

## **DIGITAL INFRASTRUCTURE AND INTERNATIONAL VISIBILITY OF MOLDOVAN SCIENTIFIC JOURNALS**

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**Abstract:** This study evaluates the online accessibility and international visibility of scientific journals from the Republic of Moldova by analyzing the technical and functional features of their websites. In an era where a journal's digital presence is fundamental to its reach and impact, many smaller academic communities risk marginalization. Applying a structured evaluation framework, this research assesses key website characteristics – Including domain architecture, publishing platforms, metadata implementation, and archive currency – against international best practices. The findings reveal a concerted effort towards internationalization, evidenced by the presence of an English-language version on 80% of the sites. However, this intent is counteracted by significant technical deficiencies. A reliance on subdomains or pages within institutional websites limits autonomy and professional perception, while the low adoption of specialized platforms like Open Journal Systems (OJS) hinders efficient editorial management and metadata standardization. Critically, fewer than half of the journals provide individual, persistent URLs and comprehensive metadata for their articles, severely compromising discoverability by major databases and search engines. Furthermore, over one-third of journals exhibit irregularly updated archives, posing a direct threat to their credibility and indexing eligibility. The study concludes that strategic modernization of the technical and editorial infrastructure is urgently required for Moldovan journals to enhance their global visibility, establish credibility, and increase their scientific impact. The findings offer a model for similar small research ecosystems aiming to navigate the complexities of digital scholarly communication and achieve greater integration into the global academic conversation.

**Keywords:** Moldovan scientific journals, journal website, journal visibility, journal accessibility, website technical features

**JEL Classification:** I23, D83, O33

### **1 Introduction**

In the contemporary landscape of scholarly communication, a high-quality scientific journal is inseparably linked to a robust and functional website. This digital presence has evolved from a simple informational tool into the primary platform for the dissemination, discovery, and validation of research (Björk, 2007; Ware and Mabe, 2015). The role of a journal's website is therefore critical in enhancing both national and international visibility, serving as the central gateway to its content and a fundamental prerequisite for indexing and academic recognition.

A well-structured and technically optimized website is paramount for increasing a journal's discoverability. It ensures rapid, permanent, and barrier-free access to published research, which is essential for global readership. Furthermore, integration with major academic search engines like Google Scholar, OpenAIRE, and BASE – often facilitated by protocols like OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) – significantly amplifies a journal's reach by enabling the automatic aggregation of its content (Van de Sompel *et al.*, 2004; Visser and Weideman, 2011). To be effective, this technical infrastructure must align with international standards. The consistent implementation of persistent identifiers (DOI), standardized metadata schemas (Dublin Core, JATS XML), and clear open access policies is no longer optional but a mandatory condition for inclusion in prestigious international databases such as Scopus, Web of Science (WoS), and the Directory of Open Access Journals (DOAJ) (OASPA *et al.*, 2018; Pranckute, 2021).

Beyond technical specifications, the credibility and appeal of a journal are heavily influenced by its digital presentation. A modern, visually cohesive website that embodies strong branding and offers a positive user experience inspires trust among potential authors and readers (Fogg, 2003). This credibility is further reinforced by the transparent publication of editorial policies, peer-review procedures, and ethical guidelines, which are hallmarks of reputable journals (OASPA *et al.*, 2018). Collectively, these elements work to foster international collaboration by attracting a diverse cohort of authors, reviewers, and readers. When combined with the provision of open access content, particularly with English-language metadata, a journal significantly increases its potential for global citation and impact (Piwowar *et al.*, 2018).

Despite the established importance of these digital criteria, their systematic implementation and effectiveness can vary significantly, particularly in smaller or developing research ecosystems. This study therefore aims to evaluate the accessibility and international visibility of scientific journals from the Republic of Moldova by conducting a systematic analysis of the technical, functional, and informational characteristics of their websites. The findings will provide a critical assessment of their readiness to compete in the global scholarly arena.

#### Objectives of the Study:

To identify the platforms and technical solutions used to host Moldovan journals.

To evaluate the technical and functional features of Moldovan journals' websites.

To assess the level of international visibility of Moldovan journals.

To develop recommendations for enhancing web infrastructure and increasing the international impact of Moldovan journals.

## **2 Background**

The scholarly publishing landscape of the past two decades has been fundamentally reshaped by rapid technological innovation, an exponential growth in scientific output, and escalating concerns regarding research integrity (Gasparyan *et al.*, 2016). In this competitive environment, inclusion in prestigious international databases – such as WoS, Scopus, and DOAJ – has become a critical marker of a journal's legitimacy and reach. This inclusion is contingent upon strict adherence to established criteria encompassing scientific quality, publishing ethics, and technical standards (Țurcan, 2025).

Editorially, databases mandate the publication of original and relevant research, a transparent and rigorous peer-review process, a consistent publication schedule, and demonstrable geographic diversity among editorial boards and authorship (Pranckute, 2021). Furthermore, compliance with ethical frameworks, such as the guidelines established by the Committee on Publication Ethics (COPE), is now a foundational requirement (OASPA *et al.*, 2018).

Parallel to these editorial policies, the adoption of robust technical infrastructure is non-negotiable for discoverability and long-term preservation. The implementation of persistent digital identifiers – such as the International Standard Serial Number (ISSN) for the journal, Digital

Object Identifiers (DOIs) for individual articles, and ORCID iDs for author disambiguation – forms the core of a modern journal's identity and interoperability system (Cujba, 2019). These are complemented by the need for secure digital archiving solutions (e.g., CLOCKSS, LOCKSS) to ensure the permanent accessibility of content, a key factor in maintaining the scholarly record (Rieger, 2008).

Underpinning this technical ecosystem are metadata standards that ensure consistency and machine-actionability. Crossref, as a central DOI registration agency, facilitates unique identification, reciprocal citation linking, and the exchange of standardized metadata. This metadata often aligns with schemas like Dublin Core, which promotes interoperability across diverse platforms and indexing services (Jackson *et al.*, 2008; Maron, 2018). The seamless integration of these editorial and technical best practices is, therefore, essential for ensuring a journal's quality, visibility, and long-term academic impact, enabling it to compete internationally and attract high-quality submissions from a global research community.

### **3 Methodology of Research**

The analysis of journal websites was conducted between February and March 2025 and updated in July-August 2025, based on publicly available information from the official journal pages. The primary source for the list of scientific journals was the Register of Scientific Journals approved by the National Agency for Quality Assurance in Education and Research (ANACEC). Journal URLs were identified both through the National Bibliometric Instrument (<https://ibn.idsi.md/>) – and through direct online searches.

#### **3.1 Sample Analyzed**

This study focused exclusively on journals evaluated by ANACEC, which at the time of the research held one of the following categories: A+, A, B+, B, or C, according to ANACEC's classification.

The sample of journals analyzed was drawn from the National Register of Scientific Journals approved by ANACEC on February 23, 2024. According to this register, 56 journals held categories A, B+, B, or C. A new version of the National Register was approved on July 4, 2025, containing 51 journals in categories A+, A, B+, and C. Compared with the previous version, six journals were removed, and one journal was added. The union of these two lists resulted in 57 journals. Of these 57 journals, two no longer had active websites at the time of evaluation (*Moldovan Medical Journal*; *Buletinul AȘM. Științele vieții*). Consequently, the analysis was based on 55 active journal websites.

#### **3.2 Analysis Criteria**

The analysis was carried out by identifying criteria related to both technical infrastructure and the factors that enhance and maintain the visibility and accessibility of Moldovan scientific journals:

- Web domain
- Web site Platform / CMS used
- Separate pages for articles
- Timelines of issues
- English version of the website
- Presence of DOIs for articles
- Presence of ORCID identifier for authors
- Indexing policy

### **4 Results and Discussions**

#### **4.1 Web Domain and its Strategic Importance**

The web domain is important for a scientific journal not only from a technical perspective but also from editorial and strategic standpoints, due to its impact on international visibility. First, it supports the journal's academic identity and brand: having a dedicated domain (e.g., journal.md)

conveys professionalism and institutional stability. Second, search engines and major databases (WoS, Scopus, DOAJ) recognize and manage publications with clear, easily identifiable domains more consistently. Third, a professional URL is perceived as significantly more credible than a subpage hosted within the founder’s website structure. Finally, owning the domain provides direct control over the journal’s information architecture, content, and archives, facilitating maintenance and migration without loss of visibility.

#### **Types of Domains and Their Impact**

There are several ways for a scientific journal to establish its online presence, and the choice of domain type directly impacts the publication’s visibility, credibility, and long-term stability.

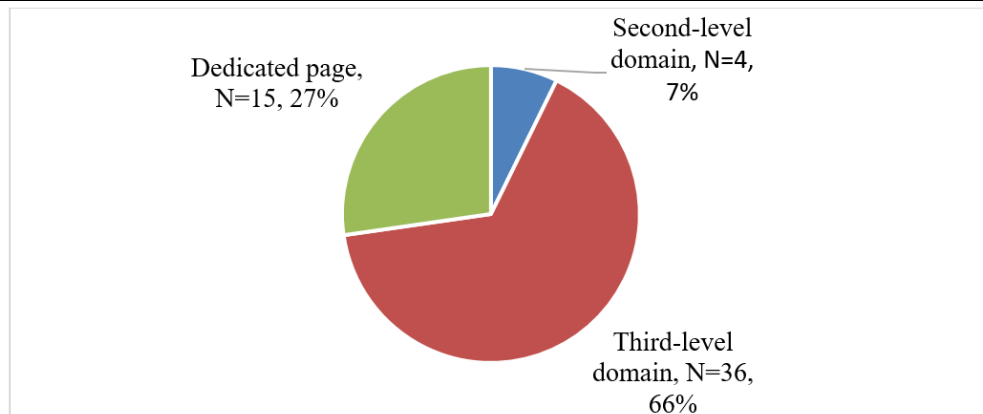
The most recommended solution is to use a dedicated second-level domain, such as journal.md. This option offers independence and full control over the website, facilitates promotion and address memorability, enhances trust in the journal, and is better regarded by international indexing databases. Additionally, migrating the platform to another server or content management system can usually be done without losing links or indexing. In international practice, established journals typically own their own domains – this is considered the standard reference model.

An intermediate option is to use a third-level domain, such as a dedicated subdomain like journal.founder.md. This approach is particularly appealing due to its low cost – often provided by universities or other founding institutions – and can ensure continuity as long as the institution’s main domain remains stable. However, branding suffers because the journal’s name is not clearly distinguished, and changes in the institutional website structure can result in broken links. Furthermore, complete dependence on the institution’s domain implies a lack of autonomy and diminishes the journal’s appeal to indexing services.

The least effective option is creating a simple, dedicated page on the founder’s website, such as founder.md/journal. While this approach incurs no additional cost and may serve as a temporary solution in the early stages, it has significant drawbacks. Indexing is challenging because search engines typically assign lower visibility to internal pages. Additionally, control over the page’s structure and design is limited, and any changes to the institution’s site organization can result in broken links. Furthermore, this setup conveys a lack of professionalism and greatly diminishes the likelihood that the journal will be perceived as an independent and credible publication.

The analysis of Moldovan journals websites reveals that out of 55 journals, 36 (approximately 66%) use subdomains (e.g., journal.founder.md); 15 (27%) have internal pages on the founder’s website (e.g., founder.md/journal); and only 4 (7.3%) have their own domains (e.g., journal.md). This distribution indicates limited web autonomy and weak branding for the majority of publications (see Figure 1).

Thus, most of the scientific journals examined are hosted online via third-level domains, whereas dedicated websites with their own second-level domains are rare, constituting only a small fraction of the total – even among journals in higher categories. The high prevalence of journals using subdomains or simple pages on the founder’s website underscores their limited web visibility and autonomy.



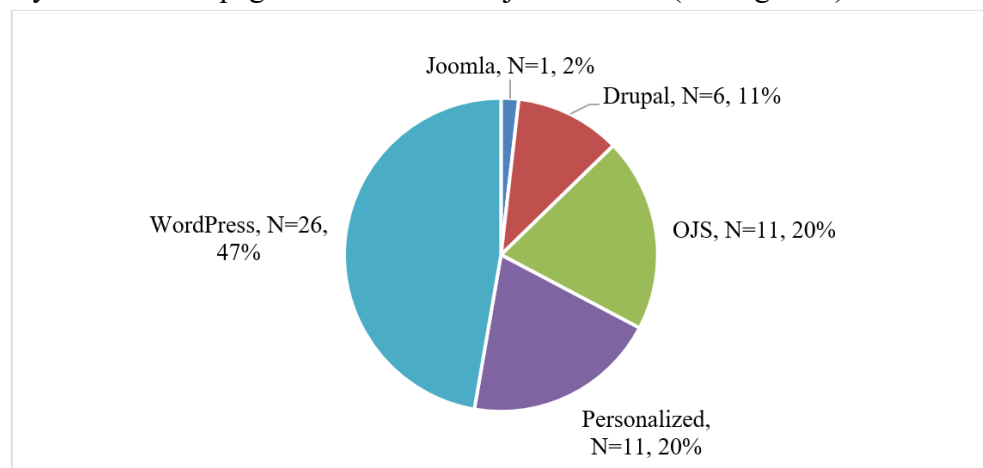
**Figure 1. Domains of Moldovan Journals' web sites**

Source: authors own study

#### **4.2 Website Platform / Content Management System (CMS)**

Examining the web platforms on which scientific journal websites are built – such as Joomla, Drupal, WordPress, and Open Journal Systems (OJS) – is important for several reasons related to both publication quality and the journal's visibility and security. Depending on the platform, editorial functionality and publishing workflows can vary significantly. For example, a platform like OJS includes dedicated modules for managing the entire process – from article submission and peer review to editing, publishing, and indexing. In contrast, general-purpose CMS like Joomla, Drupal, and WordPress may require additional extensions to support academic functionalities. Therefore, using a platform optimized for journals reduces editorial workload and minimizes the risk of human error.

The analysis of platforms shows that 26 journals – nearly half – are hosted on the WordPress CMS. One-fifth (20%), or 11 journals, use the OJS platform. Another six journals (11%) are hosted on the Drupal CMS. One journal is hosted on Joomla, while the remaining 11 journals (20%) operate on custom-built platforms. Notably, most of these custom platforms represent institutional websites, with only one or a few pages dedicated to the journal itself (see Figure 2).



**Figure 2. Platform / CMS that host Moldovan Journals**

Source: authors own study

Although WordPress is the most widely used platform, it is not specifically designed to manage academic editorial processes, which may limit its functionality and integration with international indexing standards. The relatively low proportion of journals using the OJS platform – specifically dedicated to scientific publishing – indicates untapped potential for optimizing editorial workflows and enhancing international visibility. Additionally, relying on institutional

websites with limited pages for the journal can negatively impact both accessibility and the publication’s unique identity.

### 4.3 Separate Pages for Articles

Creating separate pages for each article remains an essential practice in contemporary academic publishing.

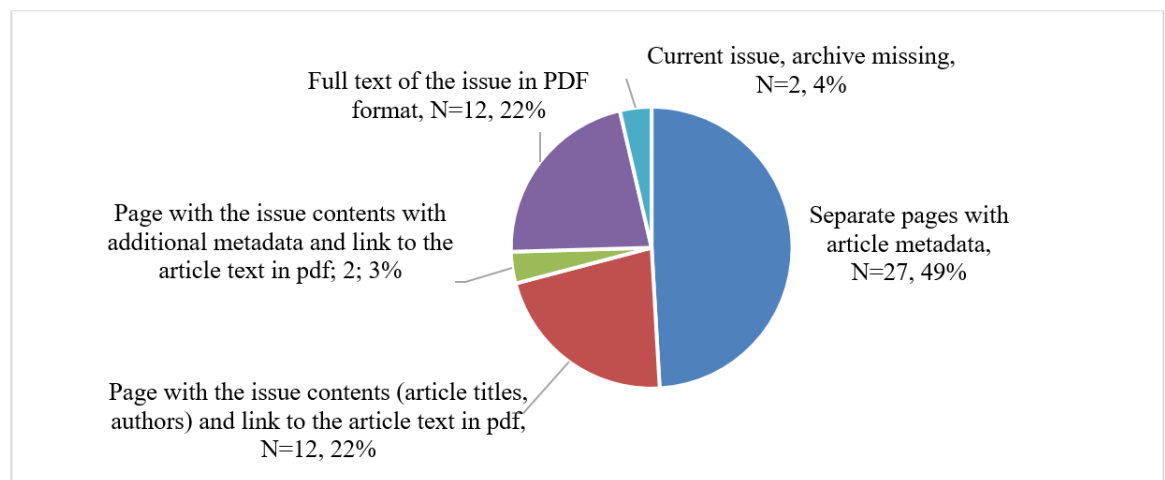
First, individual article pages are essential for international visibility and indexing. Academic databases require each article to have a unique and stable URL (permalink). If articles are available only as PDFs within a general list, automatic indexing becomes significantly more difficult – or even impossible.

Second, a dedicated page allows for the presentation of the article’s metadata, enhancing accessibility and optimizing it for search engines that index academic content. Another important aspect is that a separate page facilitates DOI integration, with each article obtaining a permalink, such as <https://doi.org/...>, ensuring stable links for citation and bibliographic referencing.

Equally important is adherence to good editorial practices – having a separate page for each article is considered a minimum international standard in academic publishing. Modern editorial management platforms, such as OJS, are designed so that every article automatically has its own dedicated page.

Therefore, it is highly important that each article has a separate page on the journal’s website. This ensures international visibility, proper indexing, easy access, and transparency. The absence of dedicated pages drastically reduces a journal’s chances of being indexed in scientific databases and diminishes the impact of the published research.

The study of journal websites reveals a suboptimal situation in this regard. Of the 55 sites analyzed, fewer than half (27, or 49%) have dedicated pages for articles (see Figure 3).



**Figure 3. Dedicated pages for articles**

Source: authors own study

Among the 28 journals without dedicated article pages, 12 list the table of contents with direct links to PDFs; 2 include minimal metadata in the table of contents (such as DOI, abstract, or keywords) but still link only to the PDF; 12 publish the entire issue as a single PDF; and 2 do not provide any online archive at all.

Essentially, the absence of dedicated article pages hinders automatic indexing by platforms such as Google Scholar, Crossref, DOAJ, and Scopus. As a result, individual articles become difficult to locate, which diminishes the journal’s visibility, citability, and scientific impact. Journals that publish only complete PDF issues or lack an online archive, significantly undermine their prospects for international recognition.

It can be stated that the situation is inadequate – fewer than half of the journals meet the international standard of providing separate pages for each article. The others rely on incomplete

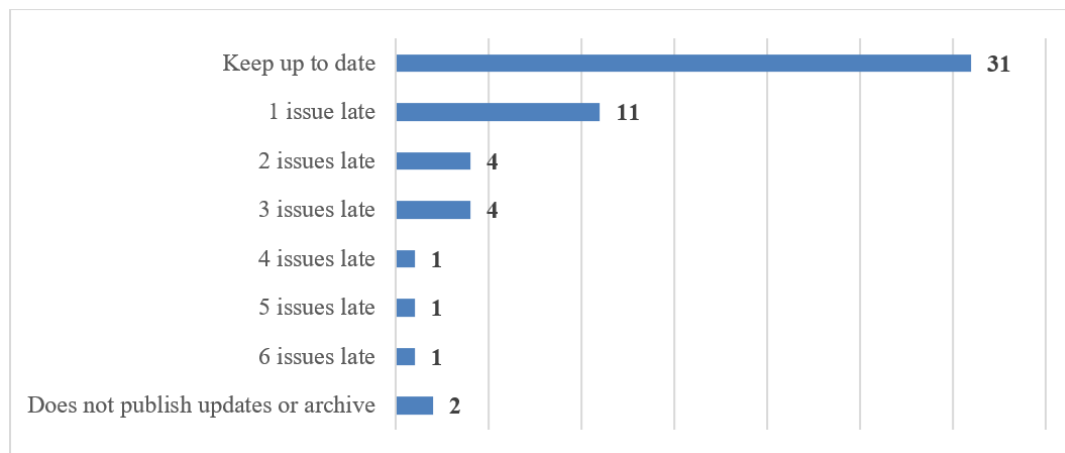
or unprofessional solutions, such as links to PDFs, full issues in PDF format, or lack of archives, which severely limit visibility and indexing potential. An urgent modernization of the journals' web infrastructure is necessary through the implementation of compliant editorial platforms (e.g., OJS) that enable metadata display and individual access to each article.

#### **4.4 Timelines of Issues (Most Recent Issue on the Website)**

Timely publication of journal issues is a fundamental criterion for any reputable scientific journal and directly impacts its credibility and visibility. Adhering to the publication schedule demonstrates that the journal maintains a stable editorial workflow and has a responsible team.

Conversely, delayed publication undermines the trust of the academic community and may be perceived as editorial negligence or poor organization, potentially discouraging authors from submitting their work. Moreover, databases such as Scopus, WoS, and DOAJ monitor publication timeliness; if issues are not released according to the declared schedule, the journal risks rejection or removal from indexing.

Data extracted from journal websites reveal a concerning situation (see Figure 4). Of the 55 journals examined, only 31 (56%) had published current issues as of July 30 (the date of the last verification), indicating that more than one-third of the journals failed to adhere to their announced publication schedules. Eleven journals were behind by one issue, four by two issues, another four by three issues, and one journal each was delayed by four, five, and six issues, respectively. This situation seriously undermines the credibility of these journals. Additionally, two journals do not publish issues or archives on their websites at all, indicating a lack of transparency and making it impossible to verify their editorial activity.



**Figure 4. Timelines of issues**

Source: authors own study

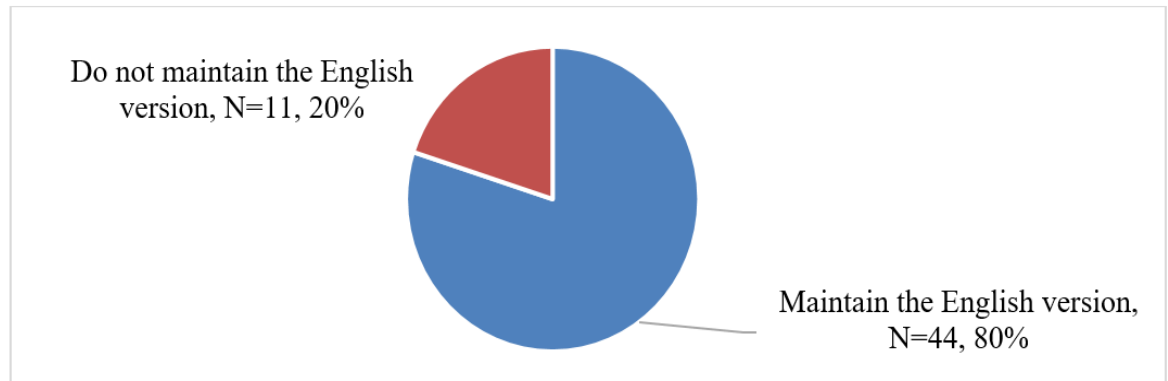
To sum up, publishing issues on time is crucial for a journal's credibility, attracting and retaining authors, achieving international indexing, and enhancing the scientific impact of its articles. A journal that fails to maintain timely publication seriously jeopardizes its chances of recognition and academic visibility.

#### **4.5 English Version of Journals' websites**

The presence of an English version on a journal's website is not merely optional but an almost mandatory requirement for achieving international visibility and recognition. It is essential that the website includes an English version, at least for key sections such as the journal title, purpose and objectives, instructions for authors, editorial policy, editorial board, and article metadata. This ensures broader international visibility, facilitates indexing in major databases, attracts foreign authors, and enhances the journal's prestige.

An analysis of 55 journal websites reveals that 44 (80%) offer an English version or pages in English (see Figure 5). This indicates a high level of international compliance and openness,

global visibility, and alignment with the standards of international databases. Conversely, the remaining 11 journals (20%) maintain their websites exclusively in Romanian, which limits international access, reduces visibility, and may pose a significant obstacle to the indexing process. These journals risk being perceived as exclusively local, even if they publish valuable articles.



**Figure 5. Maintenance of the English version of Journals' websites**

Source: authors own study

Overall, the situation is positive. The vast majority of journals already have an English version, bringing them closer to international standards of transparency and accessibility. However, the 20% of journals that publish only in Romanian are at a disadvantage and urgently need to develop an English version to increase their chances of indexing, visibility, and internationalization.

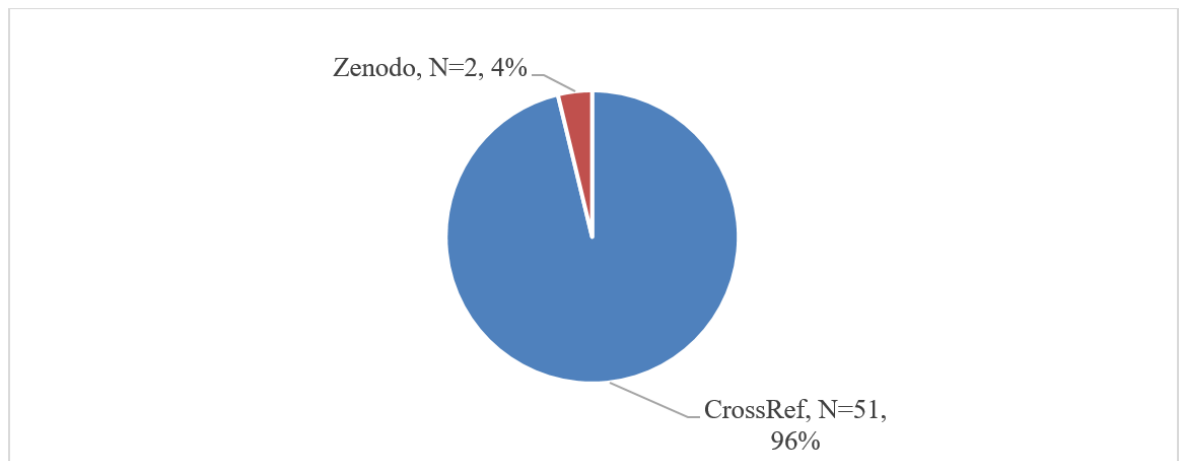
#### **4.6 Presence of DOIs for Articles**

The DOI is an essential international standard in modern scientific publishing, providing each article with a unique and permanent identifier. Unlike regular hyperlinks, which can change or expire, a DOI remains stable regardless of platform or domain changes, ensuring continuous access to the article. The use of DOIs enhances the international visibility and accessibility of publications, as they are recognized and indexed by major databases such as Scopus, Web of Science, Crossref, and Google Scholar.

At the same time, DOIs facilitate the accurate citation of scholarly works, reducing ambiguity. Today, an increasing number of international journals explicitly require the inclusion of DOIs in bibliographies. Moreover, the DOI system enables the interconnection of articles with other digital resources – for example, authors' ORCID identifiers, research projects, or databases – thereby strengthening the global network of scientific information.

Therefore, assigning DOIs enhances credibility and demonstrates compliance with international editorial standards. Without DOIs, articles become more difficult to discover and are cited less frequently, which diminishes their academic impact and limits the journal's visibility and its chances of inclusion in international databases.

An analysis of the 53 journal websites that maintain online archives show that all journals (100%) assign DOIs to their published articles, whether these appear on separate web pages, as individual PDF files, or within a complete issue PDF (see Figure 6). Of these, 51 journals (approximately 96%) are Crossref members and register their identifiers through this organization, ensuring integration with essential infrastructures such as CrossMark, ORCID, and OpenCitations. The remaining two journals (approximately 4%) use DOIs assigned via Zenodo, a solution that guarantees the persistence of identifiers but offers less control over editorial metadata at the journal level.



**Figure 6. Assigning DOIs to articles**

Source: authors own study

The situation demonstrates a high level of editorial maturity and strong preparedness for international indexing (Scopus, Web of Science, DOAJ), while also identifying several areas that require attention. It is essential for all journals to ensure consistent DOI resolution, so that each DOI directs users to the article’s landing page rather than directly to the PDF file. Additionally, metadata must be complete, including titles and abstracts in English, clear licensing information, standardized affiliations, funding details, and comprehensive bibliographic references.

The recommendations emphasize strengthening the use of Crossref wherever possible, standardizing DOI display in the canonical format ([https://doi.org/...](https://doi.org/)), depositing references in Crossref, and making them open (open references) to enhance visibility. Overall, the outlook is positive, demonstrating strong alignment with international best practices while allowing room for optimizations that could further increase the visibility and impact of published articles.

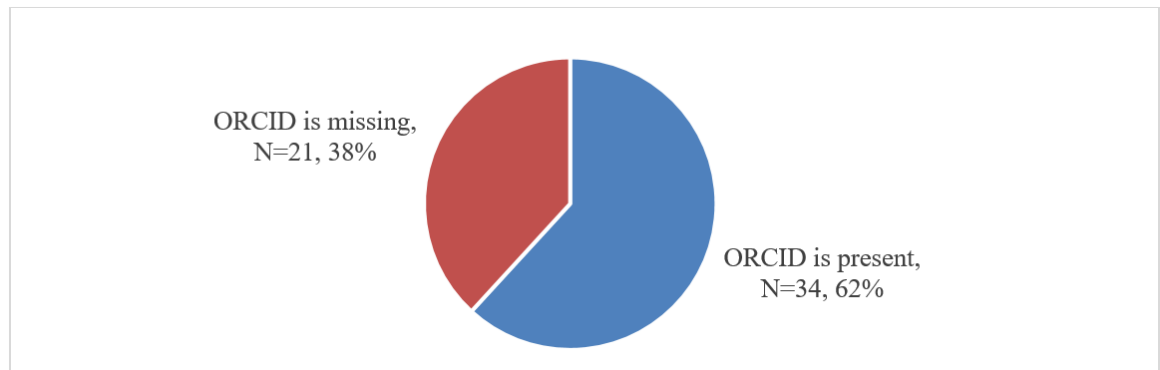
#### **4.7 Presence of Authors' ORCID Identifiers in Articles**

ORCID plays a crucial role in scientific publishing by providing each author with a unique and permanent identifier. This eliminates name ambiguities and ensures the accurate attribution of academic contributions. Because many researchers may share identical or similar names, or may change or vary their names over time, ORCID guarantees precise identification.

As an internationally recognized standard integrated into the publishing workflows of major publishers and databases – including Elsevier, Springer, IEEE, Crossref, Scopus, and Web of Science – ORCID enhances the visibility and impact of research. Articles linked to an author’s ORCID ID automatically appear in their profile and can be more easily discovered by the academic community.

In addition, integration with editorial platforms (e.g., OJS) and indexing systems reduces the risk of errors in editorial processing and metadata management, thereby enhancing transparency and publication ethics by ensuring accurate recognition of each author’s contributions. ORCID also holds increasing practical value in research evaluation and funding, as many funding agencies and evaluation bodies now require that articles, reports, and projects be linked to an ORCID identifier to monitor productivity and impact. Consequently, ORCID has become an indispensable tool in modern scholarly publishing and an increasingly common prerequisite for article acceptance in prestigious journals and databases.

An analysis of journal websites and published articles reveals inconsistent application of international standards for author identification through ORCID (see Figure 7). Of the total journals examined, 34 (approximately 62%) display authors’ ORCID identifiers in their articles, indicating openness to international best practices and a commitment to enhancing the visibility and accurate recognition of scientific contributions.



**Figure 7. Including authors' ORCID in articles**

Source: authors own study

However, 21 journals (approximately 38%) do not adhere to this standard, which limits interoperability with international databases, reduces transparency in the editorial process, and may negatively impact both the visibility of authors and the indexing potential of journals. This discrepancy indicates that, despite significant progress in the adoption of ORCID in the Republic of Moldova, standardized measures and robust editorial policies are necessary to ensure the mandatory implementation of this identifier in all scientific publications.

#### **4.8 Indexing Policy of Journals' Websites**

Indexing is also very important objectives for a scientific journal, as it determines the publication's visibility, credibility, and international impact.

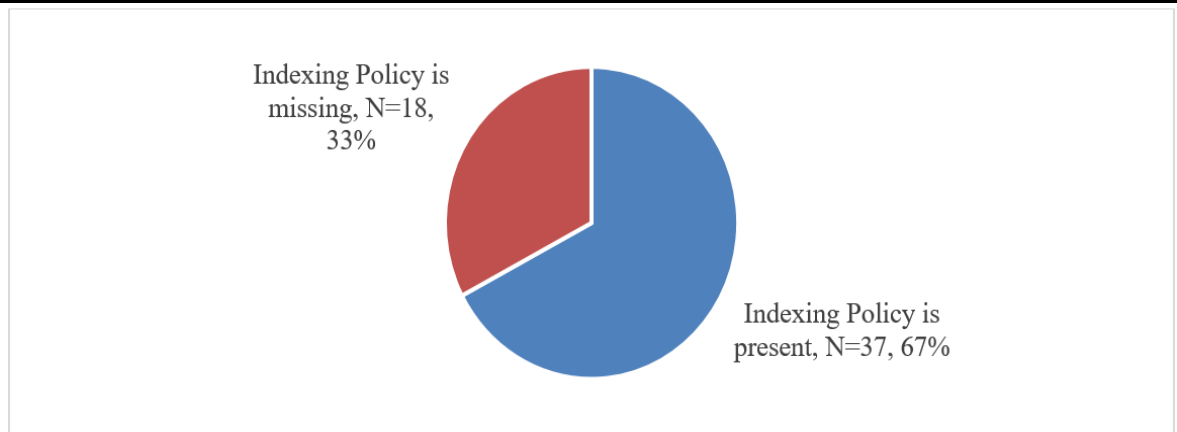
First, indexing in prestigious databases such as Scopus, Web of Science, DOAJ, EBSCO etc. ensures increased visibility; articles become easier to be discovered by researchers, academics, students, and practitioners worldwide. This enhances the likelihood of citation and, consequently, strengthens the prestige of both the journal and its authors.

Second, indexing confers recognition and legitimacy. Acceptance into an international database involves a rigorous evaluation process that certifies compliance with editorial, ethical, and technical standards. As a result, the journal gains the trust of the academic community and becomes more attractive to authors.

Indexing also enhances interoperability by integrating articles into global academic networks. These articles can be linked to authors' ORCID profiles, institutional repositories, and funder databases, facilitating the monitoring of scientific performance and the reporting of research outcomes.

Last but not least, indexing supports the sustainable development of the journal: a visible and recognized publication attracts high-quality authors, competent reviewers, and international collaborations, thereby strengthening its long-term position in the academic community.

Analysis of journal websites reveals inconsistent practices concerning the transparency of indexing (see Figure 8). Of the 55 journals examined, 37 (approximately 67%) mention their indexing policies or the databases in which the journal is included, indicating a commitment to visibility and providing accurate information to authors and readers. In contrast, 18 journals (approximately 33%) do not display such information, which may undermine trust in the publication and reduce its appeal to potential authors. The absence of indexing details makes it more difficult to assess the journal's prestige and impact.



**Figure 8. Presence of Indexing Policy on website**

Source: authors own study

The situation underscores the need for editorial standardization: all journals should present indexing data clearly and transparently, in accordance with established international standards of academic communication.

## 5 Conclusions

Based on the data collected in the study referring to the technical characteristics and visibility of journal websites, we identified several structural issues that negatively impact visibility, professionalism, and the likelihood of international indexing. The primary vulnerability concerns the web domain. Although international standards recommend that journals use their own second-level domain (e.g., revista.md), the reality is that two-thirds of journals (66%) use third-level domains (e.g., revista.fondator.md), and over a quarter (27%) only have dedicated pages on the founding institution’s website. Only 7% of journals have their own domains, meaning the vast majority face challenges related to branding, web independence, and indexing. This situation diminishes the international visibility of journals and makes them more susceptible to institutional or technical changes.

Regarding the platforms and CMSs used, nearly half of the journals are built on WordPress, a general-purpose platform that is not optimized for academic publishing. Only 20% of journals use OJS, the dedicated and internationally preferred solution for scientific journals, which offers editorial management, peer review, and automated indexing functionalities. The remaining journals rely on institutional platforms or custom solutions, resulting in fragmented practices and, in many cases, a lack of academic functionality. This indicates a heterogeneous technical infrastructure and highlights an untapped potential for modern digitization.

Another critical vulnerability lies in the pages dedicated to individual articles. Only 49% of journals provide separate pages for each article, which is an international standard and a fundamental requirement for indexing in databases such as Google Scholar, Crossref, DOAJ, and Scopus. The remaining journals publish articles solely as full PDFs or lack an accessible archive altogether, significantly limiting the visibility of the articles, diminishing the research impact, and undermining the journal's potential for international recognition. This represents one of the most significant structural deficiencies in the technical infrastructure of journals.

Significant problems also arise regarding the timeliness of issue publication. Only 56% of journals release their scheduled issues on time; the remainder are one or more issues behind schedule, and some do not publish their archives at all. This lack of punctuality directly undermines the journal's credibility, diminishes authors' trust, and reduces the likelihood of indexing in international databases, where adherence to the editorial calendar is a mandatory criterion.

In terms of access language, the situation is relatively better: 80% of journals have an English version or pages in English, which gives them international visibility and alignment with global

standards. However, 20% of journals maintain their sites only in Romanian, which places them at a disadvantage, reducing accessibility for the global audience and constituting a serious obstacle in the indexing process.

On the one hand, the use of DOIs for articles demonstrates a high level of editorial maturity: all journals analyzed assign digital identifiers, ensuring their visibility, accessibility, and international recognition. However, issues persist regarding the consistency of DOI display and resolution, as well as the completeness of metadata. In some cases, identifiers link directly to the PDF file rather than the article landing page, and metadata are not always presented in a uniform format, which diminishes interoperability with international databases.

In contrast to the widespread adoption of DOIs, the implementation of ORCID identifiers for authors remains inadequate. Only about two-thirds of journals display ORCID identifiers in their articles, reflecting a trend toward international best practices but leaving a significant portion of journals that do not use this standard. This lack of uniformity limits researchers' visibility, increases the risk of author misidentification, and reduces the attractiveness of journals for international indexing and academic collaboration.

The overall situation concerning identifiers and international standards reveals both significant progress and several shortcomings that need to be addressed.

Another issue is related to indexing policy. Only a fraction of journals clearly mentions on their websites the databases and platforms in which they are included, which conveys transparency and credibility. However, a third of journals do not provide any information about indexing at all, which affects the trust of authors and reduces the potential to attract quality papers. The lack of a standardized presentation of indexing denotes a weakness in academic communication and affects international visibility.

In conclusion, the technical characteristics and accessibility of the websites of journals in the Republic of Moldova reflect a level of partial compliance with international standards. The main problems identified are the lack of their own second-level domains, the insufficient use of platforms dedicated to academic publishing (such as OJS), the absence of separate pages for articles, frequent delays in publishing issues and the lack of an English version for some journals. These deficiencies directly affect the visibility, credibility and internationalization of journals, reducing their chances of indexing and recognition in the global scientific environment. Modernizing the digital infrastructure and aligning with international best practices is an essential priority for strengthening the position of these journals in the international academic landscape.

## **6 Recommendations**

Regarding the web domain, it is recommended that each journal obtain its own second-level domain (for example, *journal.md* or *journal.eu*), as this ensures institutional independence and professional visibility. Hidden pages within the founder's website or complex subdomains should be avoided, since they diminish credibility and hinder indexing. Any migration to a new, independent domain must be carefully planned using permanent redirects (HTTP 301) to preserve existing indexing and external links.

In terms of the platform or CMS, the preferred solution is to use Open Journal Systems as the standard platform for scientific journals, given its built-in support for peer review, metadata, and DOI management. If general-purpose CMS platforms such as WordPress or Drupal are used, they should be supplemented with specialized modules for handling articles, metadata, and digital identifiers. It is equally important to ensure site security, perform regular updates, and maintain periodic data backups.

Concerning individual article pages, each published article should have its own dedicated webpage containing complete metadata, including title, authors (with ORCID IDs), institutional affiliation, abstract, keywords, and DOI. The page should include a link to the full-text PDF, but the PDF must not replace the article's web page itself. Accessibility for automatic indexing by

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services such as Google Scholar, Crossref, and DOAJ should be regularly verified to ensure discoverability.

With respect to the timeliness of publication, journals must publish issues on schedule, according to their declared frequency. An updated online archive providing access to all past issues should be maintained at all times. In cases of delay, the journal should provide a transparent official notice on its website, explaining the situation.

A fundamental step for internationalization is the development of a comprehensive English version of the journal's website. This must extend beyond a simple homepage translation to include all key sections: the journal's aims and scope, detailed author guidelines, editorial policies, the composition of the editorial board, and crucially, the complete metadata (title, abstract, keywords) for every article. To be effective, this translation must be professionally executed to ensure conceptual accuracy and uphold the journal's credibility. Furthermore, this English version should be strategically promoted as the primary gateway for engaging international authors and readers.

Regarding identifiers, DOIs should always be displayed in their canonical format (<https://doi.org/...>) to ensure consistency and international recognition. ORCID identifiers should be integrated into the editorial workflow through the publishing platform (such as OJS), which minimizes errors, enhances transparency, and strengthens the link between authors and their scholarly contributions.

Finally, a key element of a journal's credibility is the transparent communication of its indexing status. Journals should proactively publish a clear and accurate list of all international databases and platforms that index their content. This information should be presented in a standardized, dedicated section on the website, avoiding ambiguous or scattered mentions. A consistent and verifiable presentation allows the academic community to reliably evaluate the journal's visibility and standing, which is a critical factor for authors when deciding where to submit their work.

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