

Mapping online attention to DeepSeek: an altmetric study (January 2024-January 2025)

Mapeo de la atención en línea hacia DeepSeek: un estudio altmétrico (enero de 2024-enero de 2025)

Mapeamento da atenção online para o DeepSeek: um estudo altmétrico (janeiro de 2024 a janeiro de 2025)

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ORIGINAL

Abstract

Objective: To map the online attention received by DeepSeek by analyzing mentions on channels covered by the Altmetric.com platform. **Method:** Exploratory research with altmetric analysis, using the advanced search option of Altmetric Explorer from Altmetric.com. Data collection was carried out on February 11, 2025, using the keyword "deepseek." **Results:** A total of 5,237 mentions were tracked by the platform, averaging 116.3 mentions for each search output. The first mention was recorded in January 2024, in X. The most traditional journals are the main vehicles for publishing the research developed: arXiv, with the highest number of mentions (2,987), followed by Nature (1,498). The three most mentioned articles had at least 1,000 mentions, with the most mentioned article published in December 2024 and the other two in January 2025. **Conclusions:** The DeepSeek topic has gained significant attention online, reflecting a period of heightened online attention, particularly concentrated in January 2025, without indicating a consistent upward trend over time.

Keywords: DeepSeek, altmetrics, social web

Resumen

Objetivo: Mapear la atención online recibida por DeepSeek mediante el análisis de las menciones en los canales cubiertos por la plataforma Altmetric.com. **Método:** Investigación exploratoria con análisis altmétrico, utilizando la opción de búsqueda avanzada de Altmetric Explorer de Altmetric.com. La recopilación de datos se llevó a cabo el 11 de febrero de 2025, utilizando la palabra clave «deepseek». **Resultados:** La plataforma registró un total de 5237 menciones, con un promedio de 116,3 menciones por cada resultado de búsqueda. La primera mención se registró en enero de 2024, en X. Las revistas más tradicionales son los principales vehículos para publicar las investigaciones desarrolladas: arXiv, con el mayor número de menciones (2987), seguida de Nature (1498). Los tres artículos más mencionados tuvieron al menos 1000 menciones, y el artículo más mencionado se publicó en diciembre de 2024 y los otros dos en enero de 2025. **Conclusiones:** El tema DeepSeek ha ganado una gran atención en Internet, lo que refleja su creciente relevancia en el panorama científico y tecnológico contemporáneo.

Palabras clave: DeepSeek, altmetría, web social

Resumo

Objetivo: Mapear a atenção online recebida pelo DeepSeek por meio da análise das menções nos canais cobertos pela plataforma Altmetric.com. **Método:** Pesquisa exploratória com análise altmétrica, na opção de busca avançada do Altmetric Explorer da Altmetric.com. A coleta foi realizada no dia 11 de fevereiro de 2025, com palavras-chave "deepseek". **Resultados:** Total de 5237 menções rastreadas pela plataforma, em média 116,3 menções para cada saída de pesquisa. O primeiro registro de menção foi em janeiro de 2024, no X. Têm-se os periódicos mais tradicionais como os principais veículos de publicação das pesquisas desenvolvidas: o arXiv, com maior número de menções (2987) seguido pela Nature (1498). Os três artigos mais mencionados tiveram pelo menos 1000 menções, com o primeiro artigo mais mencionado, publicado em dezembro de 2024 e os outros dois, em janeiro de 2025. **Conclusões:** O tema DeepSeek tem conquistado significativa atenção online, refletindo sua relevância crescente no cenário científico e tecnológico contemporâneo.

Palavras-chave: DeepSeek, altmetria, web social

1 Introduction

DeepSeek, a Chinese technology company, recently introduced the DeepSeek R1 Artificial Intelligence (AI) model. With less than a month of existence, this model has already demonstrated an impact on the AI industry, from its context of competition, geopolitics and commerce, challenging large companies such as OpenAI and Meta, which are already on the market and have globally recognized AI models.

DeepSeek R1 stood out for outperforming traditional AI models, such as OpenAI's GPT-4 and Meta's Llama 3.1, in specific tasks such as coding and solving mathematical problems. The most significant difference, however, lies in the cost of development: while competing models were developed with investments of more than US\$ 100 million, DeepSeek R1 was announced as having a production cost of less than US\$ 6 million. This saving was made possible by the use of less sophisticated hardware, such as conventional graphics chips, a solution adopted due to trade restrictions imposed on China by the United States regarding access to Nvidia's latest generation chips (Ng et al., 2025).

Another innovative aspect of DeepSeek R1 is its open source nature. Unlike ChatGPT, whose code is proprietary, the model developed by DeepSeek allows any individual or institution to inspect, modify and use it according to their needs, an approach that could boost AI research by promoting greater transparency and scientific collaboration. The launch of DeepSeek R1 also had an impact on the global financial market. The shares of the main technology companies listed on the US stock exchanges fell, highlighting the impact of Chinese technological innovation on the sector. The main fallers were: - NVIDIA: -17%; - Microsoft: -7%; and - Target: -5%. The market reaction resulted in a loss of approximately US\$ 1 trillion in the market value of technology companies at the start of trading (Ng et al., 2025).

DeepSeek's rise in the AI sector has also raised questions about regulation and technological security. There is speculation that OpenAI is lobbying the US government to restrict the development of new DeepSeek models, on the grounds of alignment risks and potential threats to humanity. The rapid growth of DeepSeek R1 has attracted the attention of malicious actors. Reports indicate that the company has been forced to limit new user registrations due to cyber-attacks targeting the AI model. DeepSeek was created by developer Liang Wenfeng.

The technical details of the tool were announced to the world through the publication of a white paper, an informative document that can be used to publicize products or services, published in the ArXiv preprints repository. The publication has 185 authors. The document's abstract states that the publication presents first-generation reasoning models: DeepSeek-R1-Zero and DeepSeek-R1. DeepSeek-R1-Zero was trained exclusively by large-scale reinforcement learning (RL), without an initial supervised fine-tuning (SFT) (DeepSeek-AI, 2025). Even without this preliminary step, it demonstrated reasoning abilities, spontaneously developing several advanced behaviors (Ng et al., 2025).

The abstract goes on to say that the model faces challenges such as low readability and language mixing. To solve these issues and further improve performance, DeepSeek-R1 is presented, a model that combines multi-stage training and an initialization process before RL, resulting in an improvement of the process as a whole. The preprint

summary concludes that DeepSeek-R1 achieves comparable performance to OpenAI-o1-1217 on reasoning tasks. In order to support the research community, the source code for DeepSeek-R1-Zero, DeepSeek-R1 and six dense models (1.5B, 7B, 8B, 14B, 32B and 70B), distilled from DeepSeek-R1 and based on the Qwen and Llama architectures (DeepSeek-AI, 2025), is also made available in the text.

Therefore, due to the international impact of the DeepSeek announcement, this study aims to map the online attention received by scientific production related to DeepSeek, considering the tracking carried out by Altmetric.com. The aim is to characterize the online attention received by the topic through an analysis of mentions on the channels covered by the platform, as well as to assess which types of production are most common, which journals or collections this production is linked to, the period in which the mentions took place and which productions are most relevant in this context.

2 DeepSeek and online attention on the phenomenon of AIs

In contrast to traditional citation metrics, Altmetrics makes it possible to identify interest in a given topic in real time and from the moment it manifests itself on the social web, including the identification of scientific topics with a high concentration of online attention, as well as the formation of interest groups in specific topics (Araújo, 2020; Barros, 2015). Online attention is an altmetric indicator that makes it possible to understand the level of visibility of scientific topics, articles and researchers, as well as to qualify the interactions and impacts that scientific products and researchers receive on the social web (Araújo & Furnival, 2016).

Studies of online attention have shown that some scientific topics accumulate a significant amount of online attention depending on the context of their emergence or the impact they have on different areas of knowledge. The Covid-19 pandemic is an example of this, since online attention on the topic was significant and instantaneous, both because of the urgency of the fact in the health area and because of the political phenomena and controversies linked to the topic (Gontijo & Araújo, 2025; Rocha & Araújo, 2021). A similar phenomenon occurs with technological advances and AI tools, which impact different areas of knowledge in different ways and arouse the interest of researchers for different reasons (Raman et al., 2023).

ChatGPT, an LLM bot that employs deep learning algorithms to generate human-like responses, was the subject of several research articles within four months of its launch in December 2022 (Raman et al., 2023). The scientific impact measured by citations of the AI tool will probably take dozens of years to calculate, but altmetric studies of online attention have already indicated some trends: the United States, Japan and the United Kingdom are the main countries that have published most of the major research articles related to ChatGPT; the most frequently mentioned source titles include journals such as Nature, Science and preprint repositories such as medRxiv and arXiv; among the research fields to which ChatGPT publications most often align are information and computer sciences, as well as biomedical and clinical sciences; five major interest groups have been identified and the topics discussed predominantly in the main articles within these five groups include the use of ChatGPT in medical writing and determining the role of ChatGPT in scientific publishing; scientists are considered to be the main user audience showing the greatest interest in ChatGPT research (Raman et al., 2023).

Another online attention study investigated the socio-technical imaginary of the Meta company and the Metaverse as it circulates in media artifacts (428) and after Zuckerberg's announcement of the Metaverse in 2021 (Brent et al., 2023). The results show that most of the mentions related to identity, security and connectivity reinforce Meta's corporate messages, strengthening the elite discourse and solidifying the company's socio-technological power, while fewer mentions were identified referring to journalists' discourses that challenge Meta's rhetoric due to the company's stance on the privacy of its users (Brent et al., 2023).

Other studies also list the online attention that AI receives more broadly in different areas of knowledge, such as Ophthalmology, Medicine and Plastic Surgery (Bogdanovich et al., 2024; Bui et al., 2022; Wu & Zhang, 2021). The results indicate that online attention occurs for a variety of reasons, but the motivations and reasons for mentions make it possible to identify phenomena such as communities of interest, the thematic aspects of greatest interest for each area of knowledge and also journals, researchers and countries strongly related to the topic (Bogdanovich et al., 2024; Bui et al., 2022; Wu & Zhang, 2021). DeepSeek does not yet have any significant scientific production in this area, so capturing the initial trends in the topic from the publication of the tool's preprint will enable the development of significant insights for researchers and other groups interested in scientific advancement and AIs tools, providing data to analyze possible impacts of the tool in fields such as education, economics and science

policy. This type of approach also makes it possible to infer the degree of visibility the topic has within the scientific community and, possibly, the impact it will have on scientific production in different areas.

This study contributes to the field by providing an early-stage altmetric mapping of an emerging AI technology, focusing not only on the volume of attention but also on its distribution across platforms, temporal dynamics and types of scientific outputs. By doing so, it advances the understanding of how attention patterns operate in the initial phases of technological emergence, offering empirical evidence that complements existing studies on altmetrics and artificial intelligence.

In this context, mapping online attention does not only describe the volume of mentions but allows identifying patterns of visibility, temporality and actors involved in the dissemination of scientific topics. These patterns can generate insights into how emerging technologies gain legitimacy, how media coverage influences scientific agendas, and how different audiences engage with early-stage research outputs. Therefore, altmetric indicators can be interpreted as signals of socio-technical dynamics that anticipate, complement or even shape future scientific production.

3 Methodology

This research is exploratory in nature and, through altmetric analysis, aims to map the online attention received by scientific production that mentions Deepseek technology with data from Wendt et al. (2025). This research used the Altmetric.com platform, which is the main altmetric provider currently available (Barros, 2015; Torres-Salinas et al. 2024), offering tools that track the attention that research results receive on various platforms, including social media, news, blogs and scientific policy documents.

Altmetric.com offers different ways of accessing its database, including: a) Altmetric Explorer: a user-friendly web-based platform that allows users to access all the attention data for each search output tracked. It requires an authorization key; b) Altmetric Badges: provide a quick summary of the volume and type of attention a search output has received, are automatically updated as new mentions are found and are easily incorporated into other web environments; c) APIs (Application Programming Interface): provide access via programming codes to the altmetric data associated with search outputs, thus allowing Altmetric. to integrate with other internal systems, making it easier to access the data. With other internal systems, making it easier to improve existing reporting workflows (Altmetric, 2020).

This investigation made use of Altmetric Explorer's advanced search option, using a previously provided institutional key. Through the "Edit search" function, different search refinement options were accessed to improve the queries and detail the results. The filters include: publisher, journal, affiliation, DOI, Orcid, funding agency, subject area, keywords, etc. The survey was carried out using keyword queries. This filter option shows any search outputs (journal article, book, dataset, etc.) that contain the keyword in the title of the publication, the author's name and/or the title of the journal (Altmetric, 2020). The term "deepseek" was entered into the keyword search field. The data was collected on February 11, 2025.

The results were exported in xls format, containing the following columns: Mention Type, Mention Date, Outlet or Author, Mention Title, Country, External Mention ID, Mention URL, Research Output Title, Journal/Collection Title, Authors at my Institution, Departments, Output Type, Subjects (FoR), Affiliations (GRID), Publication Date, Altmetric Attention Score, Details Page URL, DOI, ISBN, National Clinical Trial ID, URI, PubMed ID, PubMedCentral ID, Handle.net IDs, ADS Bibcode, arXiv ID, RePEc ID, SSRN, URN, Publisher Names. General altmetric impact information was analyzed, such as the number of outputs tracked, the total number of mentions, the journals and repositories in which the most mentioned articles were published, the highest number of mentions, the period in which these mentions occurred and the channels with the highest number of mentions. The aim is to characterize the altmetric impact of scientific production on this subject.

4 Results and discussions

The results show that the topic has been widely mentioned, given that at least 45 research outputs have been published and tracked since the first publications were tracked (January 2024). A total of 5,237 mentions were tracked by the platform, i.e. an average of 116.3 mentions for each research output. Figure 1 shows the general data on mentions of scientific production related to DeepSeek.

Figure 1

Overview of mentions of scientific production related to DeepSeek

REPORT OVERVIEW



Note. Source: Altmetric.com (2025). *[Image description]* The image presents a Report Overview related to research outputs and their attention metrics from the Altmetric tool. The layout is divided into four main sections with representative icons and quantitative data. *[End of description]*.

Beyond the quantitative volume, this result indicates a rapid consolidation of attention around an emerging topic, suggesting that online attention operates as an early signal of scientific and social interest. In this sense, altmetric indicators can capture not only dissemination but also the initial stages of agenda-setting processes, in which certain topics gain prominence before being consolidated through traditional scientific metrics.

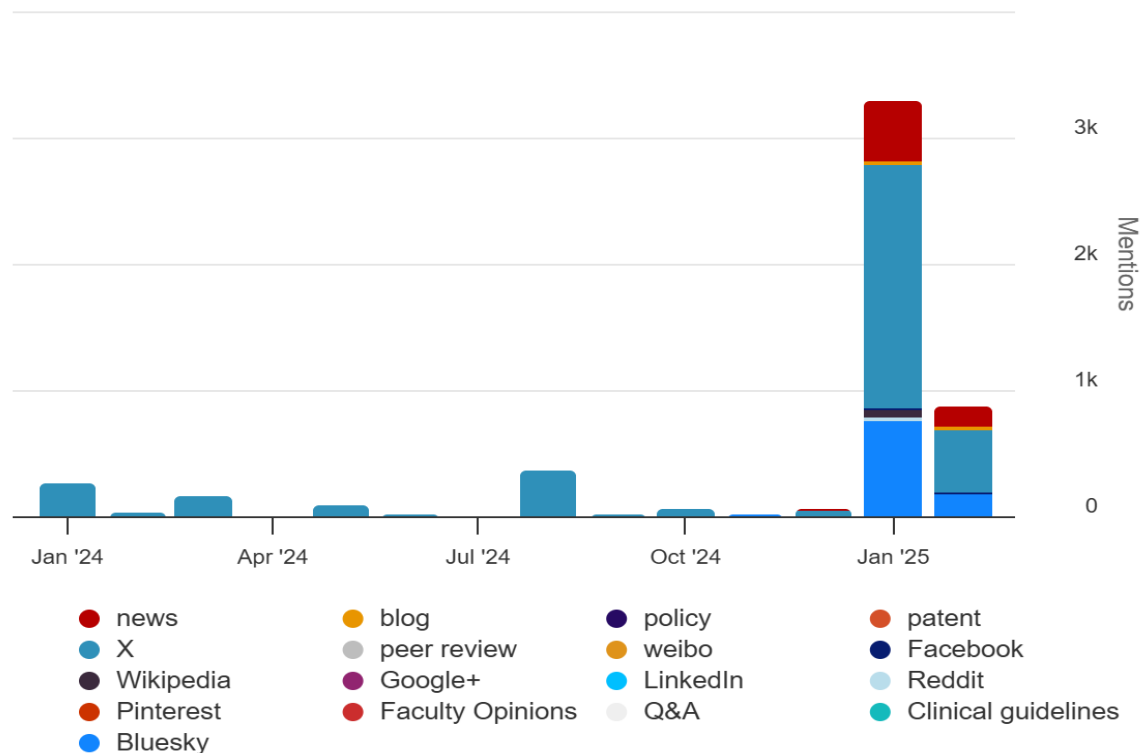
It should be noted that all the publications screened received at least 1 mention. In the study published by Costas et al. (2014), the average altmetric count in certain sets of scientific articles is between 15 and 24%, but altmetric activity is mainly concentrated in the most recent publications. These findings corroborate the fact that a recent topic such as Deepseek has mentions in all the publications tracked, even if it is a low volume of publications.

While it is possible to draw a relationship between the number of articles tracked by Altmetric.com and the number of mentions they receive, this relationship is influenced by several factors, including disciplinary differences and temporal dynamics. Altmetrics provides a complementary perspective on the impact of research, highlighting the importance of society's engagement in scientific communication (Costas et al., 2014; Thelwall et al., 2013). Thus, with regard to the platform's coverage, it should be noted that this section of research has also received attention from 9 of the 18 sources tracked by the tool.

With regard to the time distribution of mentions, the first mention was recorded in January 2024, on X. Other mentions were recorded during 2024, but it was only in January 2025 that mentions became more frequent and on different channels. Figure 2 shows the mentions over time, as well as the channels with the most mentions.

Figure 2

Number of mentions over time and channels where mentions were tracked.



Note. Source: Prepared by the authors (2025). *[Image description]* The image displays a bar chart showing the number of mentions of research outputs over time, categorized by source types. The x-axis represents a timeline from January 2024 to January 2025, and the y-axis indicates the number of mentions, ranging from 0 to over 3,000. *[End of description]*.

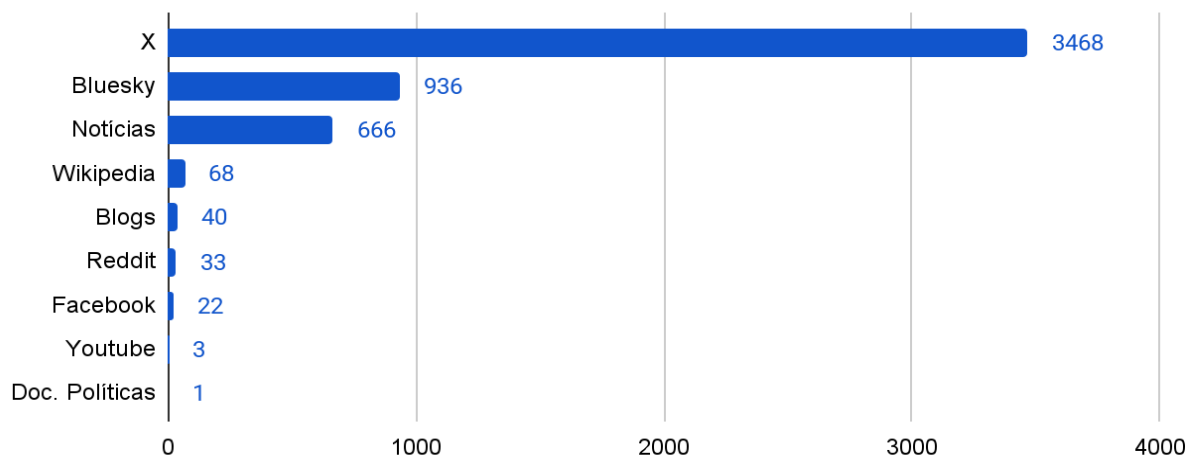
The data presented above corroborates the statements made by Costas et al. (2014) when they mention that alternative metrics are mainly valid for recent publications, with their presence increasing over time. The data does not indicate a consistent upward trend over time, but rather a pattern of fluctuation, with a significant peak in January 2025, likely associated with increased media coverage. The peak of attention observed in January 2025 may be associated with the fact that Deepseek gained media relevance in this period, as highlighted by Sugimoto et al. (2017), external factors such as conferences and online debates influence the dissemination of scientific content.

This temporal concentration of attention suggests that online visibility is strongly event-driven, rather than cumulative. The peak observed in January 2025 can be interpreted as a 'punctuated attention dynamic', in which external events-such as media coverage or technological announcements-trigger abrupt increases in visibility, suggesting the idea that altmetric indicators are sensitive to socio-technical contexts and should not be interpreted as linear proxies of scientific impact.

It should also be noted that the channel where the topic began to receive attention online was X, and this social media remained the most relevant throughout the period presented. Haustein et al. (2014) mention that articles dealing with current events tend to receive more attention on the platform, reflecting its real-time nature. The authors also point out that posts on this platform often reflect interests of the general public, such as curiosities, thus justifying the importance of this channel for the rapid dissemination of emerging research topics. Figure 3 shows the number of mentions distributed by channel.

Figure 3

Number of mentions distributed by channel



Note. Source: Prepared by the authors (2025). *[Image description]* The image is a horizontal bar chart showing the number of mentions of research outputs by source. Each bar represents a different source, with values displayed at the end of each bar. The chart highlights which platforms generated the most engagement. *[End of description]*.

Figure 3 shows that the topic has at least one mention in a variety of channels on the social web, even though it is an emerging topic about a recently launched tool. Some of these sources where mentions were identified are even sources that take time to accumulate altmetrics indicators, as is the case with YouTube, which had three mentions. Mentions on YouTube take time to accumulate because the construction of videos on scientific topics takes longer than a publication on social media platforms, but at the same time it represents a more significant impact because the creator of the content in the video usually analyzes and comments on the content of the article that is mentioned in the description of the video, making a more qualitative analysis of the articles that receive mentions (Shaikh et al., 2023).

The prominence of platforms such as X underscores the centrality of real-time communication environments in shaping the visibility of emerging scientific topics. Unlike conventional academic dissemination channels, these platforms facilitate the rapid circulation and ongoing reinterpretation of scientific information across heterogeneous audiences. In this sense, online attention appears to be driven not only by the intrinsic relevance of the research, but also by the communicational affordances and platform-specific dynamics that condition how information is produced, shared, and reframed.

In addition, the mention in different channels shows a significant interest from different audiences in the topic, both scientific and non-scientific, as the channels function as platforms that bring together different audiences and functionalities, indicating different uses and interaction of users with the scientific products mentioned (Elmore, 2018). This may also indicate that deepseek will become a topic of relevance in the scientific community, which can be done by comparing the production and citation indicators with the altmetric ones, the former taking longer to accumulate.

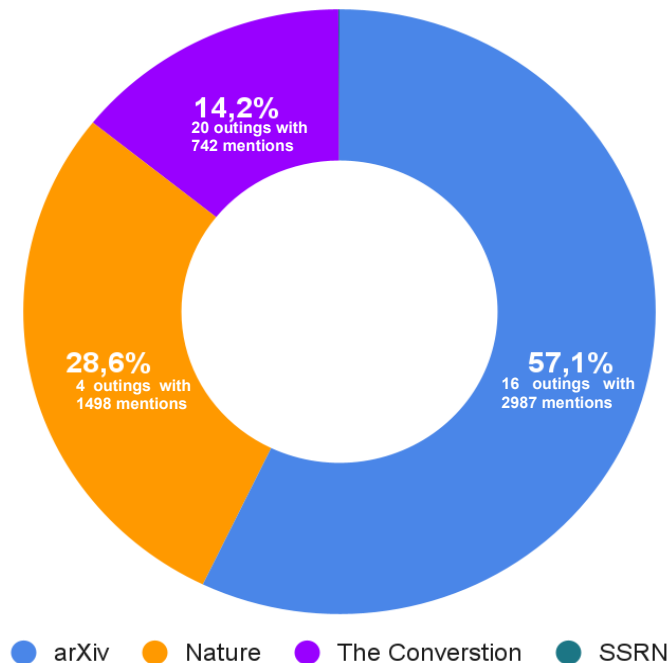
A similar phenomenon occurred with Chatgpt at its launch, with the altmetric and traditional indicators of the first few months showing how interesting the tool would become for the scientific community and how this would manifest itself in scientific production (Raman et al., 2023). The very subject of AI and its tools is something emerging and widely disseminated among the academic community and different areas of knowledge, a context in which the use of altmetric analysis helps to understand how scientific production is influenced by emerging topics of great interest to the specialized and non-academic population.

Figure 3 also shows the 666 mentions in news portals, which demonstrates the media coverage of the topic. Mentions in news portals indicate an impact of the topic beyond traditional academic channels, which indicates that the topic is of interest to the general population, since the characteristic of this type of source is to translate technical-scientific phenomena for a non-specialized audience (Fleerackers et al., 2022). In general, the data indicates that the topic tends to be widely explored by scientific production, as is the case with similar AI-related phenomena and tools (Bogdanovich et al., 2024; Bui et al., 2022; Raman et al., 2023; Wu & Zhang, 2021). This process can be analyzed over time by monitoring altmetric data in conjunction with the application of traditional metrics used to measure and analyze scientific production.

When it comes to monitoring scientific production on different topics, the more traditional journals are the main vehicles for publishing research. This can be confirmed by the data presented in Figure 4, which shows the total number of mentions per journal or repository.

Figure 4

Total mentions per journal or repository



Note. Source: Prepared by the authors (2025). *[Image description]* The image is a donut chart that displays the percentage distribution of research outputs across different publication platforms. Each segment is color-coded and labeled with its corresponding percentage. *[End of description]*.

The first repository with the highest number of mentions (2987) is arXiv, possibly because the topic is recent and the first findings were shared in preprint format. This result is similar to that presented by Raman et al. (2023), who showed that research results on emerging topics, such as the launch of AI tools, tend to be published more quickly in order to popularize the findings. Nature was second in the number of mentions (1,498) on the subject, which corroborates Ortega's (2018) findings that articles of general interest, often published in top-tier journals, tend to attract more attention on social media, highlighting the role of the journal's prestige in online engagement. Finally, there is the Australian news portal The Conversation, which has 742 mentions, and the SSRN portal, which is dedicated to the dissemination of preprints and articles, with only 3 mentions.

It should be noted that open access is a determining factor for the dissemination of research results on the most diverse web channels, indicating that academic visibility is not restricted exclusively to high-impact publications, but also to those accessible to the general public. As discussed by Tennant et al. (2016), open access can increase the social impact of academic publications, and the data obtained reinforces this hypothesis by indicating a significant level of mentions of journals that follow this editorial policy.

The prominence of preprint repositories such as arXiv suggests that, in the context of emerging technologies, visibility is more closely tied to the speed of dissemination than to processes of formal validation. This reinforces the role of preprints as strategic instruments within contemporary scientific communication, enabling the rapid circulation of results while, at the same time, placing pressure on conventional frameworks of legitimacy and quality control.

The three most mentioned articles had at least 1000 mentions. Figure 5 shows the general information of the 3 most mentioned articles:

Figure 5

The 3 most mentioned articles related to "deepseek".



Note. Source: Prepared by the author (2025). *[Image description]* The image shows a list of the top three research articles based on their Altmetric attention scores. Each entry includes a colorful Altmetric donut (visual representation of attention sources), a score, the article title, the publication platform, and the publication date. *[End of description]*.

It can be seen that the first most mentioned article was published in December 2024, while the other two were published in January 2025. As discussed above, the topic began to receive attention online at the beginning of 2024, but it wasn't until a year later that it began to receive more consistent mentions. It should also be noted that the diversity of channels where the articles were mentioned can be seen in the number of colors shown in the bars before the Altmetric Attention Score. In addition, it can be seen that the first two articles were published in the arXiv repository, and the third was published by Nature, according to the data presented above.

All three articles received widespread attention online, with mentions on various platforms, especially news and social media. The DeepSeek-V3 Technical Report article (DeepSeek-AI et al., 2024) had the highest Altmetric Attention Score (1746), while China's cheap, open AI model DeepSeek thrills scientists (Elizabeth Gibney) had the lowest (1024). However, the number of users mentioning each article on X was highest for the article published in Nature (537), indicating significant engagement from the general public. This engagement may be related to the relevance of the journal in which the article was mentioned.

As for the sources of mentions, it is worth noting that all the articles received widespread journalistic coverage, especially "DeepSeek-V3 Technical Report" (165 vehicles) and "DeepSeek-R1" (DeepSeek-AI et al., 2025) (98 vehicles), suggesting strong interest from specialized media. The number of Wikipedia pages citing the articles is also relevant, with the highlight being "China's cheap, open AI model DeepSeek thrills scientists" (19 pages), indicating that the article influenced open reference content.

In terms of social media, mentions on Bluesky are significant in all cases, while the presence on Reddit was greater in the DeepSeek-R1 article (11 Redditors), suggesting further discussion of this work. The widespread adoption of Bluesky may have coincided with the period when X was down in Brazil, thus highlighting the strong correlation between online attention and social media management. Data from Mendeley and Dimensions shows that the DeepSeek-R1 article had the highest number of academic readers (933), while the journalistic article had the lowest number of readers (11). This reinforces the idea that technical articles have a greater impact on the scientific community, while news articles such as Elizabeth Gibney's have a greater public reach.

The three articles analyzed show different patterns of online dissemination. The article entitled "DeepSeek-V3 Technical Report" received the most general attention, with a strong presence in the media. "DeepSeek-R1", despite a lower Altmetric Attention Score, had a more balanced distribution between the media, social networks and academia. Elizabeth Gibney's article stood out for its repercussions on X and Wikipedia, indicating a significant impact on the lay public and the dissemination of knowledge about DeepSeek. The analysis suggests that different types of publications generate different patterns of online engagement, reinforcing the importance of considering multiple metrics when assessing the impact of scientific communication.

The contrasting attention patterns across the three most mentioned articles indicate that online engagement varies according to both the nature of the publication and its communicational scope. Technical reports tend to attract more circumscribed, academically oriented attention, whereas journalistic pieces broaden exposure and drive public visibility. This contrast underscores the multidimensional character of altmetric impact, which operates simultaneously across circuits of scientific recognition and broader societal engagement.

At the same time, the findings suggest that online attention is less a stable indicator of scientific impact than a reflection of external events and media dynamics. This interpretation converges with earlier work (Sugimoto et al., 2017; Haustein et al., 2014), which emphasizes the responsiveness of altmetrics to shifting social and communicational contexts. In the case of DeepSeek, the sharp concentration of attention within a limited time frame points to a burst-like dynamic, commonly associated with emerging technologies, in which visibility escalates rapidly before stabilizing or dispersing. Under such conditions, altmetric indicators are effective in capturing immediacy, but require careful handling when mobilized as proxies for longer-term relevancerts.

5 Final considerations

This article aimed to characterize the online attention received by the DeepSeek theme by analyzing the mentions on the channels covered by the Altmetric.com platform, specifically to assess which types of production are most common, which journals or collections this production is linked to, the period in which the mentions took place and which are the most relevant productions in this context.

We believe that the objectives of the research were achieved, by explaining the online attention paid to DeepSeek and in which channels, mentions and behavior, demonstrating the interest of users from different platforms in the subject, which denotes a scenario of impact and visibility on the social web, with significant public interest and engagement around the topic.

The 5,237 mentions recorded for 45 research outputs since January 2024, highlights a relevant average of online attention per publication, especially on X (formerly Twitter), which has led the volume of mentions since the start of monitoring. X serves as a valuable channel for discussing research results, suggesting the need for further exploration of its role in scientific communication.

This study presents some limitations that must be considered when interpreting the results. First, the data were collected exclusively from the Altmetric.com platform, which does not capture all forms of online attention and is dependent on its own tracking mechanisms. Second, the temporal scope of the analysis (January 2024 to January 2025) reflects a specific moment of intense media visibility, which may not represent long-term trends. Third, altmetric indicators are influenced by external factors such as media coverage, platform dynamics and social events, which limits causal interpretations. Finally, the exploratory nature of the study prioritizes descriptive analysis, indicating the need for future research to incorporate longitudinal designs and comparative approaches with traditional bibliometric indicators.

The diversity of channels and audiences involved in the interactions highlights the repercussions in non-academic spheres as well as the scientific reach. The predominance of highly relevant journals and repositories, such as arXiv and Nature, indicates the centrality of these platforms in the early dissemination of research, although it does not necessarily reflect peer-reviewed validation, especially in the case of preprint repositories such as arXiv.. In addition, the concentration of mentions in a few articles, with three productions that exceeded a thousand mentions each, points to the existence of studies with the power to disseminate and influence. The conclusion is that DeepSeek has garnered significant attention online, reflecting a period of heightened online attention, particularly concentrated in January 2025, without indicating a consistent upward trend over time.

The results do not point to a steady, cumulative increase in relevance. Instead, they suggest that DeepSeek became the focus of a short-lived surge of online attention, underscoring how strongly altmetric patterns depend on timing and context. From an Information Science perspective, the study reinforces the usefulness of altmetrics as proxies for visibility and engagement in the early phases of scientific and technological emergence. At the same time, it draws attention to their limits, particularly when used to anticipate sustained or long-term impact.

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