

Paper Analysis of Shanghai Ocean University in Bibliometric Method from Web of Science

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Abstract

The data of this research was mainly collected from the Web of Science (WOS) and Incites database platform, which was filtered and cataloged according to the different platforms. For tracing the change in scientific research at Shanghai Ocean University, make use of Bibliometric analysis to get the image and table of highly cited papers and hot papers. In this study, the scientific aspects in highly cited papers and hot papers, published in the last year in the core collection of Web of Science, were taken as objects, and office software was used as the main tool to carry out bibliometric and figure analysis. From the four aspects to find the difference in these fields, the production of specific fields and cited times is inconsistent. And suggest the department and management adjust the policy and method via elastic personnel and rewards to prompt the advancement of the research fields.

Keywords

Highly Cited Papers, Hot Paper, Shanghai Ocean University, Comparison, Cited Times, Author

1. Introduction

Shanghai Ocean University, founded in 1912, has gradually become a multidisciplinary university in recent years [1], which is famous for Marine Science, Aquaculture and life science, food science and management-related with these fields via information science and technology to explore the innovation and development in traditional disciplinary. Many fields contain brand-new educational meaning. To master the trend of educational development and construct the comparative and collaboration both in the world and domestic higher education. One of the most useful and correct methodological approaches in bibliometrics is ranking. The paper considers theoretical definitions of such terms

compared to their real sense in the course of bibliometric research. [2] Cited in scientific literature, shows more complexity. For example, Garfield mentioned 15 cited causes in 1964, and cited times could not reveal the purpose of author using the cited paper. [3] With the development of full text literatures acquiring and full-text mining technology, literature type identified was applied in cited purpose of author, push cited purpose of author into the new research era. [4]

2. Method

Web of Science (WOS) (2023-present) and Incites database (2017-2021).

Combined search with keywords = “shanghai ocean university” and keyword = 2023.

Bibliometric analysis to get the figure and table so as to evaluate advancement of this university from cited times and author and journal and research fields.

How to choose Highly cited paper and hot paper?

Highly cited paper is chosen according to the standard such as at the same period and in the same field, cited paper is sorted on the 1% of the specialty.

Hot paper is selected by the criteria, which is in recent two years, cited times of publishing article sorted on 0.1% in recent two months.

3. Result and Discussion

Retrieval of the incite database and Web of Science (WOS) to get the data about research fields, author publishing most area and Highly cited paper and hot paper as mentioned in method. There are 28 highly cited papers and 1 hot paper from the research platform.

3.1. Web of Science Paper% in the Fields

Table 1 shows 25 out of 112 entries, 33 record(s) (2.865%) do not contain data in the field being analyzed (deadline is Nov. 3rd, 2023).

Environmental Sciences Ecology is in the top 1 in the research area list, which WOS paper accounts for 36831.94% of 1152. The second group is Biochemistry Molecular Biology, Marine Freshwater Biology, Food Science Technology, Zoology and Genetics Heredity respectively above 20% of 1152. The third group is Fisheries, Chemistry and Science and Technology Other Topics above 15% of 1152. There are 16 research areas under 15% of 1152, and most of 16 research areas is 14.41% of 1152.

3.2. Data from the Incite Database and GIPP

GIPP is a kind of standard to get data from the incite database.

Author Publishing Most Area

According to GIPP standards catalog the fields and count the data. Seeing **Figure 1**, Life science is 57% and the domain in author publishing most area, and the proportion in the amount than last 5 years. Other decreases respectively than

last five years, compared with my research history.

3.3. Highly Cited Paper (HCP)

3.3.1. Fields

In **Figure 2**, ES/WR, Food Science and Technology, Fisheries/Marine & Freshwater Biology and multidisciplinary science occupy the top 3 of the first group in the highly cited paper publishing most fields. There are 3 fields in the second group, including Chemistry/Medicinal, Biology and Agriculture. Others are in the third group, including 5 fields only 1 time.

Table 1. Web of Science paper% in the fields.

Research Areas	Record Count	% of 1152	Rank
Environmental Sciences Ecology	368	31.944	1
Biochemistry Molecular Biology	328	28.472	2
Marine Freshwater Biology	328	28.472	2
Food Science Technology	279	24.219	4
Zoology	258	22.396	5
Genetics Heredity	242	21.007	6
Fisheries	228	19.792	7
Chemistry	193	16.753	8
Science Technology Other Topics	189	16.406	9
Engineering	166	14.410	10
Nutrition Dietetics	135	11.719	11
Toxicology	124	10.764	12
Infectious Diseases	117	10.156	13
Agriculture	112	9.722	14
Public Environmental Occupational Health	111	9.635	15
Microbiology	106	9.201	16
Pharmacology Pharmacy	100	8.681	17
Physiology	93	8.073	18
Immunology	86	7.465	19
Materials Science	83	7.205	20
Veterinary Sciences	76	6.597	21
Biodiversity Conservation	71	6.163	22
Oceanography	70	6.076	23
Computer Science	69	5.990	24
Physics	67	5.816	25

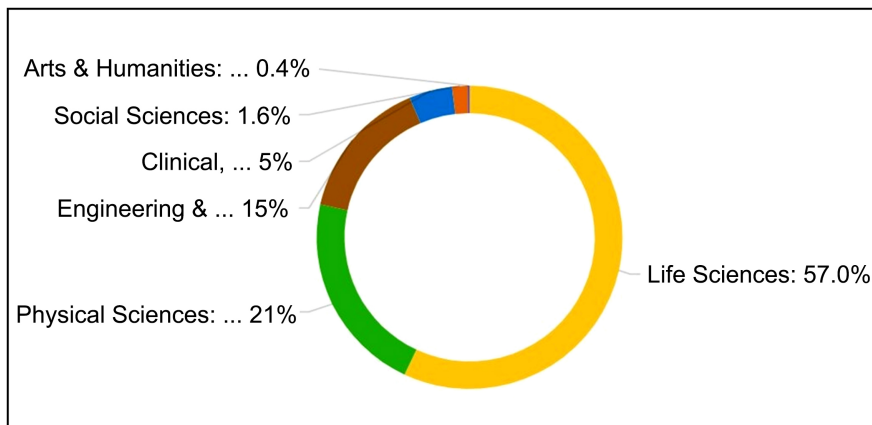


Figure 1. Author publishing most areas.

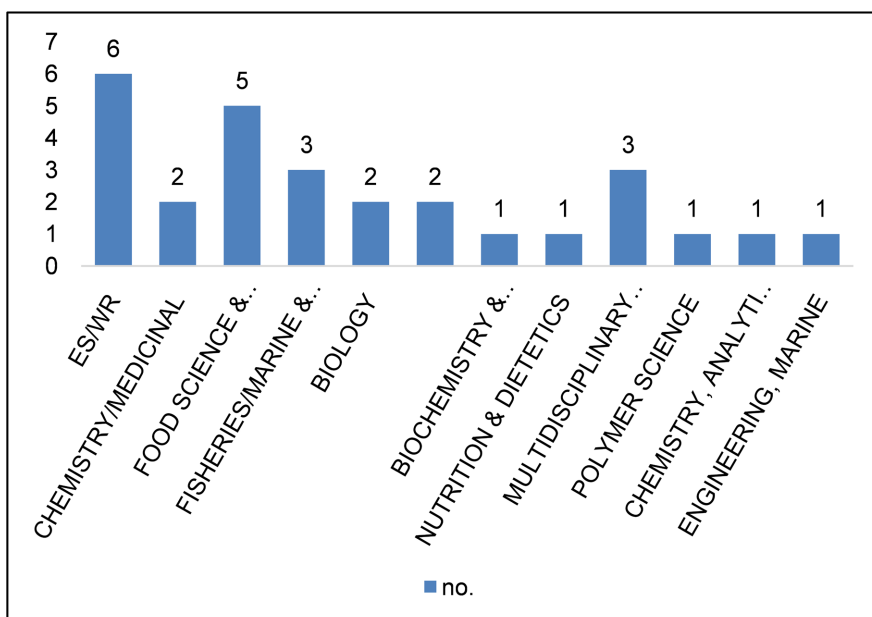


Figure 2. Highly cited paper publishing in most fields.

3.3.2. Source

Highly cited paper publishing most Journal is focused on. In Figure 3 except for Food chemistry and scientific reports, another highly cited paper publishing most journals is at the same level.

3.3.3. Author

According to Stanford University published recently in the sixth version [5] [6], eleven authors from Shanghai Ocean University entered the World’s Top 2% Scientists 2023. And to make our excited that Yu, Fei is on the name list of career-long impact. In our research in authors, the results is not the same as the above.

In our research, Li, Li and Xing, Yihan is on the top one of highly cited paper publishing most. Wang, Zhaocai, Cao, Yu and Xie, Jing is in the second group. Yu, Fei and Liu, Kehai is only in the third group. Others, including 9 authors, is in the same trend of Figure 4.

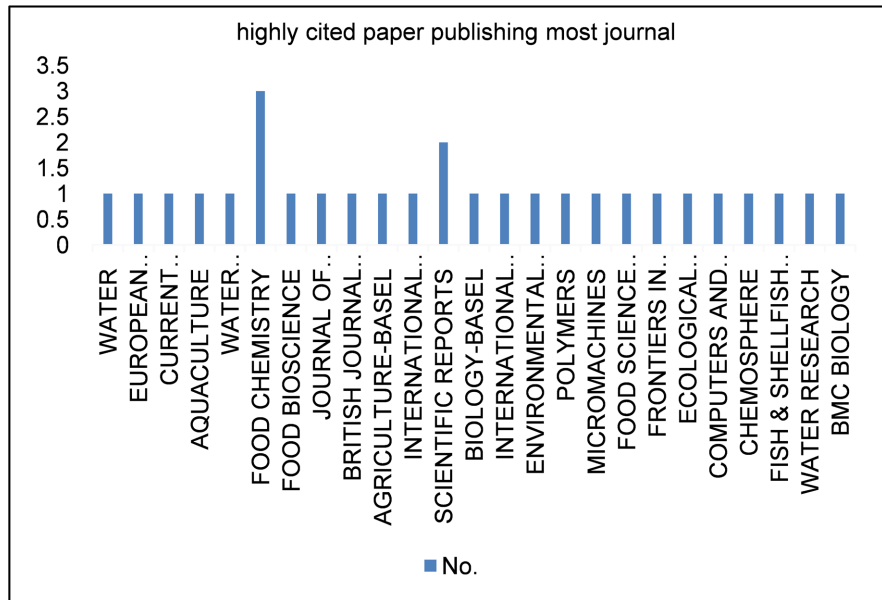


Figure 3. Highly cited paper publishing most journals.

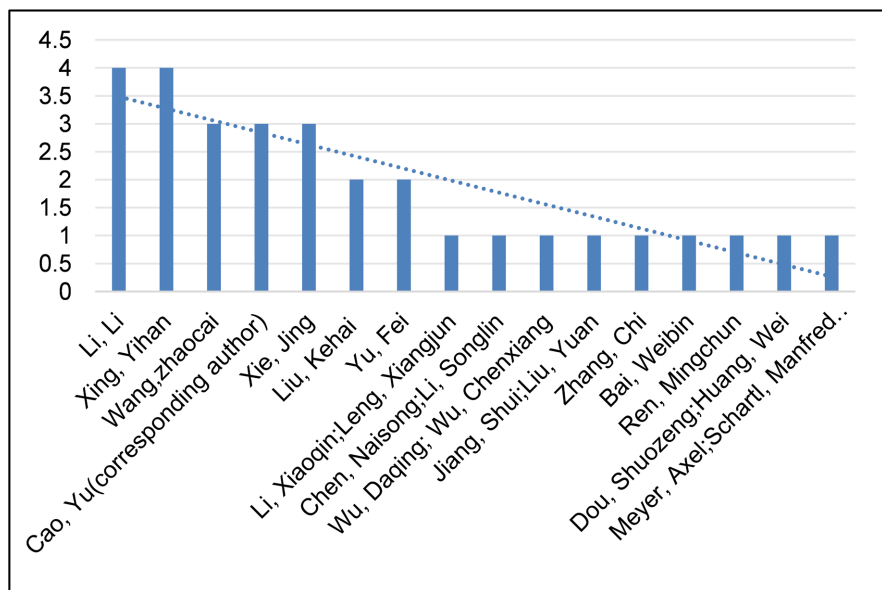


Figure 4. Highly cited paper publishing most authors.

3.3.4. Cited Times

As Figure 5 shows, the 12 fields lie in the distinctly difference of the cited times no matter how total or core cited times. ES/WR, Food Science & ...and Agriculture, ... are on the top 3 respectively.

3.4. Hot Paper

There is one hot paper in Shanghai Ocean University in recent years (2022-2023). This paper mainly researches in Multidisciplinary Sciences. And the paper is an achievement by international collaboration, cooperating with Univ Stavanger.

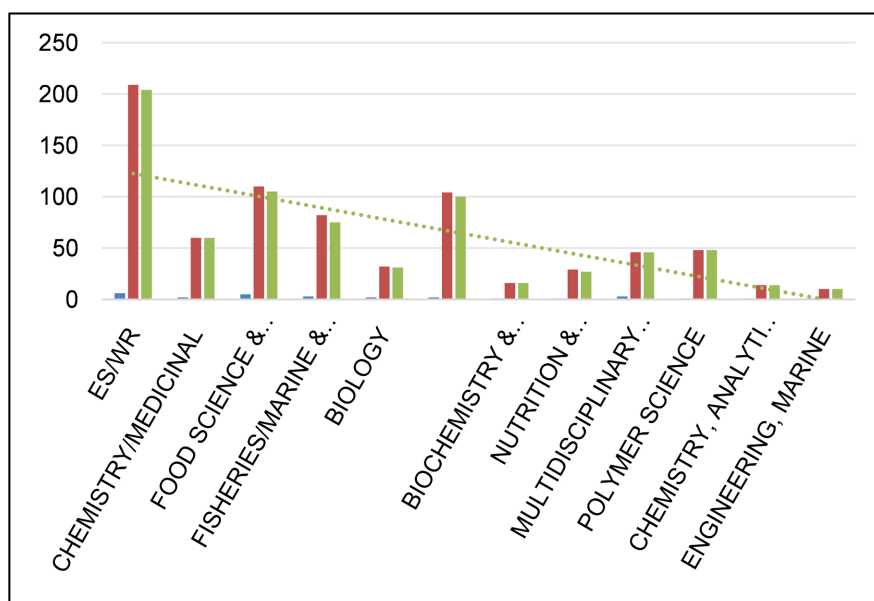


Figure 5. Cited times publishing most area.

3.4.1. Field

Multidisciplinary Sciences (hot paper).

3.4.2. Source

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3.4.3. Author

According to the article, we know that Xing, Yihan is the corresponding author, and all of the authors are Gaidai, O (Gaidai, Oleg), Yan, P (Yan, Ping), Xing, YH (Xing, Yihan) respectively.

3.4.4. Cited Times

The total cited times is 20. (DOI10.1038/s41598-023-27547-x)

In the article which titled is **Future World Cancer Death Rate Prediction**, tells us the cancer is world illness which causes significant morbidity and death and imposes an immense cost in public health. Refer to the causes do the related scientific experiment to get the solution. According to the abstract written by author to know the advance of the research in the future. Read the abstract in the detail as follow.

Abstract: Cancer is a worldwide illness that causes significant morbidity and death and imposes an immense cost on global public health. Modelling such a phenomenon is complex because of the non-stationarity and complexity of cancer waves. Apply modern novel statistical methods directly to raw clinical data. To estimate extreme cancer death rate likelihood at any period in any location of interest. Traditional statistical methodologies that deal with temporal observations of multi-regional processes cannot adequately deal with substantial regional dimensionality and cross-correlation of various regional variables. Setting:

multicenter, population-based, medical survey data-based biostatistical approach. Due to the non-stationarity and complicated nature of cancer, it is challenging to model such a phenomenon. This paper offers a unique bio-system dependability technique suited for multi-regional environmental and health systems. When monitored over a significant period, it yields a reliable long-term projection of the chance of an exceptional cancer mortality rate. Traditional statistical approaches dealing with temporal observations of multi-regional processes cannot effectively deal with large regional dimensionality and cross-correlation between multiple regional data. The provided approach may be employed in numerous public health applications, depending on their clinical survey data.

4. Conclusion

Through our research, Shanghai Ocean University is in a transforming period, which research owes to the historic accumulation and brand new innovation and development. Joint research with foreign colleges is a good way to expand the range of research and affection, incited and reference research will be a potential issue. Detailed research in reference and analysis the output via software will be a good way to learn more about the trends of the university.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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