

A Case Study of the Citation Advantage of the Open Access Papers Published by Taipei Medical University Researchers.



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Objective

Nearly 60% of the journal papers of Taipei Medical University (TMU) in 2022 are open access articles. The research purpose of the poster is to analyze the journal papers of TMU indexed in WoS database in the period 2017-2021, intending to understand the citations impact of journal papers and the difference in the average number of citations between open access (OA) and non-OA journal papers. It is authors' hope that research results will serve as reference for paper submission of TMU researchers and promotion programs of TMUL in the future.

Method

This study was based on a bibliometric analysis to 10,586 TMU papers published from 2017 to 2021 in the WoS database. The data was collected on May 11, 2022, and the Affiliation "Taipei Medical University" was searched in the Web of Science Core Collection database (including Science Citation Index Expanded, SCI-EXPANDED & Social Sciences Citation Index, SSCI). There are 6 types of OA classification (Table 1) in the WoS database, each article may receive multiple OA classifications. Authors used Excel to calculate the average number of citations of papers based on the classifications of Open Access and the quartiles of journal impact coefficients (2020 JIF).

Result

It was found that the number of papers in Open Access journals of Taipei Medical University accounted for 57.79% of the total number of papers, and the Gold OA papers accounted for 47.85% (Table 2). These 10,586 articles were cited 109,159 times, with an average citation of 10.31, while the average citation of OA journal papers was 12.46, and the average citation of papers in non-OA journals was 6.33; the average citation times of papers ranked by OA journal article type were green accepted (130.16), hybrid (77.37) and green submitted (24.08) (Figure 1). The average citation of papers in Q1 OA journals was 5 times higher than that of Q4 OA journals (20.21 vs. 4.17); The average citation of "Green Accepted" papers in Q1 journals was 186.74, the average citation number of papers in "Gold Hybrid" in Q1 journals was 119.48, and the average citation number of papers in "Green Submitted" papers in Q1 journals was 47.18 (Figure 2).

Conclusion

The bibliographic data collected in this study are limited to journal articles indexed by the WOS database of Taipei Medical University and differences in subject areas are ignored. Therefore, the results cannot apply to other institutions. In conclusion, OA journals have higher citations on average than non-OA journals. The average citation times of papers in Q1 OA journals are better than those of Q2, Q3 and Q4 journals. Green Accepted journal papers have the highest average citations. Therefore, the authors recommend that researchers of Taipei Medical University should aim for JIF Q1 and Gold Hybrid journals when submitting journal papers in the future and try to self-archive or institutionally archive their manuscripts as much as possible to increase research visibility and increase citations.

Table 1: Descriptions of Open Access Types

Open Access Type	Descriptions
Gold	Identified as having a Creative Commons (CC) license by OurResearch Unpaywall Database. All articles in these journals must have a license in accordance with the Budapest Open Access Initiative to be called Gold.
Gold Hybrid	Items identified as having a Creative Commons (CC) license by OurResearch but that are not in journals where all content is Gold. Hybrid Gold open access status is at varying levels of completeness, especially for newly published articles.
Free to Read	The licensing for these articles is either unclear or identified by OurResearch as non-CC license articles. These are free-to-read or public access articles located on a publisher's site. A publisher may, as a promotion, grant free access to an article for a limited time. At the end of the promotional period, access to the article may require a fee which can lead to temporary errors in our data. You may find content that is incomplete, especially new content.
Green Published	Final published versions of articles hosted on an institutional or subject-based repository (e.g., an article out of its embargo period posted to PubMed Central).
Green Accepted	Accepted manuscripts hosted on a repository. Content is peer reviewed and final, but may not have been through the publisher's copy-editing or typesetting.
Green Submitted	Original manuscripts submitted for publication, but that have not been through a peer review process.

Note: Clarivate Analytics. (n.d.). Results. Web of Science Core Collection Help. Retrieved August 1, 2022, from https://images.webofknowledge.com/WOKRS533JR18/help/WOS/hp_results.html

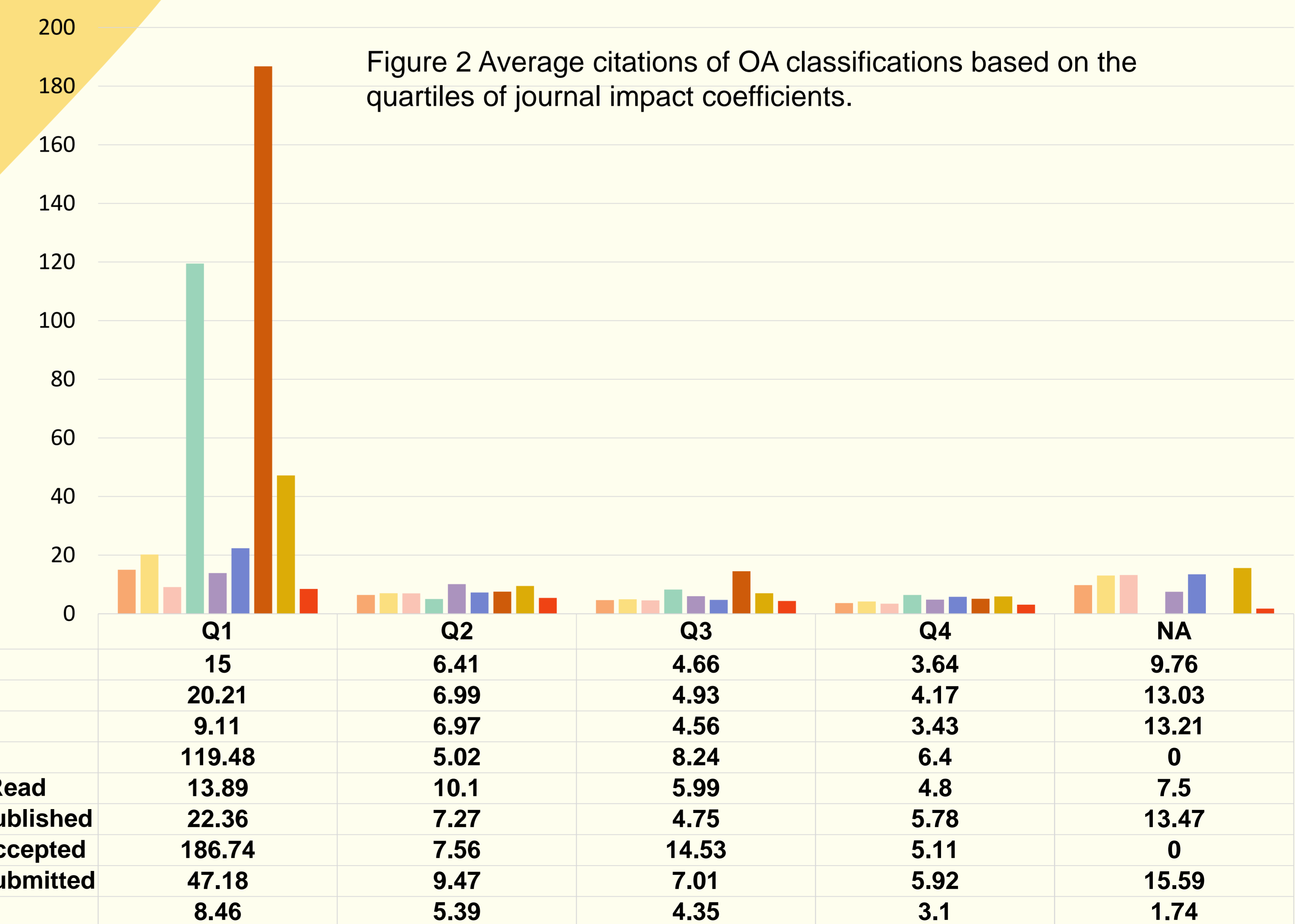
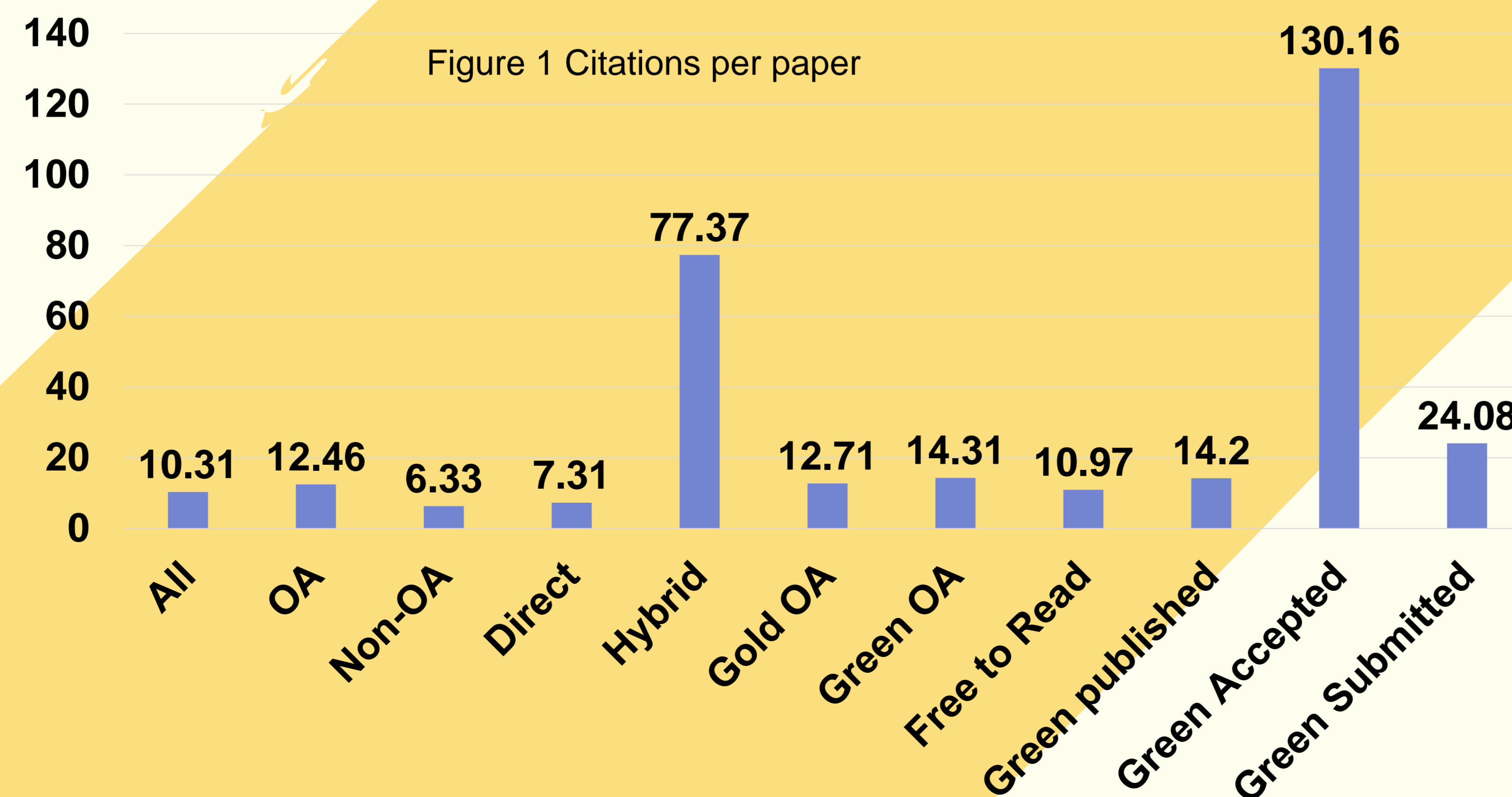


Table 2: Numbers of Open Access Type

Open Access Type	2017-2021 paper numbers	
All	10,586	
Gold OA	4,676 (44.17%)	5,066 (47.85%)
Gold Hybrid	390 (3.68%)	
Free to Read	736 (6.95%)	
Green Published	4,528 (42.77%)	6,118 (57.79%)
Green Accepted	244 (2.3%)	
Green Submitted	1,026 (9.69%)	
Non-OA	4,468 (42.21%)	