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Scientific Production and Thematic Research Trends in Albahit Journal of Applied Sciences: A Bibliometric Analysis of Publications from 2020 to 2026

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الإنتاج العلمي والاتجاهات الموضوعية للبحث في مجلة الباحث للعلوم التطبيقية: تحليل ببليومتري للمنشورات خلال الفترة (2020–2026)

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Abstract
Purpose: This study maps the scientific production and thematic development of Albahit Journal of Applied Sciences from 2020 through 20 July 2026. It evaluates publication dynamics, citation impact, authorship and collaboration, and the evolution of research themes. Design/methodology/approach: Official journal archive metadata were reconciled with a dated Google Scholar journal-profile snapshot. Of 99 raw records, one duplicate version and one erroneous metadata-only record were excluded, yielding a census of 97 publications. Performance indicators, h- and i10-indices, citation concentration, the Gini coefficient, collaboration measures, an exclusive broad-field taxonomy, and a multi-label title-derived subtheme taxonomy were applied. Findings: The corpus received 77 citations (mean 0.79; median 0); 72 publications (74.2%) were uncited. The journal-level h-index was 4 and i10-index 1, while the citation Gini coefficient was 0.869. Output was discontinuous: no publications were identified in 2023–2024, whereas 2025 contributed 39 papers (40.2%). Electrical engineering and renewable energy and computer science, communications, and artificial intelligence were the largest fields (17 papers each). Recent output shifted toward water and environmental assessment, control and automation, health applications, and AI/data-driven systems. Mean authorship was 2.28; the degree of collaboration was 0.732, but 190 of 205 unique authors (92.7%) appeared only once. Originality/value: No prior bibliometric study of this journal was identified in the searches undertaken. The study provides an auditable baseline and a practical editorial roadmap for continuity, metadata quality, thematic coherence, collaboration, and visibility.

Keywords: bibliometrics; scientific production; citation analysis; research collaboration; thematic analysis; Libyan journals; Google Scholar.

الملخص
تهدف الدراسة إلى رسم خريطة كمية وموضوعية للإنتاج العلمي المنشور في مجلة الباحث للعلوم التطبيقية خلال الفترة من 2020 إلى 20 يوليو 2026، وقياس تطور النشر، وأثر الاستشهاد، وأنماط التأليف والتعاون، والتحولات الموضوعية. المنهجية: جُمعت بيانات الفهرس الرسمية للمجلة وبيانات الاستشهاد من ملف المجلة في الباحث العلمي من Google. وبعد تدقيق 99 سجلًا أوليًا، استُبعد تكرار واحد وسجل ببليوغرافي خاطئ، فاستقر مجتمع الدراسة عند 97 منشورًا. طُبّقت مؤشرات الأداء الببليومتري، ومعامل جيني، ومؤشرا h وi10، ومقاييس التعاون، وتصنيف موضوعي حصري للمجالات وتصنيف فرعي متعدد الوسوم مشتق من العناوين. النتائج: بلغ مجموع الاستشهادات 77، بمتوسط 0.79 ووسيط صفري؛ ولم يحصل 72 منشورًا (74.2%) على استشهاد. بلغ مؤشر h أربعًا وi10 واحدًا، ووصل معامل جيني إلى 0.869، بما يكشف تركّزًا شديدًا للأثر. استحوذت منشورات 2025 على 40.2% من corpus، في حين لم يُرصد نشر في 2023 و2024. تصدّر مجالا الهندسة الكهربائية والطاقة المتجددة، وعلوم الحاسوب والاتصالات والذكاء الاصطناعي (17 منشورًا لكل منهما). ظهر انتقال حديث نحو المياه والبيئة، والتحكم والأتمتة، والصحة، والذكاء الاصطناعي. بلغ متوسط المؤلفين 2.28 ودرجة التعاون 0.732، لكن 92.7% من المؤلفين ظهروا في منشور واحد فقط. الخلاصة: تُظهر المجلة اتساعًا تطبيقيًا ونموًا حديثًا، يقابله انقطاع زمني وتركّز استشهادي وشبكات تعاون متكررة محدودة. وتوصي الدراسة بانتظام الصدور، وتحسين البيانات الوصفية والمعرّفات الدائمة، وبناء محاور تحريرية متماسكة، وتوسيع التعاون، ومأسسة متابعة ببليومترية سنوية.

الكلمات المفتاحية : القياسات الببليومترية؛ الإنتاج العلمي؛ تحليل الاستشهادات؛ التعاون العلمي؛ التحليل الموضوعي؛ المجلات الليبية؛ الباحث العلمي من Google.

1.Introduction

Bibliometrics provides a quantitative means of describing how a body of scholarship grows, who contributes to it, how knowledge is connected, and which documents or themes attract attention. Its value lies not in reducing research quality to a single number, but in combining complementary indicators of productivity, impact, collaboration, and intellectual structure (Donthu et al., 2021; Hicks et al., 2015; Waltman, 2016). At journal level, these indicators can function as an evidence base for editorial planning, archive quality control, internationalization, and the design of thematic calls.

Albahit Journal of Applied Sciences is an interdisciplinary applied-science journal published by the College of Technical Sciences–Bani Walid, Libya. Its official archive covers engineering, computing, environment, materials, mathematics, management, and health-related applications. The journal reports print ISSN 2708-244X and electronic ISSN 2708-8936 (Albahit Journal of Applied Sciences, 2026). Its breadth makes a simple count of articles insufficient: the editorially relevant question is whether output has been continuous, whether research themes have consolidated or shifted, and whether visibility and collaboration have developed alongside volume.

The study period is especially instructive because it contains both early issues (2020–2022), a two-year publication gap in the available archive (2023–2024), and a marked return in 2025–2026. A dated Google Scholar profile adds citation signals but also introduces known metadata risks. Google Scholar typically offers broader citation coverage than selective databases, yet its records may contain duplicates, incomplete versions, and inconsistent fields (Harzing & Alakangas, 2016; Jacsó, 2010; Martín-Martín et al., 2018, 2021). Reconciliation with the official journal archive is therefore essential.

1.1 Research gap and contribution

Searches using combinations of the journal title, its English and Arabic names, and terms such as bibliometric, scientometric, production, and citation analysis did not identify a prior bibliometric study devoted to Albahit Journal of Applied Sciences. The present work addresses that gap through a census rather than a sample. Its contribution is threefold: it creates a cleaned publication-level dataset; integrates performance, impact, collaboration, and thematic indicators; and translates the evidence into specific editorial actions. The claim is deliberately bounded to the searches conducted and should not be read as proof that no unpublished or locally inaccessible assessment exists.

1.2 Objectives and research questions

The general objective is to evaluate the structure, development, and visibility of scientific production in the journal between 2020 and the data cutoff of 20 July 2026. Five research questions guide the analysis:

- RQ1. How did annual publication output change, and where are the principal interruptions or surges?
- RQ2. How are citations distributed, and how concentrated is the observed impact?
- RQ3. Which broad fields and title-derived subthemes characterize the journal, and how did they shift between early and recent periods?
- RQ4. What are the authorship, productivity, and repeated-collaboration patterns?
- RQ5. What editorial and visibility priorities follow from the combined evidence?

2. Literature Review and Analytical Framework

2.1 Bibliometric performance, mapping, and responsible interpretation

Contemporary bibliometric guidance distinguishes performance analysis—publication, citation, author, institution, and source indicators—from science mapping, which examines conceptual, intellectual, or social relationships (Donthu et al., 2021; Zupic & Čater, 2015). Tools such as bibliometrix and VOSviewer support reproducible mapping and visualization (Aria & Cuccurullo, 2017; van Eck & Waltman, 2010), but software does not remove the need for defensible inclusion rules and data cleaning. Lim et al. (2024) emphasize that merging and cleaning records is itself an analytical stage, while Mukherjee et al. (2022) argue that bibliometric outputs should be connected to theory and practice rather than presented as decorative maps.

Citation indicators measure recorded attention, not intrinsic quality. The h-index combines output and citation thresholds (Hirsch, 2005), but it is sensitive to corpus size, field, database, and citation window. Mean citations can be dominated by a few papers, whereas medians, uncited shares, concentration ratios, and inequality measures expose skewness. Responsible interpretation therefore requires indicator plurality and explicit caveats (Hicks et al., 2015; Waltman, 2016). This is particularly important for a young, multidisciplinary journal whose recent papers have had little time to accrue citations.

Database choice also shapes the observable literature. Web of Science and Scopus differ in journal, language, region, and disciplinary coverage (Mongeon & Paul-Hus, 2016). Google Scholar generally identifies more citations, including citations outside conventional indexed journals, but its inclusiveness increases the burden of deduplication and metadata validation (Harzing & Alakangas, 2016; Martín-Martín et al., 2018, 2021). The present design treats the official OJS archive as the authority for publication metadata and the dated Google Scholar profile as the source for citation counts.

2.2 Evidence from journal-level and regional studies

Single-journal bibliometric studies show how longitudinal data can support editorial self-evaluation. Studies of the Journal of Business Research and the International Journal of

Information Management combined output, citations, collaboration, and thematic evolution to document growth and changing intellectual emphasis (Donthu et al., 2020, 2021). Mokhtari et al. (2020) demonstrated the value of coupling 2,056 Scopus-indexed Journal of Documentation papers with co-authorship, co-citation, keyword, and limited altmetric analyses. In an African journal context, Musa et al. (2022) compared 1,649 Web of Science and 1,879 Scopus records for African Health Sciences, thereby showing that journal profiles depend on database coverage.

Regional bibliometric evidence provides a wider interpretive benchmark. Dardas et al. (2023) examined more than 3.3 million outputs from Middle Eastern and Arab countries and found strong expansion but substantial differences in impact and collaboration; physical sciences accounted for a majority of output. Mubin et al. (2022) extracted 549 papers from ten leading HCI venues to examine participation in the MENA region, demonstrating how venue selection and socioeconomic context condition observed productivity. El Rassi et al. (2018) similarly documented medical-research productivity across Arab countries and emphasized international collaboration and normalized comparison. These studies justify examining Albahit as both an editorial system and a small component of a broader regional research ecosystem.

Table 1. *Selected prior bibliometric studies relevant to the present design*

Study	Objective and scope	Sample / source	Methods and tools	Key result and limitation
Mokhtari et al. (2020)	Evaluate Journal of Documentation, 1945–2018	2,056 papers; Scopus	Excel; VOSviewer; co-citation, co-authorship, co-word, limited altmetrics	Output and citations increased; developing-country participation remained low. Single-database dependence.
Musa et al. (2022)	Profile African Health Sciences	1,649 WoS and 1,879 Scopus records	Performance and co-authorship analyses; database comparison	Revealed temporal growth and leading contributors. Counts differed by database.
Dardas et al. (2023)	Map Middle Eastern and Arab productivity, 2003–2022	3,303,079 outputs; Scopus/SciVal	Productivity, impact, field mix, and collaboration indicators	Growth coexisted with impact gaps; physical sciences dominated. Macro-level aggregation masks journals.
Mubin et al. (2022)	Assess MENA participation in HCI	549 papers from 10 premier venues	Bibliometric and socioeconomic analysis	High-income MENA countries led participation. Venue-based scope omits other outlets.

Donthu et al. (2021)	Retrospect on 40 years of IJIM	1,629 publications, 1979–2019; Scopus	Performance, citation, collaboration, and thematic analyses	Growth and collaboration increased; historical name and coverage decisions affect the corpus.

Note. Sample sizes and periods are reported as stated by the cited studies. The studies are comparative precedents, not direct benchmarks for a 97-publication young journal.

2.3 Analytical framework

The study uses a five-domain framework. Publication performance captures volume, continuity, and growth. Citation impact captures reach, skewness, and concentration. Authorship analysis captures team size, productivity, and repeated ties. Thematic analysis captures disciplinary breadth and change. Data-quality and visibility analysis records discrepancies between the official platform and Google Scholar. The framework is descriptive and decision-oriented; it does not infer causal relationships between editorial practices and citation outcomes.

Table 2. *Operational analytical framework*

Domain	Core indicators	Editorial question
Publication performance	Annual output, share, growth, active/gap years	Is the publication program continuous and sustainable?
Citation impact	Total, mean, median, SD, h, i10, uncited share, Gini, concentration	Is visibility broad or dependent on a few papers?
Authorship and collaboration	Unique authors, appearances, team size, degree and index of collaboration, repeated pairs	Does the journal support durable research communities?
Thematic structure	Exclusive broad fields; multi-label title subthemes; period comparison	Which strengths are established or emerging?
Data quality and visibility	Duplicates, erroneous records, archive/profile mismatch	Are metadata and discovery systems trustworthy?

3. Methods

3.1 Design, scope, and unit of analysis

This is a retrospective, single-journal bibliometric census with quantitative title-content analysis. The unit of analysis is a distinct publication attributed to Albahit Journal of Applied Sciences and dated from 2020 through 20 July 2026. All available document types were retained because the Google Scholar profile did not consistently label document type and the official archive presents the records as published contributions. The observation window is not a complete calendar year for 2026.

3.2 Data sources and retrieval

Two sources were reconciled. First, the official OJS archive and issue pages supplied titles, ordered author strings, years, volumes, issues, page ranges, and article links. Second, a PDF snapshot of the journal's Google Scholar profile supplied per-record citation counts and profile totals. Retrieval and verification were completed on 20 July 2026. The profile displayed 77 citations, h-index 4, and i10-index 1. Because citation counts change, the date is part of the measurement definition.

3.3 Eligibility, deduplication, and audit trail

The Google Scholar snapshot contained 99 raw records. Titles were normalized for case, whitespace, punctuation, and common typographic variants. Candidate duplicates were checked against author lists, years, pages, and official article pages. One incomplete, uncited version of a proton-exchange-membrane fuel-cell article duplicated a complete cited record and was excluded. A second record was excluded because the listed title duplicated another article, its page range conflicted with the author's actual paper, and the official issue page contained no corresponding article file. The resulting corpus contained 97 distinct publications.

Table 3. *Corpus construction and cross-source reconciliation*.

Stage	Records	Decision
Google Scholar profile export	99	Raw profile records inspected
Duplicate version removed	−1	Incomplete uncited version removed; complete cited record retained
Erroneous metadata-only record removed	−1	Title and pages conflicted with official issue evidence
Final bibliometric corpus	97	Distinct publications analyzed
Official OJS records retrieved	94	One was the erroneous record; 93 valid records matched the corpus
Google Scholar-only records	4	Present in the profile but absent from the current OJS archive

Note. The four Google Scholar-only records are retained because the journal profile attributes them to the journal. Their absence from the current archive is treated as a platform-level discrepancy, not proof that they were never published.

3.4 Metadata cleaning and author disambiguation

Official article pages were preferred for author metadata when available; Google Scholar supplied citations. Author strings were standardized by trimming whitespace, harmonizing capitalization, and consolidating clear orthographic variants only when titles, coauthors, and issue metadata supported equivalence. No institutional or national analysis was attempted because complete affiliations were not available for all records. Ambiguous names were not merged solely on surname similarity. This conservative rule reduces false merges but may retain some variants as separate people.

3.5 Indicators and statistical analysis

Descriptive analysis included counts, percentages, mean, median, population standard deviation, annual growth, and compound annual growth. Annual growth was undefined where the previous year's output was zero. The reported compound annual growth rate, $CAGR = (P2026/P2020)^{(1/6)} - 1$, is descriptive only because 2026 is incomplete and the series contains two zero-output years.

Citation impact included total citations, mean, median, standard deviation, h-index, i10-index, uncited share, top-paper and top-k concentration shares, and the Gini coefficient. The h-index was calculated by ranking publications in descending citation order and identifying the largest rank h for which citations at rank h were at least h. The degree of collaboration was $DC = Nm/(Nm + Ns)$, where Nm and Ns are multi- and single-authored publications (Subramanyam, 1983). The collaboration index was the number of author appearances in multi-authored papers divided by the number of multi-authored papers, consistent with team-size approaches discussed by Lawani (1986).

Spearman's rank correlation tested the monotonic association between publication year and citations because citation counts were highly skewed. Tests were two-tailed at $\alpha = .05$. A field-by-active-year chi-square test was calculated during diagnostics, but 91.1% of expected cells were below five; its $\chi^2 = 26.403$, df = 32, $p = .746$ result is therefore not interpreted. Analyses were conducted with Python 3.12, pandas 2.2.3, SciPy 1.17.0, and Matplotlib 3.10.8. The cleaned workbook provides publication-level data and calculation sheets.

3.6 Thematic classification

Each publication was assigned to one mutually exclusive broad field using its normalized title and, when needed, the official issue metadata. Nine fields were defined to preserve the journal's applied-science breadth while avoiding one category per specialty. A second, multi-label layer captured nine recurring subthemes. A paper could receive more than one subtheme label; therefore, subtheme percentages do not sum to 100%. The period comparison uses 2020–2022 as the early phase and 2025–2026 as the recent phase.

The coding dictionary specified inclusion terms, exclusions, and tie-breaking rules; all assignments were manually audited after rule-based matching. A second independent coder was not available, so Cohen's κ was not estimated. This is reported as a limitation rather than replaced by an artificial reliability statistic. For a target journal that requires intercoder reliability, an independent recoding exercise should be completed before submission.

4. Results

4.1 Publication trajectory

The journal published 97 papers across five active years. Output rose from 12 papers in 2020 to 18 in 2021 (+50.0%), fell to six in 2022 (−66.7%), and was absent in 2023 and 2024. Publication resumed at a much higher level in 2025 with 39 papers, representing 40.2% of the entire corpus. The partial 2026 total was 22 papers by 20 July. Mean annual output across all seven calendar years was 13.86, compared with 19.4 across active years only. The nominal 2020–2026 CAGR was 10.63%, but it does not represent smooth growth.

Table 4. *Annual publication and citation profile*

Year	Publications	Share	Annual growth	Cited	Uncited	Citations	Mean cites
2020	12	12.4%	—	5	7	12	1.00
2021	18	18.6%	+50.0%	12	6	52	2.89
2022	6	6.2%	−66.7%	3	3	6	1.00
2023	0	0.0%	−100.0%	0	0	0	—
2024	0	0.0%	0.0%	0	0	0	—
2025	39	40.2%	Undefined	4	35	6	0.15
2026*	22	22.7%	−43.6%	1	21	1	0.05

Note. *2026 is partial through 20 July. Growth is undefined in 2025 because the immediately preceding year has zero publications.

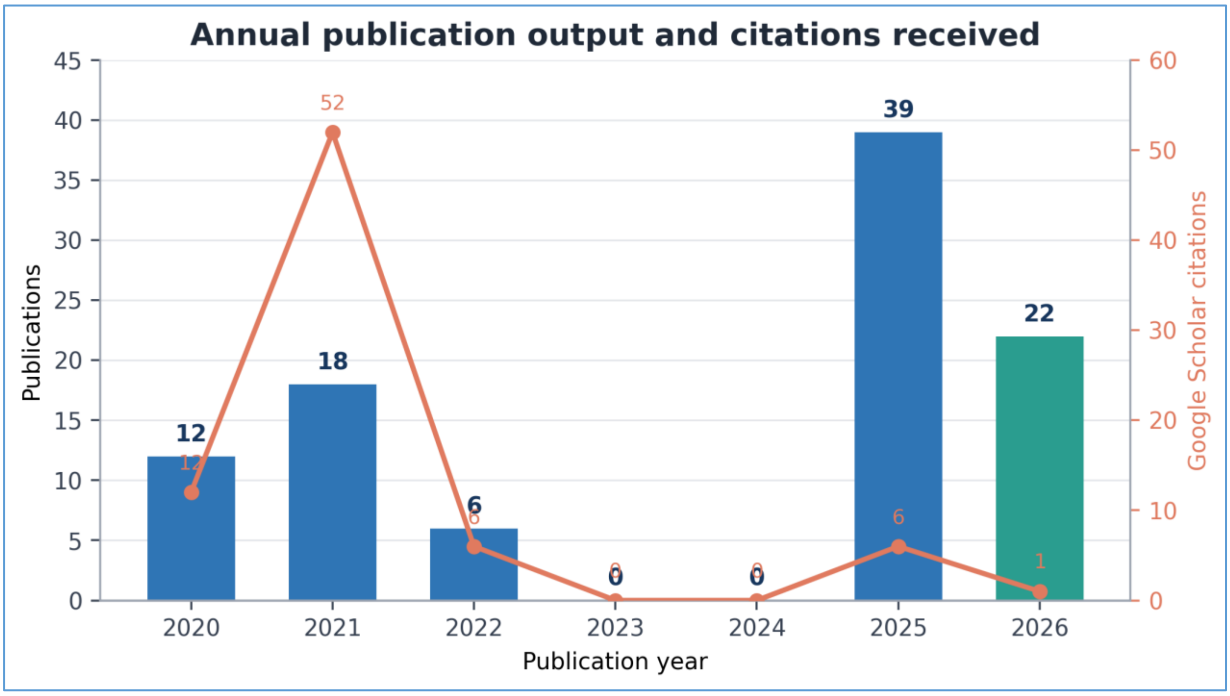

Figure 1. *Annual publication output and citations received.*

Note. Bars show publication counts; the line shows citations accumulated by papers from each publication year as of 20 July 2026. The association is confounded by unequal citation windows.

4.2 Citation impact and concentration

The 97 papers received 77 Google Scholar citations. The mean was 0.79, the median zero, and the population standard deviation 2.38. Only 25 papers were cited at least once; 72 (74.2%) were uncited. The journal-level h-index was 4 and i10-index 1, exactly matching the profile summary. The Gini coefficient of 0.869 indicates highly unequal citation distribution. The most-cited paper—a 2021 review of TiO_2 photoanodes for solar applications—received 20 citations and alone accounted for 26.0% of all citations. The top four papers accounted for 49.4%, and the top ten for 76.6%.

Table 5. *Citation and corpus performance indicators*

Indicator	Value	Interpretive note
Publications / citations	97 / 77	Census and dated Google Scholar snapshot
Mean / median citations	0.79 / 0	Strong right-skew
Population SD	2.38	Dispersion dominated by a small cited tail
Cited / uncited publications	25 / 72	Uncited share = 74.2%
h-index / i10-index	4 / 1	Profile values independently reproduced
Citation Gini	0.869	Very high concentration
Top paper / top 4 / top 10 shares	26.0% / 49.4% / 76.6%	Impact depends on a small core
Year–citation Spearman correlation	$\rho = -.470$, $p < .001$	Later papers have fewer citations; publication age is a major confounder

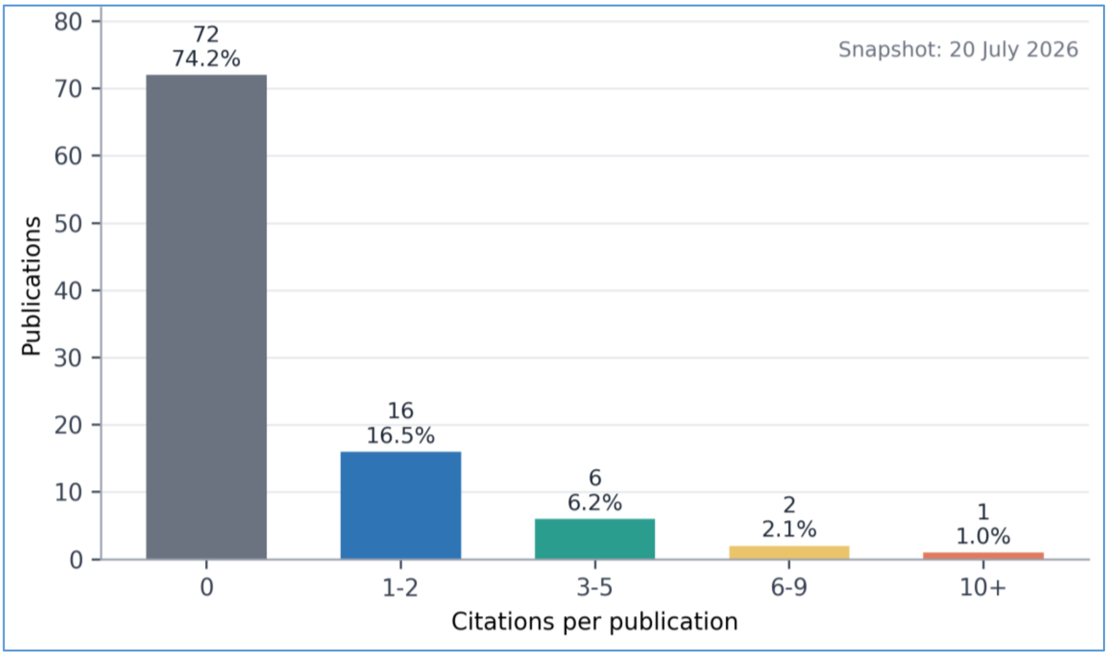

Figure 2. *Citation distribution of the corpus*

Note. Citation bins use cumulative Google Scholar counts as of 20 July 2026.

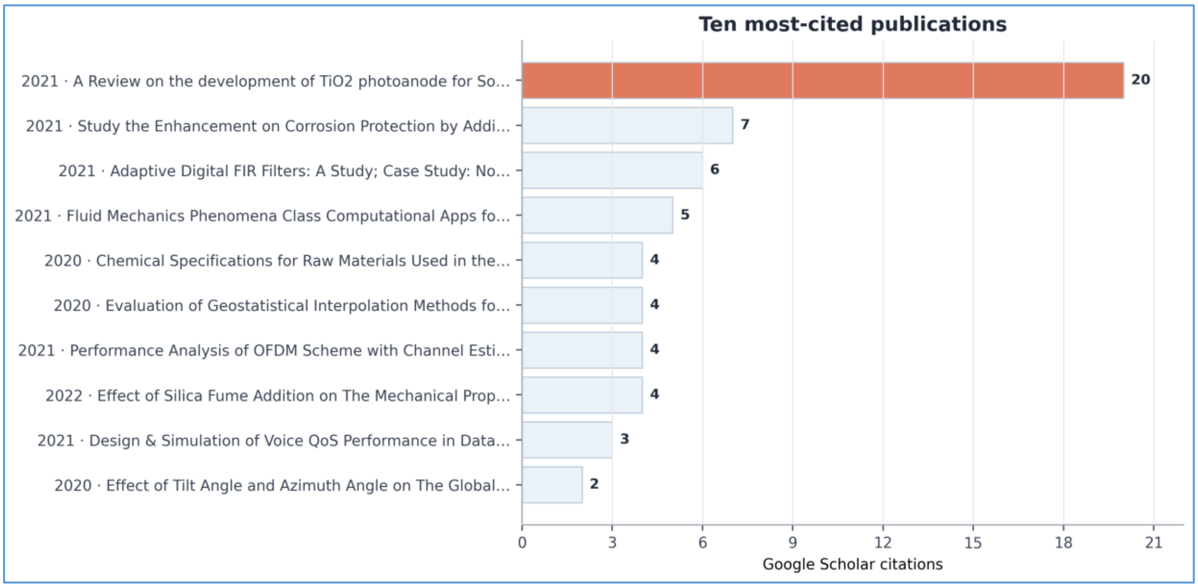

Figure 3. *Ten most-cited publications*.

Note. Titles are shortened only for display; the underlying workbook preserves full metadata. Publication year was negatively associated with citations (Spearman $\rho = -.470$, $p < .001$). This is an age effect as much as an impact signal: 61 papers (62.9% of the corpus) were published in 2025–2026 and had very short citation windows. The result cannot support a claim that newer work is of lower quality.

4.3 Broad fields and thematic evolution

The journal's output spans nine broad fields. Electrical engineering and renewable energy and computer science, communications, and artificial intelligence jointly led with 17 papers each

(17.5%). Environment, water, agriculture, and earth sciences followed with 14 (14.4%), and mechanical and industrial engineering with 13 (13.4%). Together, the four largest fields accounted for 62.9% of publications, establishing a clear applied engineering and environmental core without eliminating disciplinary breadth.

Table 6. *Distribution by mutually exclusive broad field*

Broad field	Publications	Share
Electrical engineering and renewable energy	17	17.5%
Computer science, communications, and artificial intelligence	17	17.5%
Environment, water, agriculture, and earth sciences	14	14.4%
Mechanical and industrial engineering	13	13.4%
Civil and structural engineering	9	9.3%
Materials science, chemistry, and nanotechnology	8	8.2%
Management, economics, accounting, and education	8	8.2%
Mathematics and modeling	7	7.2%
Health and biomedical sciences	4	4.1%

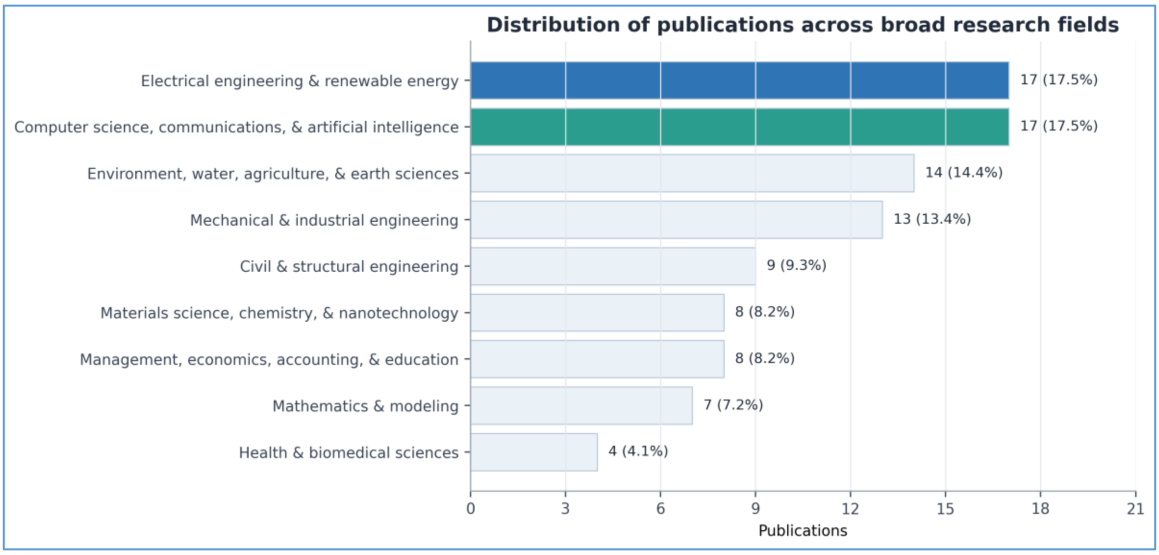

Figure 4. *Distribution across broad research fields*

Note. Each publication is assigned to one field; percentages sum to 100% apart from rounding. The multi-label analysis reveals change within that broad structure. Water, pollution, and environmental assessment was the largest subtheme (12 papers), with ten papers in the recent phase versus two in the early phase. Control, automation, and embedded systems increased from one to eight papers. Health and biomedical applications (seven recent papers) and AI, data-driven systems, and digital twins (five recent papers) were absent from the early phase. By contrast, materials/coatings/nanotechnology and wireless communications/networking were more prominent in 2020–2022 than in 2025–2026.

Table 7. *Title-derived subthemes by publication phase*

Subtheme	All	2020–2022	2025–2026
Water, pollution, and environmental assessment	12	2	10
Materials, coatings, and nanotechnology	11	7	4
Renewable energy and low-carbon technologies	11	4	7
Wireless communications and networking	10	6	4
Civil infrastructure and construction materials	9	5	4
Control, automation, and embedded systems	9	1	8
Health and biomedical applications	7	0	7
Management, economics, accounting, and education	7	1	6
AI, data-driven systems, and digital twins	5	0	5

Note. The subtheme taxonomy is multi-label; a paper can contribute to more than one row. Consequently, totals and percentages are not additive.

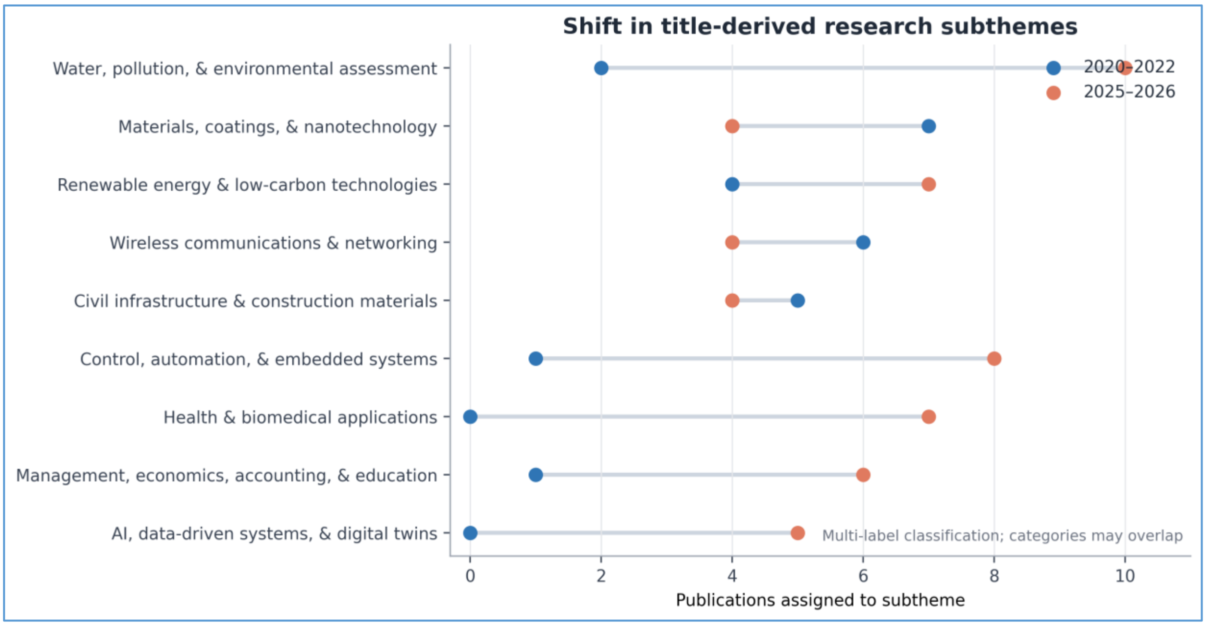

Figure 5. *Shift in title-derived research subthemes*

Note. Early and recent periods exclude the zero-output years 2023–2024. Counts are not normalized for the different number of publications in each period and should be read as portfolio signals.

4.4 Authorship and collaboration

The corpus contained 221 author appearances representing 205 standardized unique authors. Mean team size was 2.28 (median 2). Twenty-six papers (26.8%) were single-authored and 71 (73.2%) multi-authored, producing a degree of collaboration of 0.732. The collaboration index among multi-authored papers was 2.75. Two-author papers were most common (35; 36.1%), followed by single-author (26; 26.8%) and three-author papers (24; 24.7%).

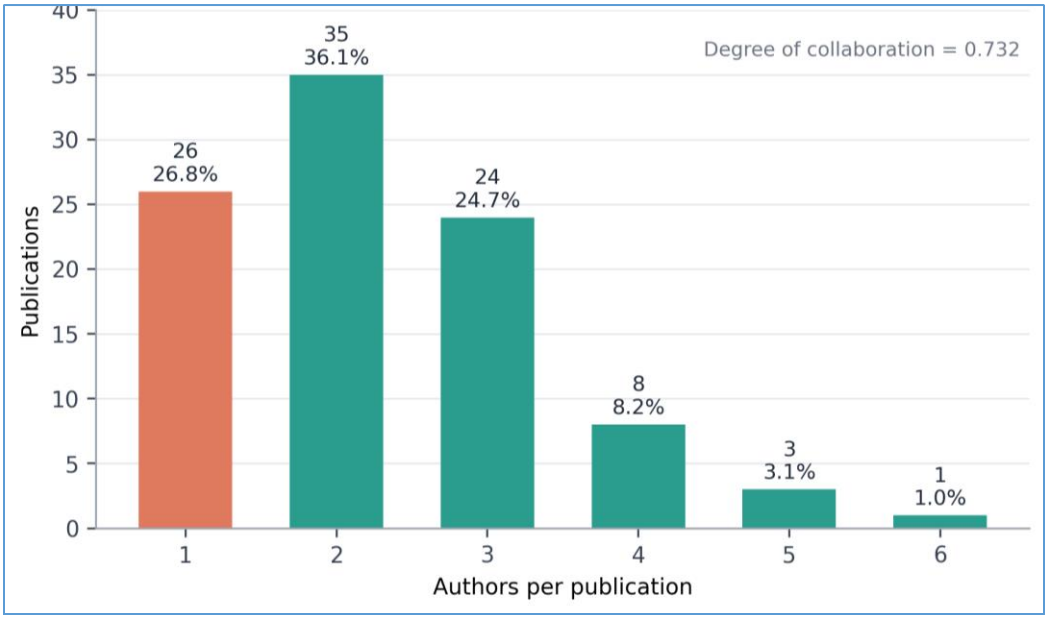

Figure 6. *Authorship-size distribution*

Note. The degree of collaboration is the share of multi-authored publications in the corpus.
Productivity was widely dispersed. Taha Muftah Abu Ali authored three papers, the highest count. Fourteen authors appeared in two papers each, while 190 of 205 unique authors appeared once, a transience rate of 92.7%. Repeated collaboration was similarly sparse: only seven author pairs coauthored two papers. They formed two three-author clusters and one two-author dyad. The result indicates broad participation but limited persistence of author teams.

Table 8. *Authorship and collaboration indicators*

Indicator	Value
Author appearances / unique authors	221 / 205
Mean / median authors per publication	2.28 / 2
Single- / multi-authored publications	26 / 71
Degree of collaboration	0.732
Collaboration index	2.75
One-publication authors	190 (92.7%)
Maximum author productivity	3 publications
Repeated coauthor pairs	7 pairs; 2 joint papers each

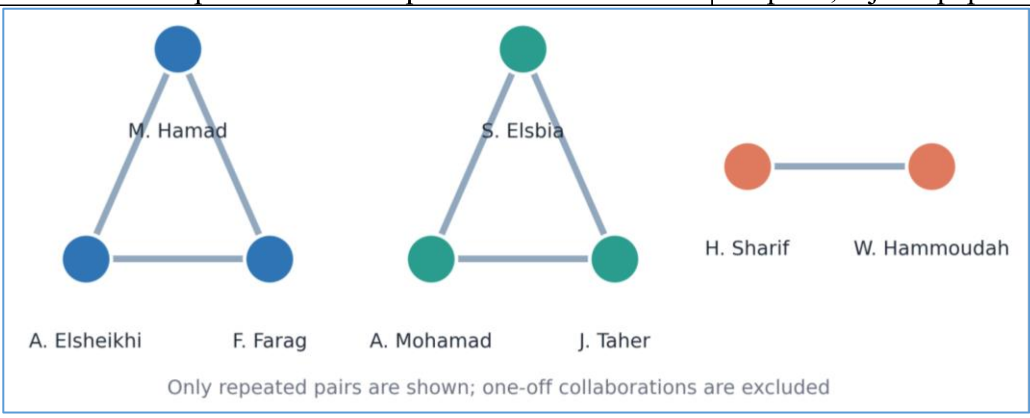

Figure 7. *Repeated co-authorship ties*

Note. Only pairs with two joint publications are shown. The complete author–publication incidence list is supplied in the workbook.

5. Discussion

5.1 Publication growth is real but discontinuous

The dominant temporal finding is not a simple upward trend but a discontinuous publication system. The 2025 surge and substantial partial-2026 output demonstrate renewed capacity, yet the 2023–2024 gap prevents interpreting CAGR as stable institutional growth. For editors, continuity is a higher-priority indicator than an isolated annual maximum. A public issue calendar, early article posting, and documented reasons for archive gaps would make future performance more interpretable.

Journal retrospections often report sustained growth and increasing collaboration over long windows (Donthu et al., 2020, 2021; Mokhtari et al., 2020). Albahit's shorter and interrupted trajectory differs in scale and maturity. The comparison is not a quality ranking; it identifies the operational conditions under which bibliometric visibility accumulates. Regularity creates predictable opportunities for authors, indexing systems, and citing readers.

5.2 Citation visibility is concentrated and age-dependent

A median of zero, 74.2% uncited share, and Gini coefficient of 0.869 show that the journal's measurable impact depends on a small set of papers. The leading review article's 20 citations illustrate how review-like synthesis and globally recognizable topics can attract attention. At the same time, concentration must be interpreted alongside recency: nearly two thirds of the corpus appeared in 2025–2026. The significant negative year–citation correlation is therefore expected and cannot be attributed to declining research merit.

Google Scholar's breadth is useful for detecting attention to a journal that may be incompletely represented in selective indexes, but it also makes data cleaning non-negotiable (Harzing & Alakangas, 2016; Martín-Martín et al., 2018, 2021). The two excluded records and four archive/profile mismatches are not trivial housekeeping details; they affect publication counts, author credit, and h-index calculations. The journal would benefit from consistent DOI registration, Crossref deposits, structured references, ORCID iDs, and a routine metadata audit across the OJS platform and discovery services.

5.3 Thematic breadth is becoming a portfolio

The broad-field distribution positions the journal primarily within engineering, computing, energy, environment, and applied technology. This pattern is consistent with the physical-sciences emphasis observed in regional output (Dardas et al., 2023), while the recent emergence of health, management, and AI topics broadens the portfolio. The subtheme shift toward water and pollution, automation, health, and data-driven systems aligns with locally relevant infrastructure and global technological agendas.

Breadth, however, can dilute journal identity if each issue is an unstructured collection. The evidence supports a portfolio strategy rather than indiscriminate scope expansion: maintain enduring pillars in renewable energy, communications, materials, civil infrastructure, and environment; develop emerging clusters in AI-enabled systems, control, and applied health; and connect them through cross-cutting calls such as AI for water systems, smart renewable grids, digital twins for infrastructure, and low-carbon materials. Such calls would create recognizable citation and collaboration communities.

5.4 Collaboration is common but not yet durable

The degree of collaboration is high enough to show that team science is normal in the journal, consistent with the collaborative character of applied research (Subramanyam, 1983). Yet the author system is highly transient: 92.7% of contributors appear once and only seven pairs repeat. This distinction between prevalence and persistence is important. A journal can have many multi-authored papers while still lacking durable networks.

Regional evidence shows that collaboration patterns are uneven and often tied to resource and institutional differences (Dardas et al., 2023; El Rassi et al., 2018; Mubin et al., 2022). Albahit can strengthen persistence by inviting multi-institution special issues, publishing complete affiliations, encouraging author identifiers, and appointing guest editors who connect Libyan teams with regional and international groups. Because current metadata are insufficient for reliable country or institution mapping, improving affiliations is the prerequisite for measuring progress.

5.5 Editorial and visibility roadmap

The evidence supports the following prioritized actions:

- Stabilize the publication calendar and ensure every published item appears in the official archive with consistent volume, issue, pages, and date metadata.
- Assign and deposit DOIs; validate ISSNs, English and Arabic titles, abstracts, author names, ORCID iDs, affiliations, funding fields, references, licenses, and article-type labels.
- Establish three to five editorial pillars and use special issues to consolidate high-potential intersections such as water–AI, smart renewable grids, automation, low-carbon materials, and infrastructure resilience.
- Expand durable collaboration through regional guest editors, cross-institution calls, reviewer-development activities, and transparent contributor metadata.
- Adopt an annual bibliometric dashboard containing output continuity, metadata completeness, citation distribution, collaboration persistence, geographic diversity, review times, and research-integrity indicators.
- Pursue indexing progressively after technical and editorial requirements are met, beginning with complete machine-readable metadata and transparent policies, then applying to appropriate directories and selective databases.
- Refresh this dataset before submission and again annually; preserve dated snapshots so changes in Google Scholar counts remain auditable.

6. Limitations

The study has seven principal limitations. First, Google Scholar citation counts are dynamic and can include non-journal sources; the findings are valid only for the 20 July 2026 snapshot. Second, 2026 is incomplete and recent papers have short citation windows. Third, the official OJS archive did not contain four records present in the journal profile, preventing perfect platform reconciliation. Fourth, broad fields and subthemes were coded primarily from titles and issue metadata rather than full texts and complete author keywords. Fifth, no second coder was available, so intercoder reliability was not estimated. Sixth, author-name normalization lacked universal ORCID identifiers, and affiliation coverage was insufficient for institution or country networks. Seventh, the small, young, multidisciplinary corpus limits inferential analysis and makes field- and age-normalized citation comparisons unreliable. These constraints favor cautious descriptive interpretation.

7. Conclusion

Albahit Journal of Applied Sciences has developed a broad applied-science portfolio of 97 publications, with a strong recent return to publishing and identifiable strengths in engineering, computing, energy, environment, materials, and infrastructure. Its recent thematic movement toward water and pollution, automation, health applications, and AI creates opportunities for a clearer editorial identity. However, the publication gap, highly concentrated citations, large

uncited share, metadata discrepancies, and shallow repeated-collaboration network show that volume alone will not secure durable visibility.
The journal's most effective next step is to convert renewed output into a stable editorial system: regular issues, complete and interoperable metadata, thematic portfolios, durable collaboration, and annual evidence-based monitoring. The cleaned corpus and workbook establish a reproducible baseline. Future updates should use the same rules, add independent thematic coding, incorporate affiliation and country data, and compare Google Scholar with Scopus or Web of Science if and when verifiable coverage becomes available.

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Compliance with ethical standards

Disclosure of conflict of interest

The authors declare that they have no conflict of interest.
