to it and selects a number of top results.
 - The LLM uses the information from those documents to write a summary and answer the question. The answer includes references to the documents used to generate the answer.
- More accurate and relevant information
- Real citations make it easy to verify information
- The quality of results depends on the content of the database(s) used, as well as on the ranking algorithm.
- Misinterpretations are possible.

LLM + Retrieval-Augmented Generation (RAG)



SciSpace

<https://scispace.com/>

- Web application, mobile application and a Chrome extension
- Freemium: limited free version + [several paid plans](#) + institutional subscription (SciSpace Enterprise)



SCISPAC

Tools

SciSpace Agent
Biomedical Agent
SciSpace Recruit
SciSpace for Enterprise
Agent Gallery
Chat with PDF
Literature Review
AI Writer
Find Topics
Paraphraser
Citation Generator
Extract Data
AI Detector
Citation Booster

Directories

Papers
Topics
Journals
Authors
Conferences
Institutions
Citation Styles
Writing templates

Search interface + a toolbar (left)

The image shows the SciSpace search interface. On the left side, there is a vertical toolbar with icons for home, search, edit, chat, document, help, list, chat, and AI. The main content area features the SciSpace logo and the heading "How can I help with your research?". Below the heading is the text "Handle everyday research tasks with reliable, citation-backed results". A large search input field contains the placeholder text "Give me any task to work on...". Below the search field is a "Tools" dropdown menu, a "Lite" dropdown menu, and a microphone icon. At the bottom, there is a navigation bar with five buttons: "Search Papers", "Literature Review", "Draft", "Diagrams", and "Presentation".

+

SciSpace

How can I help with your research?

Handle everyday research tasks with reliable, citation-backed results

Give me any task to work on...

+ Tools Lite


Search Papers Literature Review Draft Diagrams Presentation

Analysis of uploaded PDFs

PDFs must be readable
(does not work for
non-OCR-ed content)

Chat with PDF

Upload any PDF to SciSpace Chat PDF, ask a question, and get concise, citation-linked answers, summaries, and follow-ups in seconds—free tier, 256-bit encrypted, no data training, supports 75 + languages.



Drag and drop or click here to browse

Max. 100 MB per file

[Upload PDFs](#)

Or [Try a sample pdf](#)



SCISPAC

Agent gallery


Ready-made agents that perform specific tasks



Content Analysis Codebook Generator for Qualitative Research

Create a structured content analysis codebook with code definitions, inclusion/exclusio...


[Run Task](#) [View Output](#)



Survey Interview Script Generator for Qualitative Research

Create structured survey interview scripts with open-ended questions, probes,...

[Run Task](#) [View Output](#)




Constructing an Instrument for Data Collection Template

Design a structured instrument for data collection with ready-to-use qualitative templates,...

[Run Task](#) [View Output](#)


SciSpace Agent Gallery

 Featured


 Extract + Analyse

 Literature Review

 Create + Write


 Deep Search


Browse by Domain

 Physics

 Computer Science + AI

 Biomedical

 Chemistry

 Mathematics

 Social Sciences

 Health Sciences

 Engineering

Literature review with SciSpace

Refining the research question (Deep search)

- Different levels
 - Standard (this is all you can do with the free version)
 - High
 - Deep
- Different languages can be used.
- The results depend on the range of available literature.

Research Steps Hide all steps ^

Scispace is performing Deep Review search .

Trade routes used for the import of pepper into Europe during the 11th–15th centuries

🗒️ Could you clarify what specific aspect of the trade routes for pepper importation you are interested in? Here are a few suggestions to help narrow your focus:

1. **Geographical Focus:** Are you interested in the specific regions or countries involved in the pepper trade routes (e.g., India, Middle East, Mediterranean countries)?
2. **Economic Impact:** What was the economic significance of these trade routes in Europe during this period (e.g., influence on local economies, trade balance)?
3. **Cultural and Social Influence:** How did the pepper trade affect cultural exchanges and social dynamics within Europe (e.g., culinary changes, social status)?
4. **Historical Context:** What were the historical events or developments that influenced these trade routes (e.g., Crusades, rise of the Ottoman Empire)?

Please choose one or more options or provide additional details to refine the search further.

Write "Submit" to run OR Enter instructions to enhance query. ➔

A summary based
on five top papers,
including papers not
available in full text.

Answer from top 5 papers ▾

The import of pepper into Europe during the Middle Ages was driven by high demand and the luxury trade, significantly influencing social and economic dynamics. Pepper, along with other spices, became a status symbol among the aristocracy, reflecting wealth and sophistication. The archaeological findings from the Gribshunden shipwreck reveal that pepper was among the exotic spices transported for elite consumption, indicating its importance in medieval Scandinavian society (Larsson & Foley, 2023). The pursuit of spices, including pepper, spurred exploration and trade, leading to significant historical developments and the expansion of European influence globally (Freedman, 2008) (Freedman, n.d.).

Economic Impact

- The spice trade, particularly pepper, was lucrative, with merchants capitalizing on the price differences between Asia and Europe.
- The Spanish Crown's acquisition of Portuguese spice routes allowed for monopolistic control over the pepper market, enhancing profitability (Kellenbenz, 1956).

Cultural Significance

- Spices were integral to medieval cuisine, medicine, and religious ceremonies, symbolizing affluence and refinement.
- The extravagant use of pepper in culinary practices underscored its role in shaping social customs and tastes (Freedman, 2008).

While the demand for pepper and other spices fueled economic growth and cultural exchange, it also led to exploitation and colonial expansion, raising ethical questions about the consequences of such trade practices.

Read Less ^

📖 Save to Notebook ▾

APA, Bullets ▾

🔍 Find Topics



A summary based on five top papers, including only papers available in full text.

A significant share of non-English content.

Answer from top 5 papers ▾

The import of pepper into Europe during the Middle Ages was significantly influenced by trade routes and economic exchanges, particularly through Mediterranean ports like Valencia. The Venetian galleys played a crucial role in this trade, facilitating the import of spices, including pepper, alongside textiles and metals, which were exchanged for wool and other goods (Luis, 2020). The demand for pepper surged as it became a staple in culinary practices, evidenced by its incorporation into traditional dishes in regions like Verona (Brugnoli, 2020).

Trade Routes and Economic Impact

- **Venetian Galleys:** Operated from the late 14th to the 16th centuries, connecting Valencia with various Mediterranean and Northern European markets.
- **High Demand:** Pepper was highly sought after, leading to profitable exchanges that solidified Valencia's status as a trade hub (Luis, 2020).

Culinary Integration

- **Culinary Uses:** Pepper became integral to local cuisines, with historical recipes indicating its use in dishes like pearà, showcasing its cultural significance (Brugnoli, 2020).

Broader Trade Networks

- **Hanseatic Connections:** The trade of spices, including pepper, was part of larger networks involving the Hanseatic League, which connected Northern Europe with Mediterranean markets (Köhler & Jahnke, 2021).

Conversely, while pepper was a luxury item, other commodities like rice also gained prominence in trade, indicating a diverse market landscape in medieval Europe (Luis, 2020).

Read Less ^

 Save to Notebook ▾  APA, Bullets ▾  Find Topics


Undermind

<https://www.undermind.ai/>

- Web application
- An institutional or company email is required (Gmail not accepted)
- Freemium: limited free version + [several paid plans + institutional subscription](#) (Undermind Enterprise)
- Collaborators can be invited to join a project



μ Projects / 16-06-2026

 Upload Paper PDFs

Library

 All Papers

 Starred

 Uploads

+ New folder

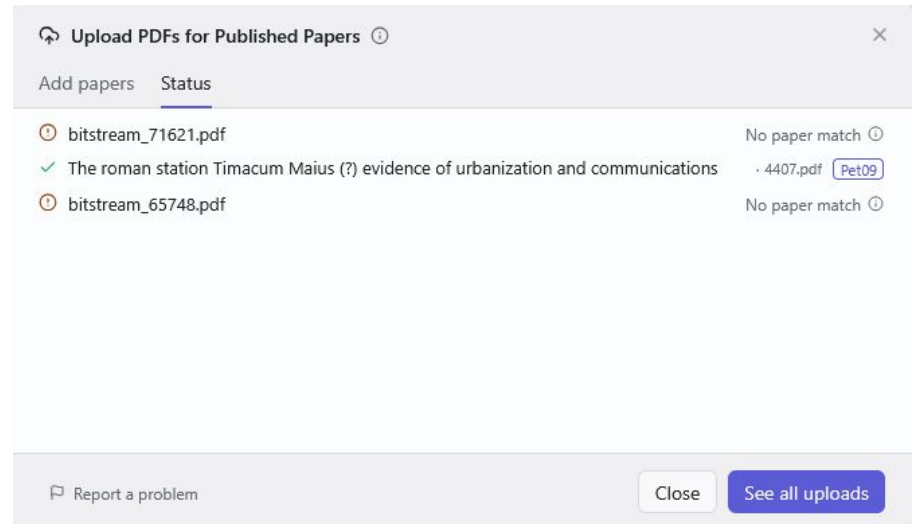
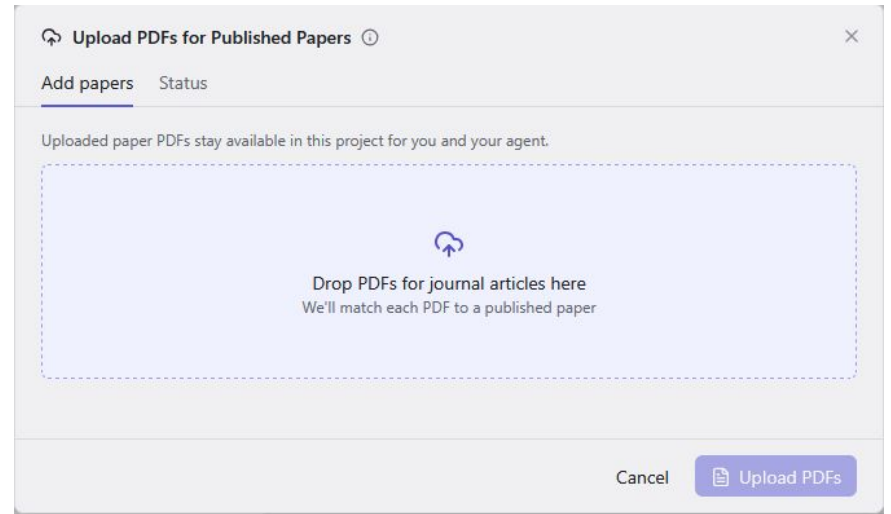
Organize your deep searches, files, and papers here.

Chats

Your chats will appear here

PDF analysis

- Only works with papers that have a DOI
- Text must be readable (doesn't work with non-OCR'd scans)
- Upload a paper
- Ask questions



PDF analysis

The Roman Station *Timacum Maius* (?) Evidence of Urbanization and Communications

Abstract: The 2009 archaeological campaign at Niševac, eastern Serbia, has provided important evidence for the urban growth of a Roman settlement, such as drains and a section of the Roman road traversing the settlement. Along with a sumptuous structure furnished with a wall heating system discovered in 2008, the latest excavation results provide clues as to the importance of the settlement which, containing all elements of Roman urban architecture, offers further corroboration to its presumed identification as the Roman station of *Timacum Maius* on the *Lissus-Naissus-Ratiaria* road.

Keywords: Svrlijig, *Timacum Maius*, archaeological excavations, urbanization, *Lissus-Naissus-Ratiaria* road

The purpose of the continued fieldwork in the Niševac village area near Svrlijig in the Svrlijski Timok river valley, eastern Serbia, was to deepen the previously collected archaeological data about a sizeable Roman settlement, presumed to have been *Timacum Maius*, a station on the *Lissus-Naissus-Ratiaria* road that connected the Adriatic and the Danube (Petrović 2007: 81–95). This road was the shortest link between the Adriatic ports and the mineral-rich areas of the central Balkans, thus the area of the city of *Naissus* from which it took a north-eastward course towards *Ratiaria*, Trajan's colony on the Danube near modern Archar in Bulgaria. In the famous Roman itinerary, *Tabula Peutingeriana*, *Timacum Maius* figures as the first station on the section of the road from *Naissus* to *Ratiaria*.

Archaeological and other data suggesting that *Timacum Maius* might have been situated in the Niševac village area has already been discussed (Petrović and Filipović 2007; 2008). The site of Kalnica sitting on a low river terrace on the left side of the Svrlijski Timok is the area where *Timacum Maius* was assumed to have been located as early as the nineteenth century (Kanitz 1986: 350; Dragašević 1887: 53). P. Petrović, concerned with the issue of identifying the location of both *Timacum* stations (*Maius* and *Minus*) for decades, suggested Niševac as the site of *Timacum Maius* in a number of his studies (Petrović 1968; 1976a; 1976b; 1992; 1995 and 1997). Further, M.

Reading full text of [Pet09](#)

Thinking

Showing a section from a paper

Thinking

Assuming you mean [Pet09](#), the key results are:

- The excavation adds support for identifying the Niševac site with the Roman station **Timacum Maius**, the first stop on the road from *Naissus* to *Ratiaria* [Pet09](#).
- The site shows clear signs of **planned urban layout**: drainage channels and roads appear to follow an orthogonal pattern, implying rectangular building blocks and deliberate settlement design [Pet09](#).
- The authors uncovered a **major Roman road** in Trench 3, built with parallel stone borders and a compacted pebble-gravel surface, which they interpret as part of an inter-urban route [Pet09](#).
- In Trench 2 they found a **drainage system** with two perpendicular channels, which they take as evidence for road infrastructure and organized waste or rainwater management [Pet09](#).
- The Roman occupation layer is dated mainly to the **late 3rd to early 4th century CE** from pottery and coins [Pet09](#).
- The excavation also revealed an **earlier Iron Age occupation layer**, showing the site had a longer settlement history before the Roman phase [Pet09](#).
- Fine decorated pottery suggests the inhabitants had **some wealth and long-distance trade links** within the Roman world [Pet09](#).
- Their overall conclusion is that this was not just a minor stop, but a settlement with enough infrastructure and built environment to count as a **real urban center** [Pet09](#).

If useful, I can also:

- turn this into a **1-paragraph plain-language summary**
- extract the paper's **methods, evidence, and conclusions** in a small table



- Looking up paper info for [Pet09](#)
- Searching for papers
- Searching for papers citing [Pet09](#)
- Searching for papers cited by [Pet09](#)
- Thinking

The closest matches I found to [Pet09](#) are these:

Paper	Why it is similar	PDF
Pet08	Same authors, same site, and directly about locating Timacum Maius on the Lissus–Naissus–Ratiaria road	downloading
Pet07	Same authors and road system; focuses on traces of the Naissus–Ratiaria road and locating the two Timacum stations	downloading
Die18	Strong thematic match on Roman urbanism and settlement centrality in Moesia Superior ; broader regional analogue rather than the exact same site	no PDF
Gut22	Good methods analogue for Roman road archaeology and physical road construction, though not Balkan-focused	PDF available

Best starting set

- **Nearest continuations/background to your paper:** [Pet07](#), [Pet08](#)
- **Best conceptual analogue:** [Die18](#)
- **Best road-construction comparison:** [Gut22](#)

I ignored [Fil13](#) because it looks less relevant to the Roman-road/urbanization question than the others.

If you want, I can next:

- pull the **abstracts and key claims** for these papers
- make a **comparison table** of [Pet09](#) against [Pet07](#), [Pet08](#), [Die18](#), and [Gut22](#)

PDF analysis

Search for similar papers directly from the chat

Literature search with Undermind

Refining the prompt

Pepper import into Europe in the Middle Ages

🗨 Thinking

This sounds like a medieval trade-history question, but it could point in different directions: Indian Ocean to Mediterranean supply chains, Mamluk and Venetian intermediation, or European-side evidence such as customs accounts, prices, and consumption. A useful search will depend on which of those you care about most.

1. Do you mainly want **trade routes and merchants**, or **evidence on quantities, prices, and imports into Europe**?
2. Which period matters most: **early/high medieval**, **late medieval**, or **the whole Middle Ages**?

Trade routes and evidence on quantities, the the whole Middle Ages

🗨 Thinking

So the core looks like: reconstructing how pepper reached Europe across the full medieval period, while also capturing whatever hard evidence survives on volume or scale of import rather than just narrative route descriptions.

ly, or **pepper and other eastern spices where pepper is the**

re main entry zones and redistribution hubs such as the **markets?**

black pepper, entire Europe



Search proposal

Medieval black pepper imports into Europe



I want a literature search on the import of black pepper into Europe across the whole Middle Ages. The focus should be on the trade routes by which black pepper reached Europe and on evidence for quantities or scale of import into European markets. Treat Europe broadly rather than focusing on a single region, while still capturing the main entry points, intermediaries, and redistribution networks where the literature sees them as central.

▶ Launch

✎ Edit

Medieval black pepper imports into Europe

Search completed · 67 papers found · 10:01 AM

[Export](#)
[Generate Report](#)

Summary of results Search goal Timeline

Black pepper reached medieval Europe primarily through an eastern Mediterranean funnel centered on Mamluk Egypt—above all Alexandria—with the best evidence showing that this system intensified and became highly documented in the fourteenth and fifteenth centuries rather than evenly across the whole Middle Ages [Abu85](#) [Ash75](#) [Fis58](#). [Show more](#) ▾

KEY	MATCH %	YEAR	CIT/YR	TITLE	Actions
Abu85	100%	1985	4.3	Levant Trade in the Later Middle Ages. ☆ D. Abulafia and E. Ashtor · <i>The Economic History Review</i>	PDF
Wak96	100%	1996	0.9	The Changing Pattern of Europe's Pepper and Spice Imports, c. 1400-1700 ☆ C. Wake · <i>The Journal of European economic history</i>	PDF
Ash75	100%	1975	0.2	The Volume of Levantine Trade in the Later Middle Ages (1370-1498). ☆ E. Ashtor · <i>The Journal of European economic history</i>	PDF
Chr12	100%	2012	3.3	Trading Conflicts: Venetian Merchants and Mamluk Officials in Late Medieval Alexandria ☆ G. Christ	PDF
Val11	100%	2011	0.1	Le marché des épices d'Alexandrie et les mutations du grande commerce de la mer Rouge (XIVe-XVe siècle) ☆ É. Vallet	PDF
Arb04	100%	2004	0.3	The Last Decades of Venice's Trade with the Mamluks: Importations into Egypt and Syria (MSR VIII.2, 2004) ☆ B. Arbel	PDF

CHAT KNOWLEDGE | 6 PDFs | 68 abstracts | 1 deep search | 0 files

Learn more ▾

💡 Thinking

🔍 Drafting a deep search

I drafted the search.

You can launch **Medieval black pepper imports into Europe** as is, or keep refining it with me.



Deep search complete

Medieval black pepper imports into Europe

[Abu85](#) 100% **Levant Trade in the Later Middle Ages.**

[Wak96](#) 100% **The Changing Pattern of Europe's Pepper and Spice Imports, c. 1400-1700**

[Ash75](#) 100% **The Volume of Levantine Trade in the Later Middle Ages (1370-1498).**

Viewing results 🗨

🔍 Search completed. I found 67 papers and 5 full texts. I've saved them inside this project.

Black pepper reached medieval Europe primarily through an eastern Mediterranean funnel centered on Mamluk Egypt—above all Alexandria—with the best evidence showing that this system intensified and became highly documented in the fourteenth and fifteenth centuries rather than evenly across the whole Middle Ages [Abu85](#) [Ash75](#) [Fis58](#).

These results are now available in the chat. Next, I can help you analyse the results and full texts in depth.

📄 Report generation recommended

We can now write documents analyzing the papers found in the search *Medieval black pepper imports into Europe*

[Generate Report](#) × Dismiss

🔍 Deep search [Write report](#)

Write a message...

Search results



Summary based on retrieved publications

Black pepper reached medieval Europe primarily through an eastern Mediterranean funnel centered on Mamluk Egypt—above all Alexandria—with the best evidence showing that this system intensified and became highly documented in the fourteenth and fifteenth centuries rather than evenly across the whole Middle Ages (Abu85) (Ash75) (Fis58).

Route structure

- **Indian Ocean to Red Sea to Mediterranean** was the canonical corridor: Malabar supply feeding Aden/Red Sea networks, then Egyptian and Syrian ports, then Italian shipping into Europe (Pra11) (Mar07) (Fis58).
- **The internal eastern route shifted over time:** Vallet identifies a move from the older Kārim/Aydhāb–Aden system toward Jeddah/Mecca-linked circuits in the fifteenth century, helping explain the growing role of Syrian outlets alongside Alexandria (Val11) (Win14) (Mei03).
- **Venice was the main European intermediary** in the later Middle Ages, operating through Alexandria, Beirut, and Syrian ports under Mamluk supervision and fiscal intervention (Arb04) (Chr12) (Ash74b).

Scale and quantification

- **Quantitative evidence is strongest for 1370–1500:** aggregate estimates of Levantine volume (Ash75), price/profit series for pepper (Ash76) (Lan68) (Ash75b), and shipping or customs records from Venice-linked trade (Arb04b) (Nam13).
- **European redistribution is visible but regionally fragmented:** London customs (Jen16) (Cob90), Flanders/England galley links (Wat61) (Raw00), Central European and Hungarian routes via Venice and the Black Sea (Pac07) (Pac80) (Sch22), and occasional cargo snapshots such as Aigues-Mortes in 1358 (Cla24).
- **For the early and central Middle Ages, evidence is thinner and more documentary than volumetric:** Geniza-based work mainly establishes enduring Egypt–Aden–India connectivity rather than Europe-wide import totals (Goi54) (Rei09) (Udo87).

References are provided for each statement.

Report

- Further prompt refinement.
- The user is prompted to upload papers not available in full text.

- 💡 Thinking
- 🔍 Reviewing your deep searches
- 📄 Suggesting PDF uploads

The search gives us a workable core already. The main content issue is that the evidence is uneven across the period: for the **fourteenth and fifteenth centuries** there are route studies and some real quantitative evidence, while for the **earlier Middle Ages** the literature seems much thinner and more indirect.

1. What do you want the report to do: **synthesize the state of knowledge**, or **make a more specific argument** about how black pepper reached Europe and how much of it moved?
2. Should the report be organized as a **whole-period survey**, or around the stronger claim that **late medieval evidence is much better than early medieval evidence**, with the earlier centuries treated more cautiously?

PDF uploads suggested

Uploaded paper PDFs stay available in this project for you and your agent.

The search already supports a solid report from its summaries, metadata, and available PDFs, but these papers look central for the trade-route structure and quantitative claims. Uploading their full texts would let me ground the report more tightly in the underlying evidence, especially for Levantine volumes, Venetian-Mamluk intermediation, and the broader Europe-facing route system.

- [Ash75](#) The Volume of Levantine Trade in the Later Middle Ages (1370-1498) [Get PDF](#)
- [Abu85](#) Levant Trade in the Later Middle Ages. [Get PDF](#)
- [Arb04](#) The Last Decades of Venice's Trade with the Mamluks: Importations into Egypt and Syria (... [Get PDF](#)
- [Val11](#) Le marché des épices d'Alexandrie et les mutations du grande commerce de la mer Roug... [Get PDF](#)
- [Abu87](#) Asia, Africa and the Trade of Medieval Europe [Get PDF](#)

[Upload PDFs](#)

Report

- Thinking
- Looking up paper info for [Pra11](#) [Mar07](#) [Win14](#) [Lan68](#) [Ash75b](#) +11 more
- Reviewing your deep searches
- Reviewing your deep searches
- Thinking
- Looking up paper info for [Abu85](#) [Wak96](#) [Ash75](#) [Chr12](#) [Val11](#) +19 more
- Thinking
- Reviewing your deep searches
- Reviewing your deep searches
- Thinking
- Looking up paper info for [Mel05](#)
- Thinking
- Reading full texts of [Sch22](#) [Sop16](#) [Lui20](#) [Mel05](#) [Car25](#)
- Thinking
- Writing a file

Black pepper imports into medieval Europe

The literature supports a clear broad picture of how black pepper reached Europe in the Middle Ages, but it does not support equally strong claims for every century. The best-established route runs from the Malabar coast through Indian Ocean and Red Sea networks into Mamluk Egypt and Syria, then by Venetian and other Mediterranean carriers into European markets ([Pra11](#) [Mar07](#) [Fis58](#) [Abu87](#)). What changes across the period is not only the trade itself but the quality of the evidence. For the earlier and central Middle Ages, the record is patchy and often documentary rather than volumetric ([Goi54](#) [Rei09](#) [Udo87](#)). For the fourteenth and especially fifteenth centuries, the literature becomes much denser, with customs material, cargo lists, price series, and merchant records that allow more precise reconstruction ([Ash75](#) [Lan68](#) [Ash75b](#) [Arb04b](#) [Jen16](#) [Cob90](#)).

Evidence across the period

Period	What the literature can show	Main evidence base	Main limit
Early and central Middle Ages	Durable links between Egypt, Aden, India, and the Mediterranean (Goi54 Rei09 Udo87)	Geniza documents, commercial correspondence, port studies (Goi54 Rei09)	Little secure Europe-wide quantification
Fourteenth century	Stronger route reconstruction and some market shocks, price problems, and institutional change (Val11 Ash76b)	Merchant records, Mediterranean trade studies, Alexandrian market work (Val11 Abu85)	Quantities still uneven by region
Fifteenth century	Best evidence for routes, institutions, and scale of imports (Ash75 Arb04 Mel03 Mel05)	Customs, cargo lists, galley manifests, state records, merchant ledgers (Arb04b Jen16 Cob90 Sch22 Lui20)	Still no single continuous Europe-wide series

Route structure

The dominant route in the literature is an eastern Mediterranean funnel. Pepper was produced above all on the Malabar coast, and studies that recenter the trade on the Indian Ocean stress that Europe was only one branch of a wider Asian system ([Pra11](#)). From there, pepper moved through Muslim mercantile networks into Aden and the Red Sea, then into the Mamluk commercial sphere, with Alexandria as the

How should academic retrieval augmented generation (RAG) systems handle retracted works?

I test Elicit, Scite assistant, SciSpace, Primo Research Assistant, Undermind, Ai2 ScholarQA and many more to see how they handle retracted papers.



AARON TAY

JUN 02, 2025

ARTIFICIAL INTELLIGENCE

AI models are using material from retracted scientific papers

Some companies are working to remedy the issue.

By Ananya

September 23, 2025



Challenges

- Understanding the technology
- Making choices and decisions (what to buy, what to recommend)
- Unrealistic expectations
- Uneven quality for different languages, older publications and non-journal content

Takeaways

- Keep an open mind, check and test!
- Combine new tools with traditional search strategies.
- Combine multiple AI-based tools.
- Include new tools in training programmes on digital literacy and research methodology (free versions are good enough for this).



Resources

- [Aaron Tay's Musings about librarianship](#)
- [What a year of testing & thinking about AI academic search taught me](#)
- [A Librarian's Guide to AI in Academic Search Tools | Katina Magazine](#)
- [Why Blindly Applying Prompt Engineering Techniques to RAG Systems as a user is a bad idea | by Aaron Tay](#)



Thank you! Questions?

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