

## **CURRENT AND FUTURE TREND OF RESEARCH IN ACADEMIC WRITING: A BIBLIOMETRIC ANALYSIS**

*Evi Karlina Ambarwati, Indah Purnama Dewi, Praditya Putri Utami, Nina Puspitaloka,  
Alvin Yahya Makarim Nazar  
Universitas Singaperbangsa Karawang  
evi.karlina@fkip.unsika.ac.id, indah.purnama@fkip.unsika.ac.id, praditya.putri@fkip.unsika.ac.id,  
nina.puspitaloka@fkip.unsika.ac.id and 2010631060047@student.unsika.ac.id*

Submitted: 2024-03-12

Accepted: 2024-03-25

---

**Abstract:** This study was a comprehensive bibliometric analysis of the literature of Academic Writing in various higher education contexts and mapped the current state of the trend as well as identified gap for future research. There were 991 documents retrieved on Academic Writing in Higher Education from database citation index Scopus (2013 to 2022) under certain conditions. The documents were then analyzed using OpenRefine version 3.5.2, VOSviewer version 1.6.17 from Leiden University, Microsoft Excel and Tableau Desktop from the perspectives of the number of yearly publications, countries, authors, citation numbers, and keywords. The findings show that the number of publications on Academic Writing is generally growing. The research topics shows that academic writing instruction across classroom contexts reflect the 21<sup>st</sup> century life skills and learning through students' active participation, i.e. peer assessment, peer learning, and self-regulation. Likewise, information, media and technology are instilled through e-learning and computer-aided instruction. Last, the functional view of grammar in academic writing establishes new research focus.

**Keywords:** academic writing; bibliometric analysis; research trends

---

### **INTRODUCTION**

Writing is an important skill in academic context. This is the case because writing is the primary communication method in academia (Craswell & Poore, 2011). Likewise, it is one of the most difficult skills for many students to master, either for L1 and L2 users of English (Bailey, 2014). Hence, teaching the skill requires proper attention. Efforts to illuminate teaching academic writing have been made in various classrooms across the globe that handbook for teaching academic writing for each context is mostly available, for example in English as a second language classroom (Paltridge et al., 2009), UK (Ganobcsik-Williams; 2017) and Europe (Björk et al., 2003). Many researches were also conducted to provide pedagogical support.

Various aspects of academic writing are interesting to be researched. Studies were conducted on curriculum models in different classroom contexts, for example genre-based approach in Iran, Japan, Indonesia, UK and China (Ariyanfar & Mitchell, 2020; Nagao, 2019; Wijayanti et al., 2017; Wingate, 2012; X. Xu & Li, 2018); product-based approach in Iraq, Iran, and Malaysia (Abdulrahman & Kara, 2022; Naghdipour, 2016; Nordin & Mohammad, 2018; Selvaraj et al., 2019) as well as process approach in South Africa (Ngubane et al., 2020). Other

researchers looked into the various aspect of feedback for improving students' writing quality (Ferris et al., 2013; Truscott & Hsu, 2008).

However, as with other aspects of life, the new global economy and 21st century society set a new direction for writing instruction. First, many academic writing classrooms instill the 21st century learning and life skills by allowing students to take more initiatives and participations about their writing skill. For example, studies investigated the application of self-regulated learning and metacognition theories to acquire academic writing skill (Chen et al., 2022; Inan-Karagul & Seker, 2021). Likewise, many writing classrooms provided many opportunities for students collaboration (Pham, 2021; Valizadeh, 2022). Last, students were given more social responsibility to provide feedback to their peers (Bürgermeister et al., 2021; Sunzuma et al., 2022).

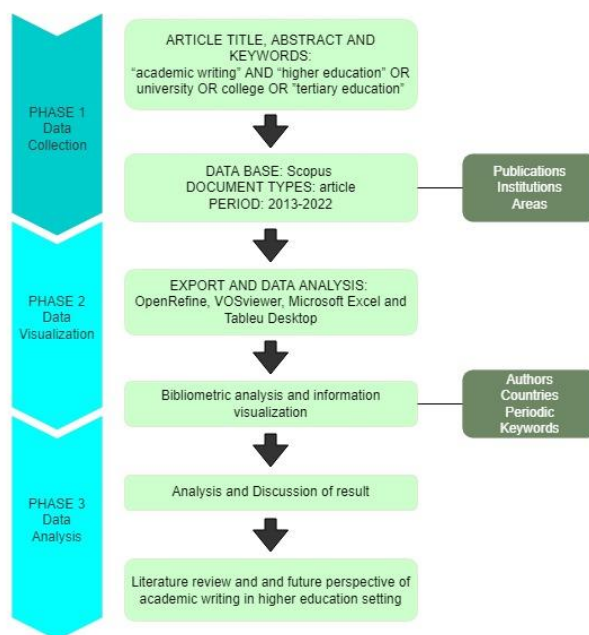
Next, information, media and technology skills creates the technology affordances in writing classroom. For example, studies investigated technology enhanced academic writing instruction in blended learning environment (Rahman et al., 2020; Scott et al., 2020) and flipped classroom (Fathi & Rahimi, 2022; Qader & Arslan, 2019). Various technological tools, such as Google Docs was also utilized to facilitate collaborative writing (Alharbi, 2020; Valizadeh, 2022) and feedback (Alharbi & Alqefari, 2021; Hoa & Lap, 2021). In regards to feedback, though, Automated Writing Evaluation (AWE) is currently popular among students and instructors (Ambarwati, 2021; J. Xu & Zhang, 2022; Zhang & Hyland, 2018). Also, the issue of academic integrity which might result from the timely copy-paste access from the Internet's open sources begin to rise (Ledwith & Rísquez, 2008; Pennycook, 2016; Walker, 2010).

Therefore, considering the significant change in culture, politics, economy and technology development, this article seeks to provide an overview of the current situation and trends in academic writing studies based on database citation index Scopus from 2013 to 2022. Moreover, it aims to provide useful information for future academic writing research by means of data analysis visualization using VOSviewer version 1.6.17, OpenRefine version 3.5.2, Microsoft Excel and Tableau Desktop. Thus, the research questions are to be addressed in the present study: What is the bibliometric information regarding publications about academic writing, including the number of annual publication, authors, and citations?, Who are the most influential authors in the field of academic writing? And What are the publication trends in academic writing?

## **METHOD**

Bibliometric analysis involves quantitative assessment of bibliographic materials by means of statistical methods (Broadus, 1987). This study employed bibliometric analysis of the literature on academic writing in post-secondary classroom context and mapped the current state

of the field, prominent topics as well as predicted the future trend in the field. There were 3 phases involved, i.e. Data Collection, Data Visualization and Data Analysis (Figure 1).



**Figure 1. Bibliometric Analysis Method**

The documents for this study were selected from database citation index Scopus, one of the world’s largest and extensive scientific publication databases across numerous fields. The database was collected on 15 September 2022. There were 1954 sample documents extracted from the title-abstract keywords “academic writing” AND “higher education” OR university OR college OR “tertiary education”. Then, the documents were filtered by the time span of 2013 to 2022. Only article was chosen as the target document type.

Finally, 991 documents were obtained. The documents cover various subject areas, i.e. social science (54.1%), arts and humanities (29.5%), computer science (3.5%), psychology (3.2%), Business, Management and Accounting (2.1%), Engineering (2.1%), Nursing (0.9%), Economics, Econometrics and Finance (0.9%), Medicine (0.8%), and Energy (0.5%). These were exported to an Excel document which include bibliographic information, abstract and keywords. Then, data cleaning was conducted using OpenRefine version 3.5.2 to cluster synonymous words and/or phrases. OpenRefine is a powerful tool to clean the overlapping large data.

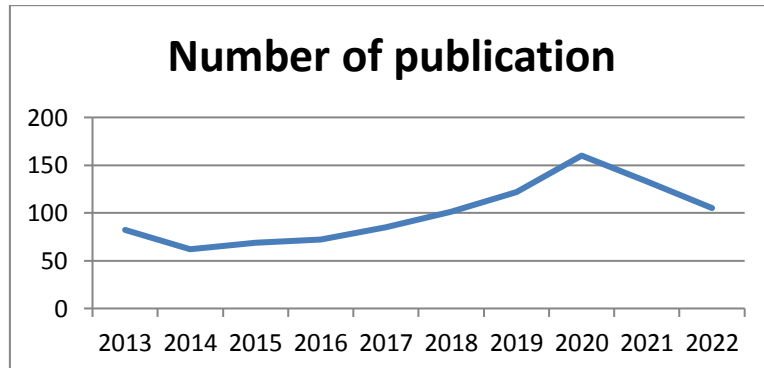
VOSviewer version 1.6.17 from Leiden University was used because of its efficient ability to work with large data set and generate interesting visual and analysis (van Eck & Waltman, 2010). Prior to bibliometric analysis, data cleaning was complementarily performed in the VOSviewer’ Thesaurus menu. VOSviewer, Microsoft Excel and Tableau Desktop were utilized

altogether to visualize the data. Then, publication, authors and journal maps were constructed based on co-citation networks. Likewise, keyword maps based on shared network were created to visualize and analyze the emerging trends and topics in the field of academic writing.

## FINDING AND DISCUSSION

### 1. Bibliometric information: annual publications and articles structures

The database citation index Scopus generated 991 publications about “academic writing in tertiary education” between the year 2013-2022. Figure 2 illustrates the distribution of the publication. It can be seen that the publication quantity about the topic is generally growing. In the beginning of 2013, as many as 80 articles reporting about academic writing were published. The number slightly fluctuated since 2014 to 2015. But it continued to consistently grow for 8 years. Then, the publication number reached its peak in 2020 during the COVID-19 outbreak when 160 scientific reports being published. This climax marks the increasing requirement of writing in academic contexts during the global cooperation (Sun & Lan, 2021). However, the quantity of scholarly articles slowly decreased in the last two years and approximately 100 articles were published in 2022. Regardless the number, the trend shows that studies in academic writing remain significant.



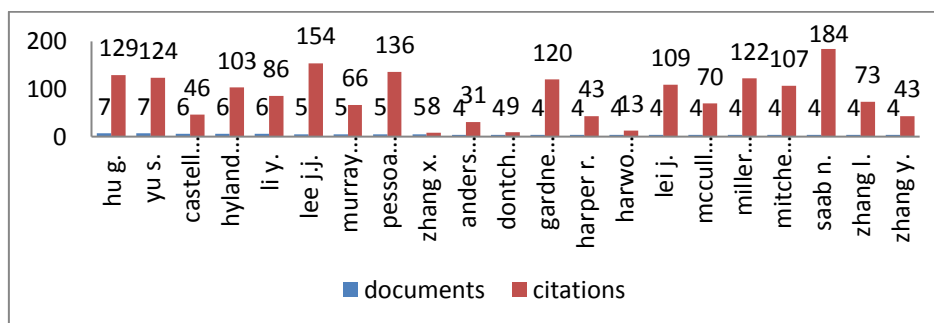
**Figure 2. The quantitative distribution**

### 2. Authors and co-authorship relations

To map authors and their co-authorship relation, authors were selected. Minimum number of documents of a source was adjusted to 4 and minimum number of citation of stated as 0. The number of authors generated under the condition was 21 out of 1880 authors, showing the influential authors in research of academic writing.

Figure 3 depicts the distribution of the 21 authors. It can be seen from the chart that the numbers of published works do not correspond with the number of documents' citations. While Li Hu, Yu, Castello, Hyland and were the top-5 most productive authors, Saab N, Lee J J and Pessoa S were among the most-cited authors with the numbers of citation 184, 154 and 136

consecutively. Interestingly, the three most-cited authors research different areas of academic writing. First, Saab published articles about numerous elements of undergraduate students’ peer feedback throughout the year of 2016-2019. Meanwhile Lee’s works focus on the linguistics aspects, i.e. the lexical, syntax and interactional metadiscourse of the students’ writing. Last, Pessoa have been intensively researching the genre-based pedagogic practices in various classroom contexts. These authors’ contributions to the trend of academic research are found consistent with 21<sup>st</sup> century education integration in writing pedagogy. For example, peer feedback in writing instruction reflects the critical thinking, communication and personal and social responsibility skill (Liu & Edwards, 2018). Also, the authors’ significance works show the contribution of Halliday’s SFL (Halliday & Matthiessen, 2014) to academic writing pedagogy in various classroom contexts.



**Figure 3. Distribution of authors based on numbers of documents and citations**

### 3. Publication trends

In order to visualize the publication trends, the minimum number of keywords occurrence of documents was set to 5 resulting 291 thresholds of 4978 keywords. As depicted in Figure 4, the keywords were generated into 3 clusters. The most highlighted keyword appeared in both Cluster 1 and 3 is “academic writing”. Meanwhile, “student” is highlighted in Cluster 2.

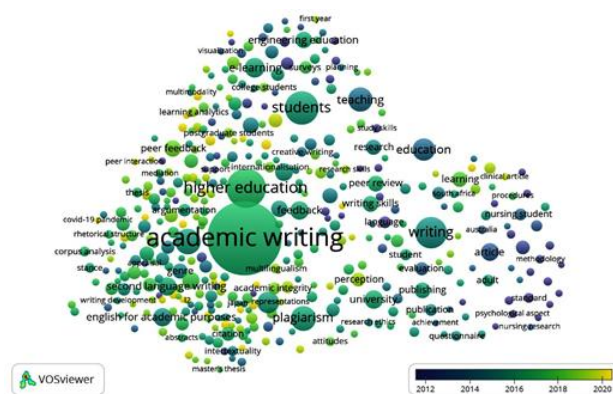
The main keywords in Cluster 1 are closely related to collaboration, i.e. peer interaction, peer learning, and tutoring. Likewise, self-regulation and metacognition are predominant keywords. Last, the main keywords related to integrity are dominant, such as plagiarism and citation. In cluster 2, the spotlighted keyword is “Student”. Similar to that of Cluster 1, the keywords are related to formative assessment, such as peer assessment and peer feedback. Keywords related to writing instruction, i.e. e-learning and computer aided instruction are also prominent. Interestingly, critical thinking is highlighted in the cluster. Lastly, Cluster 3 highlights collaboration, namely peer group and peer review. This cluster also contains keywords which correlate with scholarly writing, such as publication and article, university. It can be seen from all the keywords that the current trend in academic writing research seems to promote 21st century education in which students’ learning and life skills as well as media and technology skills are prepared.



the best use of peer feedback, instructors should provide support for students to gain confidence, such as procedural facilitation, rubrics as well as time to practice.

Other main keywords related to media and technology for academic writing are e-learning and computer aided writing instruction. E-learning has become popular due to technology advances and that emergency learning during COVID19 escalated its popularity. One of the instruction model commonly used is flipped classroom. Indeed, the results from Fathi & Rahimi (2022) shows that students learnt in flipped classrooms have a better performance on writing fluency than non-flipped classrooms. The only drawback was the slight amount of improvement on writing complexity and accuracy due the need of higher processing level of understanding. Another aspect of writing instruction which can be supported by digital tool is feedback. AWE, such as Turnitin, Criterion, Pigai and Grammarly has become a familiar tool for teacher and students, both as the main source of feedback and complement of teacher’s feedback (Xu & Zhang, 2022). The last aspect to be considered in writing instruction in an e-learning environment is Academic Integrity which mainly concerns with one’s honesty and responsibility of academic writing. The issue of unacceptable text borrowing is likely to escalate due to the timely copy-paste access provided by the Internet (Pennycook, 2016).

Finally, Figure 6 depicts a change in distribution of the topics and provides trend in future research. Most of the light-coloured nodes were close to “self-regulated learning”, “e-learning”, “automated writing evaluation”, “research writing” and “academic literacy” after 2019. This shows that these are the emerging research focus. “Plagiarism” and its extension to the larger concept of “academic integrity” also attract researchers’ attention. Some researchers also begin to study the development of twenty first-century skills and academic writing, such as peer review, critical thinking, and self-regulation.



**Figure 6. The overlay visualization map of keywords according to year.**

Hence, it is suggested that there is a need for further research focusing on the contribution of academic writing to instill 21<sup>st</sup> century skills. Many aspects of the skills, i.e. collaboration, communication and critical thinking can be instilled in writing instruction. For example, involving in peer review, students are required to use their critical thinking and collaboration

competence to critically assess their peer's writing drafts. Also, delivering the review to peers allow students to practice their communication skill. Further, research should focus on many aspects of technology integration in writing instruction. For example, integrating automated writing evaluation and e-learning might benefit not only students' digital competence but also their self-regulation and critical thinking.

## CONCLUSION

This bibliometric analysis sought to better understand the current state of the art and emerging research topics on academic writing from 2013-2022. The result shows that there was a growing trend in number of publication within 10 years period which indicates the significance of the field. Further exploration of the publication trend revealed that future research might navigate the 21<sup>st</sup> century learning skills in writing, such as peer feedback and self-regulation in writing class. Likewise, the analysis shows that functional view of grammar in writing attracts many attentions. Hence, more studies about various aspects and contexts of the implementation of the SFL genre based approach in writing are needed.

## REFERENCES

- Abdulrahman, S. A., & Kara, S. (2022). *The Effects of Product Approach on Language Preparatory School Students' Writing Score in an Academic Writing Course*. 2(July), 45–65. <https://doi.org/10.53103/cjlls.v2i4.57>
- Alharbi, M. A. (2020). Exploring the potential of Google Doc in facilitating innovative teaching and learning practices in an EFL writing course. *Innovation in Language Learning and Teaching*, 14(3), 227–242. <https://doi.org/10.1080/17501229.2019.1572157>
- Alharbi, M. A., & Alqefari, A. N. (2021). The impact of teacher feedback via Google Doc in L2 learners' writing. *International Journal of Learning, Teaching and Educational Research*, 20(11), 170–194. <https://doi.org/10.26803/ijlter.20.11.10>
- Ambarwati, E. K. (2021). Indonesian university students' appropriating Grammarly for formative feedback. *ELT in Focus*, 3(1), 1–11.
- Ariyanfar, S., & Mitchell, R. (2020). Teaching writing skills through genre: applying the genre-based approach in Iran. *International Research Journal of Management, IT and Social Sciences*, 7(1), 242–257.
- Broadus, R. N. (1987). Toward a definition of "bibliometrics." *Scientometrics*, 12(5–6), 373–379. <https://doi.org/10.1007/BF02016680>
- Bürgermeister, A., Glogger-Frey, I., & Saalbach, H. (2021). Supporting Peer Feedback on Learning Strategies: Effects on Self-Efficacy and Feedback Quality. *Psychology Learning and Teaching*, 20(3), 383–404. <https://doi.org/10.1177/147572572111016604>
- Chen, J., Zhang, L. J., & Chen, X. (2022). *L2 learners' self-regulated learning strategies and self-efficacy for writing achievement: A latent profile analysis*. <https://doi.org/10.1177/13621688221134967>
- Fathi, J., & Rahimi, M. (2022). Examining the impact of flipped classroom on writing complexity, accuracy, and fluency: a case of EFL students. *Computer Assisted Language Learning*, 35(7), 1668–1706. <https://doi.org/10.1080/09588221.2020.1825097>
- Ferris, D. R., Liu, H., Sinha, A., & Senna, M. (2013). Written corrective feedback for individual L2 writers. *Journal of Second Language Writing*, 22(3), 307–329. <https://doi.org/10.1016/j.jslw.2012.09.009>
- Hoa, N. T. N., & Lap, T. Q. (2021). Investigating the Impact of Peer Feedback and Teacher

- Feedback Using Google Docs on Efl Students' Writing Performance. *European Journal of Education Studies*, 8(10), 15–45. <https://doi.org/10.46827/ejes.v8i10.3926>
- Inan-Karagul, B., & Seker, M. (2021). Improving Language Learners' Use of Self-Regulated Writing Strategies Through Screencast Feedback. *SAGE Open*, 11(4). <https://doi.org/10.1177/21582440211064895>
- Ledwith, A., & Rísquez, A. (2008). Using anti-plagiarism software to promote academic honesty in the context of peer reviewed assignments. *Studies in Higher Education*, 33(4), 371–384. <https://doi.org/10.1080/03075070802211562>
- Nagao, A. (2019). The SFL genre-based approach to writing in EFL contexts. *Asian-Pacific Journal of Second and Foreign Language Education*, 4(1). <https://doi.org/10.1186/s40862-019-0069-3>
- Naghdipour, B. (2016). English writing instruction in Iran: Implications for second language writing curriculum and pedagogy. *Journal of Second Language Writing*, 32, 81–87. <https://doi.org/10.1016/j.jslw.2016.05.001>
- Ngubane, N. I., Ntombela, B., & Govender, S. (2020). Writing approaches and strategies used by teachers in selected South African English First Additional Language classrooms. *Reading and Writing (South Africa)*, 11(1), 1–8. <https://doi.org/10.4102/RW.V11I1.261>
- Nordin, S. M., & Mohammad, N. (2018). The best of two approaches: Process/genre-based approach to teaching writing. *The English Teacher*, 75, 75–85.
- Pennycook, A. (2016). Reflecting on Borrowed Words. *TESOL Quarterly*, 50(2), 480–482. <https://doi.org/10.1002/tesq.294>
- Pham, V. P. H. (2021). The Effects of Collaborative Writing on Students' Writing Fluency: An Efficient Framework for Collaborative Writing. *SAGE Open*, 11(1). <https://doi.org/10.1177/2158244021998363>
- Qader, R. O., & Arslan, F. Y. (2019). *The effect of flipped classroom instruction in writing: A case study with Iraqi EFL learners*. 19(1), 36–55.
- Rahman, A. M. A., Azmi, M. N. L., & Hassan, I. (2020). Improvement of English Writing Skills through Blended Learning among University Students in Malaysia. *Universal Journal of Educational Research*, 8(12A), 7694–7701. <https://doi.org/10.13189/ujer.2020.082556>
- Scott, D., Ulmer-Krol, S., & Ribeiro, J. (2020). Enhancing the academic writing abilities of first-year bachelor of education students in a blended learning environment. *International Journal of Teaching and Learning in Higher Education*, 32(1), 87–98. <https://eric.ed.gov/?q=Enhancing+the+academic+writing+abilities+of+first-year+bachelor+of+education+students+in+a+blended+learning+environment&id=EJ1259546>
- Selvaraj, M., Aziz, A. A., Selvaraj, M., & Aziz, A. A. (2019). *Systematic Review : Approaches in Teaching Writing Skill in ESL Classrooms Systematic Review : Approaches in Teaching Writing Skill in ESL Classrooms*. 8(4). <https://doi.org/10.6007/IJARPED/v8-i4/6564>
- Sun, Y., & Lan, G. (2021). Research trends in 'trans-' studies on writing: A bibliometric analysis. *System*, 103(8), 102640. <https://doi.org/10.1016/j.system.2021.102640>
- Sunzuma, G., Zezekwa, N., Gwizangwe, I., & Zinyeka, G. (2022). Peer feedback versus teacher educators feedback in peer teaching: Zimbabwean teacher educators and pre-service teachers' views. *Pedagogical Research*, 7(3), em0130. <https://doi.org/10.29333/pr/12097>
- Truscott, J., & Hsu, A. Y. ping. (2008). Error correction, revision, and learning. *Journal of Second Language Writing*, 17(4), 292–305. <https://doi.org/10.1016/j.jslw.2008.05.003>
- Valizadeh, M. (2022). Collaborative Writing on Google Docs: Effects on EFL Learners' Descriptive Paragraphs. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 6(2), 277–287. <https://doi.org/10.21093/ijeltal.v6i2.1053>
- Walker, J. (2010). Measuring plagiarism: researching what students do, not what they say they do. *Studies in Higher Education*, 35(1), 41–59. <https://doi.org/10.1080/03075070902912994>
- Wijayanti, M. A., Emilia, E., & Gunawan, W. (2017). Genre Pedagogy to the Teaching of

- Academic Writing in Tertiary Level and Cognitive Empowerment. *Journal of English Language Studies*, 2(2), 120–131. <https://doi.org/10.30870/jels.v2i2.2239>
- Wingate, U. (2012). Using Academic Literacies and genre-based models for academic writing instruction: A “literacy” journey. *Journal of English for Academic Purposes*, 11(1), 26–37. <https://doi.org/10.1016/j.jeap.2011.11.006>
- Xu, J., & Zhang, S. (2022). Understanding AWE Feedback and English Writing of Learners with Different Proficiency Levels in an EFL Classroom: A Sociocultural Perspective. *Asia-Pacific Education Researcher*, 31(4), 357–367. <https://doi.org/10.1007/s40299-021-00577-7>
- Xu, X., & Li, X. (2018). Teaching academic writing through a process-genre approach: A pedagogical exploration of an EAP program in China. *Tesl-Ej*, 22(2), 1–21.
- Zhang, Z. (Victor), & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing*, 36(February), 90–102. <https://doi.org/10.1016/j.asw.2018.02.004>