

THE ART OF WRITING AND CRAFTING LITERATURE REVIEW

by

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What is LITERATURE REVIEW ?

A literature review is a critical summary of all the published works on a particular topic.

- It analyses specific issues
- It identifies trends in research
- It points out research gaps in existing literature

Why LITERATURE REVIEW ?



Siti Khadijah Hubadillah

FOLLOW

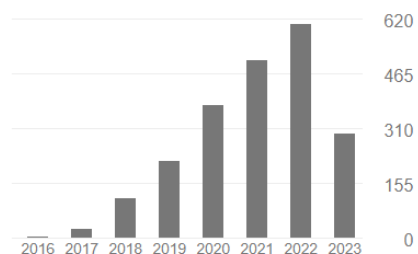
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Water and wastewater Trea... Membrane Technology Ceramic Membrane Waste Management

TITLE	CITED BY	YEAR
<input type="checkbox"/> Fabrications and applications of low cost ceramic membrane from kaolin: A comprehensive review SK Hubadillah, MHD Othman, T Matsuura, AF Ismail, MA Rahman, ... Ceramics International 44 (5), 4538-4560	242	2018
<input type="checkbox"/> A novel green ceramic hollow fiber membrane (CHFM) derived from rice husk ash as combined adsorbent-separator for efficient heavy metals removal SK Hubadillah, MHD Othman, Z Harun, AF Ismail, MA Rahman, J Jaafar Ceramics International 43 (5), 4716-4720	114	2017
<input type="checkbox"/> Fouling mitigation in forward osmosis and membrane distillation for desalination WJ Lee, ZC Ng, SK Hubadillah, PS Goh, WJ Lau, MHD Othman, AF Ismail, ... Desalination 480, 114338	111	2020
<input type="checkbox"/> Hydrophobic ceramic membrane for membrane distillation: A mini review on preparation, characterization, and applications SK Hubadillah, ZS Tai, MHD Othman, Z Harun, MR Jamalludin, ... Separation and Purification Technology 217, 71-84	98	2019
<input type="checkbox"/> Fabrication of low cost, green silica based ceramic hollow fibre membrane prepared from waste rice husk for water filtration application SK Hubadillah, MHD Othman, AF Ismail, MA Rahman, J Jaafar, ... Ceramics International 44 (9), 10498-10509	98	2018
<input type="checkbox"/> Novel hydroxyapatite-based bio-ceramic hollow fiber membrane derived from waste cow bone for textile wastewater treatment SK Hubadillah, MHD Othman, ZS Tai, MR Jamalludin, NK Yusuf, ... Chemical Engineering Journal 379, 122396	94	2020

Cited by

	All	Since 2018
Citations	2167	2126
h-index	26	26
i10-index	41	41



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Where is **LITERATURE REVIEW** in your thesis

In a thesis, the literature review is typically a separate chapter or section that comes after the introduction and before the methodology or research design chapter (Chapter 2). It serves as a critical evaluation and synthesis of the existing literature relevant to your research topic.

How a literature review helps scientist and readers

- Readers are able to:
 - Form an idea about the current state of understanding on a topic
 - Decide whether to read each article individually.

- Scientist are able to:
 - Learn about developments in the field
 - Find gaps in research
 - Identify new topics of research

Type of LITERATURE REVIEW ?

- Domain-based review
 - Structured review
 - Framework-based review
 - Bibliometric review
 - Hybrid review
 - Review aiming for theory development

- Theory-based review
- Method-based review
- Meta analytical review

□ Domain-based review: Structured review

- A structured review is a systematic and organized process of evaluating and summarizing existing literature or research on a specific topic.
- It involves predefined criteria and methods to identify, select, and analyze relevant studies.
- Structured reviews aim to provide a comprehensive and unbiased summary of the available evidence, often used to inform decision-making, identify research gaps, or guide future studies.
- They typically follow a rigorous methodology, such as defining research questions, conducting a comprehensive search, assessing the quality of included studies, and synthesizing the findings in a structured format.

□ Domain-based review: Structured review

Ceramics International 44 (2018) 4538–4560



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Ceramics International

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Review article

Fabrications and applications of low cost ceramic membrane from kaolin: A comprehensive review



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ABSTRACT

The application of low cost ceramic membrane from kaolin has attracted much interest due to its excellent mechanical stability, chemical and thermal resistivity and most importantly, because it is cost effective, in some cases, compared to polymeric membranes. The advantage of kaolin based ceramic membrane is its thermal properties that allow sintering at much lower temperature than alumina. Although many studies have been made on the application of kaolin based ceramic membranes, detailed discussions were scarcely made and the information on the fabrication of ceramic membrane from kaolin is very limited. This article is aimed to make a comprehensive review on ceramic membrane from kaolin for its fabrication methods and applications. An attempt is also made to show the future direction of the R and D on the kaolin based ceramic membrane.

□ Domain-based review: Framework-based review

- A framework-based review is a type of literature review that utilizes a conceptual framework or theoretical framework to guide the analysis and interpretation of research studies.
- The framework serves as a structure for organizing and categorizing the literature, allowing researchers to systematically examine the existing knowledge within a specific field or topic.
- It provides a theoretical lens through which the findings of individual studies can be analyzed, compared, and synthesized.
- The framework may consist of key concepts, variables, relationships, or theoretical perspectives that are relevant to the research area.
- By employing a framework-based approach, researchers can gain deeper insights into the subject matter and identify patterns, trends, or gaps in the literature that can inform further research or theory development.

□ Domain-based review: Framework-based review

Sleep Medicine Reviews 65 (2022) 101670



Contents lists available at [ScienceDirect](#)

Sleep Medicine Reviews

journal homepage: www.elsevier.com/locate/smr



Sleep and affect: A conceptual review



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ABSTRACT

Everyday experience suggests that sleep and affect are closely linked, with daytime affect influencing how we sleep, and sleep influencing subsequent affect. Yet empirical evidence for this bidirectional relationship between sleep and affect in non-clinical adult samples remains mixed, which may be due to heterogeneity in both construct definitions and measurement. This conceptual review proposes a granular framework that deconstructs sleep and affect findings according to three subordinate dimensions, namely domains (which are distinct for sleep and affect), methods (i.e., self-report vs. behavioral/physiological measures), and timescale (i.e., shorter vs. longer). We illustrate the value of our granular framework through a systematic review of empirical studies published in PubMed (N = 80 articles). We found that in some cases, particularly for sleep disturbances and sleep duration, our framework identified robust evidence for associations with affect that are separable by domain, method, and timescale. However, in most other cases, evidence was either inconclusive or too sparse, resulting in no clear patterns. Our review did not find support for granular bidirectionality between sleep and affect. We suggest a roadmap for future studies based on gaps identified by our review and discuss advantages and disadvantages of our granular dimensional framework.


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□ Domain-based review: Bibliometric review

- A bibliometric review is a type of literature review that focuses on analyzing and evaluating the scientific literature based on quantitative measures and statistical analysis of bibliographic data.
- It involves using bibliometric techniques to study patterns and trends within a specific field of research, such as publication output, citation patterns, authorship collaborations, journal impact factors, and co-citation analysis.
- Bibliometric reviews aim to provide an objective assessment of the scholarly literature by examining various bibliographic indicators.
- These reviews can help identify influential authors, leading journals, significant research themes, and the overall impact of research in a particular field.
- They are often used to understand the growth and development of a discipline, track research trends, and evaluate the impact and influence of individual papers, authors, or institutions.


□ Domain-based review: Bibliometric review


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Cleaner and Circular Bioeconomy

journal homepage: www.elsevier.com/locate/clcb





Conversion of organic wastes into biofuel by microorganisms: A bibliometric review

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Renewable energy
Microorganisms
Fermentation

ABSTRACT

This paper presents a bibliometric research of scientific documents on biofuel production from organic wastes extracted from the Web of Science (WoS) database. Original research and conference proceeding articles published until 2022 year were considered, which resulted in 773 documents. The objective of the study was to track evolutionary nuances and emerging trends of the topic, as well as upgrade knowledge in the area and help formulate scientific policies. The work concentrated on the most productive countries, authors and journals, as well as authors' keywords in documents relating to the biofuel conversion from biomass. The first paper on the field was published in 2004, and the publication number showed increasing trend with over 27% annual growth. The USA, followed by China demonstrated the highest publication and citation number. The thematic map analysis displayed the multidisciplinary nature of the topic, implying that the progress of several research domains is required for this technology. This is the first bibliometric review on biofuel from organic waste by microorganisms in the literature. The investigation results emphasize the need for further research in the area and also highlights the need for higher collaboration.

□ Domain-based review: Hybrid review

- A hybrid review is a type of literature review that combines elements of different review methodologies or approaches.
- It integrates qualitative and quantitative methods to provide a comprehensive understanding of a research topic.
- In a hybrid review, researchers may combine elements of systematic reviews, meta-analyses, qualitative syntheses, or other review methods to address the specific objectives of their study.
- This approach allows for a more nuanced analysis by incorporating both numerical data and qualitative insights from the literature.
- A hybrid review may involve systematically searching and selecting relevant studies, assessing their quality, extracting data, and conducting both qualitative and quantitative analyses.
- By blending different review techniques, a hybrid review can provide a more holistic and multidimensional perspective on a research topic, enhancing the richness and depth of the findings.

□ Domain-based review: Hybrid review



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Journal of Business Research

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Social influence research in consumer behavior: What we learned and what we need to learn? – A hybrid systematic literature review

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ABSTRACT

Social influence plays a significant role in shaping consumer behavior, and research in this area comprises a substantial portion of the literature. Despite the vast number of studies conducted over the decades, no comprehensive evaluation of the current state of research or potential gaps for future investigation has been performed. Therefore, the primary objective of this study is to conduct a hybrid systematic literature review to provide an overview of the current status of research on social influence in consumer behavior employing bibliometric analysis. The study also utilizes the Theory-Context-Characteristics-Methodology (TCCM) framework to evaluate the theories, context, characteristics, and methodologies used in this field. Ultimately, this study offers implications for both scholars and practitioners and provides directions for future research in this area.

□ Domain-based review: Review aiming for theory development

- A very significant number of review articles published in highly exclusive business journals, such as Academy of Management Review or Academy of Marketing Science Review, fall in this category.
- In this case, authors typically develop theoretical models and/or testable hypotheses or propositions in such theory-building review articles.
- However, they do not necessarily proceed to test those models and/or theoretical propositions in the same article. Paul and Mas' (2019) article on 'Toward a 7 P framework for international marketing' is a clear example for this type of work.
- Very recently, Post, Sarala, Gatrell, and Prescott (2020) provide a great contribution with plenty of indications and guidelines about how to advance theory by means of review articles.

□ Theory-based review

- A theory-based review is a type of literature review that focuses on evaluating and synthesizing existing literature within the context of a specific theoretical framework or theoretical perspective.
- It involves examining the literature through the lens of a particular theory to gain deeper insights and understanding of the research topic.
- The theoretical framework serves as a guiding framework for analyzing and interpreting the findings of the reviewed studies.
- The goal of a theory-based review is to explore how the literature aligns with or contributes to the existing theoretical understanding of a phenomenon or concept.
- Researchers conducting a theory-based review may identify key concepts, constructs, or relationships within the theoretical framework and examine how they are addressed or supported by the literature.
- This type of review helps researchers identify gaps, contradictions, or areas for further theoretical development in the field.

☐ Method-based review

- A method-based review is a type of literature review that focuses on evaluating and analyzing research studies based on the methods or methodologies employed in the studies.
- It involves examining the research design, data collection methods, data analysis techniques, and overall rigor of the included studies.
- Method-based reviews aim to assess the quality and reliability of the research methods used in the literature and provide an understanding of the strengths and limitations of the studies.
- This type of review may involve critiquing the study designs, sample sizes, sampling techniques, data collection instruments, statistical analyses, and other methodological aspects of the included studies.
- By focusing on the methods, a method-based review helps researchers evaluate the validity and generalizability of the findings and assess the overall quality of the research in a specific field or topic.

□ Meta analytical review

- A meta-analytical review is a type of literature review that involves the statistical analysis of data from multiple individual studies to generate a quantitative summary or estimate of the effect size or relationship between variables.
- It aims to synthesize and combine the findings of multiple studies to provide a more robust and precise estimate of the research question or hypothesis. In a meta-analytical review, researchers systematically identify and select relevant studies, extract data, and analyze the data using statistical techniques to determine the overall effect size or relationship.
- By pooling data from multiple studies, meta-analytical reviews can increase the statistical power, reduce random variation, and provide a more accurate estimation of the true effect or relationship in the population.
- They are often used to examine the effectiveness of interventions, evaluate the impact of treatments, or explore the association between variables across multiple studies.

Thumb rules and suggestions for developing an impactful review article

- Topic selection
- Journal selection criteria, identification of streams and period coverage
- Appropriate title
- Research gaps and importance of directions for future research
- Tables/figures

10 STEPS to do a LITERATURE REVIEW

1. Define your research question
2. Determine inclusion criteria
3. Develop a search strategy
4. Conduct the literature search
5. Screen and select studies:
6. Extract data
7. Analyze and synthesize the findings
8. Interpret and discuss the results
9. Write the literature review
10. Revise and update

You can write your literature review using one of the following approaches:



Chronological



Thematic



TIPS for using the **chronological approach**

- Use this structure when you want to focus on how ideas or methodology have progresses over time.
- Group and discuss your sources in order of their publication date.
- Record the research and developments in each group.
- Check how the field has developed over the years. Do all studies discuss a common topic?
- Example: how models for treatment methods for skin cancer in children have developed over a specific period.

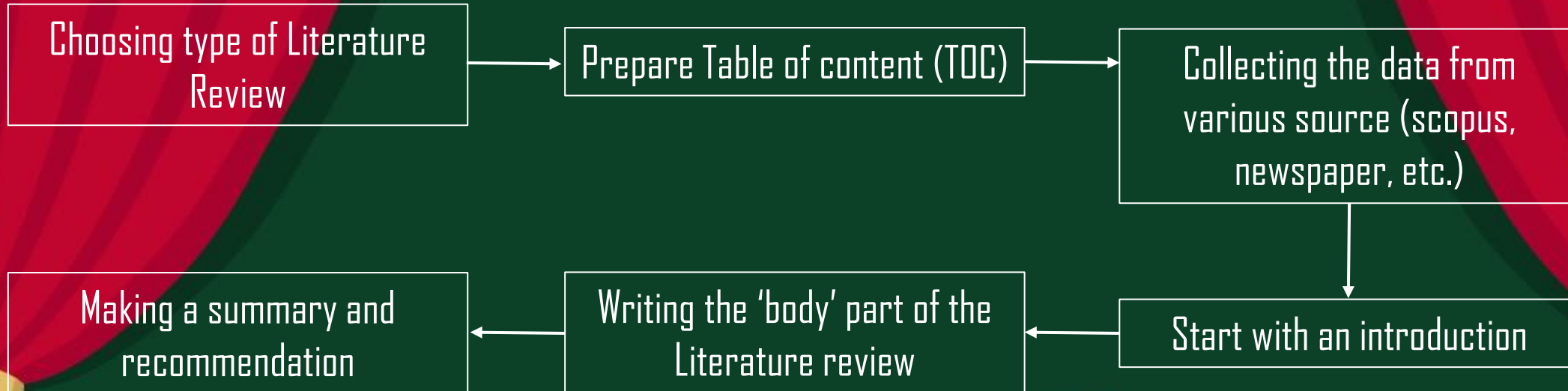


TIPS for using the thematic approach

- Remember that you need to do much more than summarizing each study.
- Analyse existing knowledge on the topic with regard to certain important issues.
- Draw the readers' attention to new angles or perspectives.
- Start listing citations you may include in your paper.



Flow in writing a literature review :



How to write INTRODUCTION in a LITERATURE REVIEW

- 1) **Start with a compelling opening:** Begin your introduction with an attention-grabbing statement or a brief anecdote that highlights the importance or relevance of your research topic. This helps to engage your readers from the beginning.
- 2) **Provide background information:** Offer a brief overview of the general area or field of study in which your topic falls. Explain the significance of the topic and why it is worthy of investigation. Include any relevant historical or theoretical background that will help the readers understand the context of your research.
- 3) **State your research objectives or purpose:** Clearly state the specific research question or objective of your literature review. Explain what you aim to achieve by conducting the review and how it contributes to the existing knowledge in the field.

- 4) Outline the scope and organization:** Briefly describe the scope of your literature review. Indicate the boundaries or limitations you have set for your review, such as specific time periods, geographical areas, or types of studies included. Additionally, provide a clear roadmap of how the review will be organized, highlighting the main sections or themes you will cover.
- 4) Discuss the relevance and gaps in the literature:** Explain why a comprehensive review of the existing literature is necessary. Highlight any gaps, inconsistencies, or unresolved questions in the current knowledge base that your review seeks to address. Emphasize how your review will contribute to filling those gaps or advancing understanding in the field.
- 5) Summarize the structure of the review:** Give a brief overview of the main sections or chapters of your literature review. This provides a roadmap for readers to follow and helps them anticipate the content they can expect in the subsequent sections.

- 6) Conclude the introduction:** Close your introduction with a clear transition to the main body of your literature review. You can briefly summarize the key points you have discussed and emphasize the significance of your research in addressing the research question or problem at hand.
- 7) Remember to keep your introduction concise, engaging, and focused.** It should provide enough background information to orient the readers and set the context for your review without going into excessive detail.

Examples on Writing INTRODUCTION in Literature Review



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Recent progress on low-cost ceramic membrane for water and wastewater treatment

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1. Introduction

1.1. History of membrane technology – when it was started?

Membrane systems are regarded as a “global innovation” owing to their low cost of service, ease of use, and excellent energy efficiency [1]. Prior work on these methods was conducted on animals such as pig bladders, cattle, or fish, as well as animal intestine sausage casings [2]. Despite these challenges, due to the non-reproducible drug, this situation cannot be explored further. Bechhold [3] patented nitrocellulose

membranes of uniform pore size in 1907 and many others have improved the design. Surprisingly, even by early 1930s, microporous colloid membranes had been developed and made available to consumers. Within the next 30 years, this early microfiltration membrane production was extended to other polymers, most notably cellulose acetate, which Loeb and Sourirajan [4] produced using phase inversion techniques that resulted to asymmetrical membrane. Membranes were not thought to be suitable for any use at the time. Recently, membrane processing has blossomed, and many people believed that it would overcome both separation and even reaction problems, and numerous polymeric membranes have been widely spread around the world.

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passed 84% of the world's currently operating desalination facilities, accounting for 69% of overall global desalinated water, and continuing to grow in numbers [10]. Desalination using RO start with water that is driven to migrate through a semi-permeable membrane by strong external pressure from a region of high solute concentration (high osmotic pressure) to a region of low solute concentration (low osmotic pressure), leaving behind salts and other minerals [11].

In overall, the global membrane separation technology market is expected to hit \$28.10 billion by 2022, growing at a compound annual growth rate (CAGR) of 7.2% from \$6.8 billion in 2005 to \$9 billion in 2008 [12]. Evidently, the global membrane technology market is expected to expand at a CAGR of 10.5% between 2019 and 2027, from \$17.70 billion to \$43.14 billion. The industry anticipates increased demand for safe drinking water as well as sustainability policies to monitor carbon dioxide and contaminants. Furthermore, a rise in the standard of living, improved expendable income, and increased health literacy are some of the notable factors predicted to move the industry forward. Increased population leads to loss of water resources and pollution of land and groundwater bodies, driving demand for wastewater treatment solutions and, as a result, increase the demand for membrane separation technology. Major advances in membrane technology, such as advanced module constructability reduction, have resulted in increased demand for membrane technology in the water and wastewater industries. As a result, the global demand for ultrafiltration (UF) membranes alone is expected to grow from 0.95 billion USD in 2017 to 2.14 billion USD in 2023 [8]. Factors such as porosity, durability, permeability, flexibility, and selectivity boost the demand for membrane separation technology.

such as alumina and titania, which are relatively costly and involve a high amount of energy during the production process [20]. Table 1 demonstrates the advantages and disadvantages of ceramic membrane [21].

Several excellent reviews on ceramic membrane have been published in recent years [22–25]. These reviews discussed ceramic membrane fabrication methods and performance for wastewater treatment as well as sintering method for ceramic membrane. However, the status of full-scale applications and market prospects of ceramic membranes have not been critically reviewed. In addition, traditional method used such as slip casting, tape casting and pressing method towards low-cost ceramic membrane fabrication were not discussed. Therefore, this review aims to discuss the fabrication method including traditional method, alternative materials, microstructure, wettability, mechanical properties and application of low-cost ceramic membrane. The mechanism of grain growth and microcracks were also reviewed and analysed. Lastly, the limitations and future perspectives/direction of research have also been provided.

1.2. Development of low-cost ceramic membrane from alternative material

Ceramic membranes are composed of oxide materials such as Al₂O₃, TiO₂, ZrO₂, and others, or a combination of these materials [18]. Up to recently, aluminium has also been use to fabricate commercialized ceramic membranes [26]. This is because of its exceptional electrical, chemical, and thermal stability. Nonetheless, owing to high sintering

Examples on Writing INTRODUCTION in Literature Review



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Hydrophobic ceramic membrane for membrane distillation: A mini review on preparation, characterization, and applications

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1. Introduction

Since the last few decades, water pollution has become one of the major global issues as a result from rapid industrialization. Water pollution is inarguably one of the main contributors to the aggravating water scarcity problems. At present, about 2.7 billion people are suffering from water scarcity for at least one month of the year [1]. Hence, much effort has been made to develop effective and economical desalination technologies to decontaminate and disinfect the polluted water. In recent years, membrane distillation (MD) has received increasing attention and showed greater potential compared to other desalination technologies, such as reverse osmosis (RO) and multistage flash distillation, due to the lower operating temperatures and pressures, higher rejection factor and lower susceptibility to concentration phenomenon [2]. In general, MD is a thermally driven separation process in which the temperature gradient between two sides of the membrane induces a vapor pressure difference that causes the movement of the vapor through the membrane pores from the hot side to the cold side of the membrane [3]. MD utilizes the hydrophobic membranes which only allow the flow of vapor and keep the liquid at the hot feed side of the system. Fig. 1A and B illustrate the vapor flow through the flat sheet and hollow fiber membranes, respectively. It is well-known that MD is capable to achieve 100% non-volatile solute rejection and produce ultrapure water as the final product [4, 6].

In 1963, silicone rubber was the first hydrophobic polymeric membrane introduced for MD application. It was patented by Bodell [7], who later filed another patent on MD in 1968 [8]. During that time, MD was merely known as a mass transfer process. Later in 1999, Doig et al. [9] confirmed that phase breakthrough did not occur with silicone rubber during the separation process. In addition, the authors also investigated the mass transfer characteristics, as well as the effects of the solvent swelling and the presence of more than one hydrophobic organic solute on the mass transfer of silicone membrane. Nowadays, hydrophobic polymeric membranes such as polytetrafluoroethylene (PTFE), polypropylene (PP), polyethylene (PE), and polyvinylidene fluoride (PVDF) are very popular for a wide array of separation applications. For example, Kuo et al. [10] fabricated the novel PVDF membranes with a contact angle as high as 130° by using alcohol as the coagulant to induce a high roughness and porous surface. Recently, a comparative study [11] was also reported on the MD performances of commercial PVDF and PTFE membranes for dyeing wastewater treatment. It was found that PTFE membrane exhibited higher porosity and



Examples on Writing CONCLUSION in Literature Review

performance (color = 99.9%, COD = 80.1%, turbidity = 99.4%, conductivity = 30.1%, and heavy metals (Cu, Fe, Zn, Cr and Cd) = 100%).

6.5. Photocatalytic application

Semiconductor photocatalysts deposition on solid supports has also been thoroughly studied to tackle environmental issues, particularly wastewater treatment through photocatalytic degradation of organic materials in gas phase due to the unusual photocatalytic action and UV light induced superhydrophilicity as well as those in aqueous solutions [230]. To deposit semiconductor photocatalysts on supports, various techniques such as dip and spin coating from slurry and suspension, chemical vapour deposition, and sputtering have been used. Membrane technology is a well-known support that has increasingly been used. A photocatalytic membrane reactor is a hybrid method that combines membrane separation with degradation by semiconductor photocatalysts aided on the membrane. As compared to organic polymer membranes, ceramic membranes are more favourable due to polymer degradation under UV exposure. Ceramic separation membranes are typically have asymmetric with a thin layer of separation and a macroporous support layer to provide the necessary mechanical resistance. Depending on the membrane form, one or more intermediate layers between the separative layer and the macroporous support are needed. Low-cost ceramic membranes are gaining popularity as a support for photocatalytic applications.

7. Conclusion and future outlooks

In summary, this review article summarized the recent progress of low-cost ceramic membrane in term of its fabrication, material, micro-structure properties and application. Recent interest in developing low-cost ceramic membrane has advanced the membrane separation performance towards various application. This is according to the advantages shown by low-cost ceramic membranes which are cost effective, enhanced properties and ability to act in harsh condition. Despite their excellence properties that can prolonged their lifetime, the other properties such as pore size and porosity can be controlled through fabrication method which are slip casting, tape casting, pressing method, extrusion and phase inversion. Recently, phase inversion technique has been extensively applied in fabricating low-cost ceramic membrane due to the ease of fabrication, able to produce membrane with high surface area and unique asymmetrical structure of finger-like and sponge-like voids. Since kaolin clay used as first alternative material in low-cost ceramic membrane fabrication in 1999, various alternative materials have been introduced into fabrication of low-cost ceramic membrane. These materials can be divided into: (1) clays, (2) agricultural waste, (3) industrial waste, and (4) animal bones waste. Although tremendous advancement in employing alternative materials into low-cost ceramic membrane fabrication have been achieved, there are some areas that deserve further investigation. It should be highlighted that it is relatively

temperature induced formation of microcracks, which is lower the mechanical strength of low-cost ceramic membrane. Herein, it should be noted that alternative material showed potential advantage to increase the mechanical strength due to the melting point that can reduce the sintering temperature. The results obtained are promising and further developments in these directions will certainly grow in the near future. However, most of the work has been focused on the utilization of new alternative ceramic materials. The next generation will move towards detail properties characterization, like grain growth phenomenon and formation of microcracks that can affect mechanical strength of low-cost ceramic membrane.

The application of low-cost ceramic membrane with high separation efficiency towards various application is the main goal of studies. The first reported low-cost ceramic membrane from kaolin clay showed excellence performance towards alcohol and gas separation. Thereafter, low-cost ceramic membranes have been demonstrated towards various application including sweater desalination, heavy metal adsorption-separation application, oil-in-water separation and photocatalytic application. To be noted, most of recent works focused on the feasibility study towards desired application and in-depth study towards the stability of low-cost ceramic membrane is not conducted. Therefore, in addition to the development of low-cost ceramic membrane from new material, we should also focus on the long-term stability of developed membrane. The performance of low-cost ceramic membrane under harsh condition should also be enhanced.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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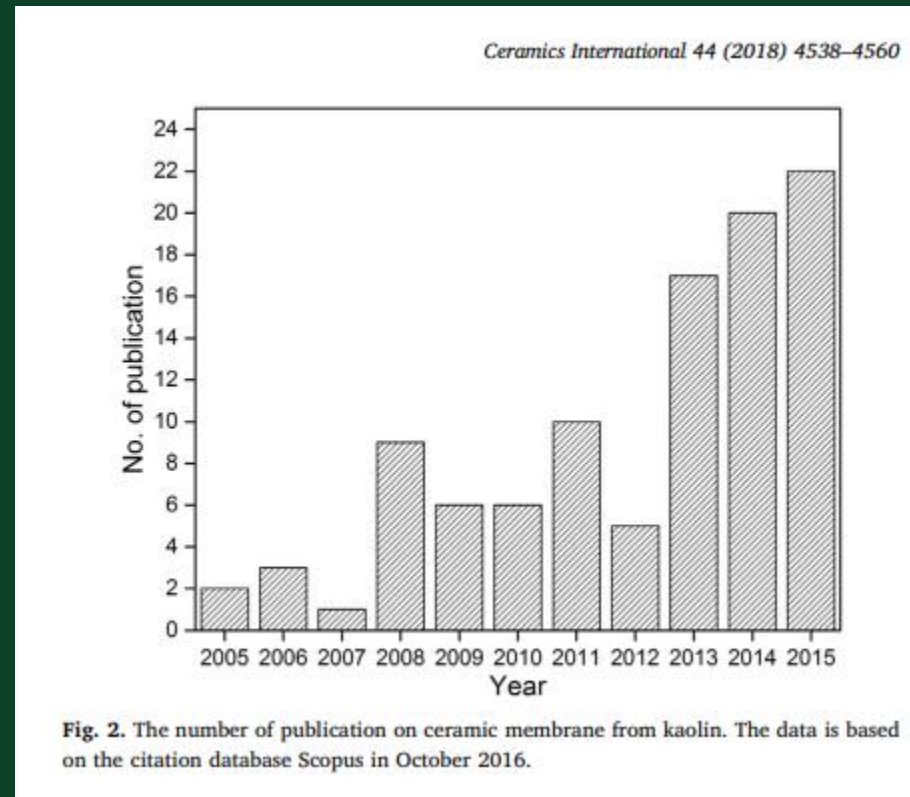
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What should NOT DO in writing Literature Review ?

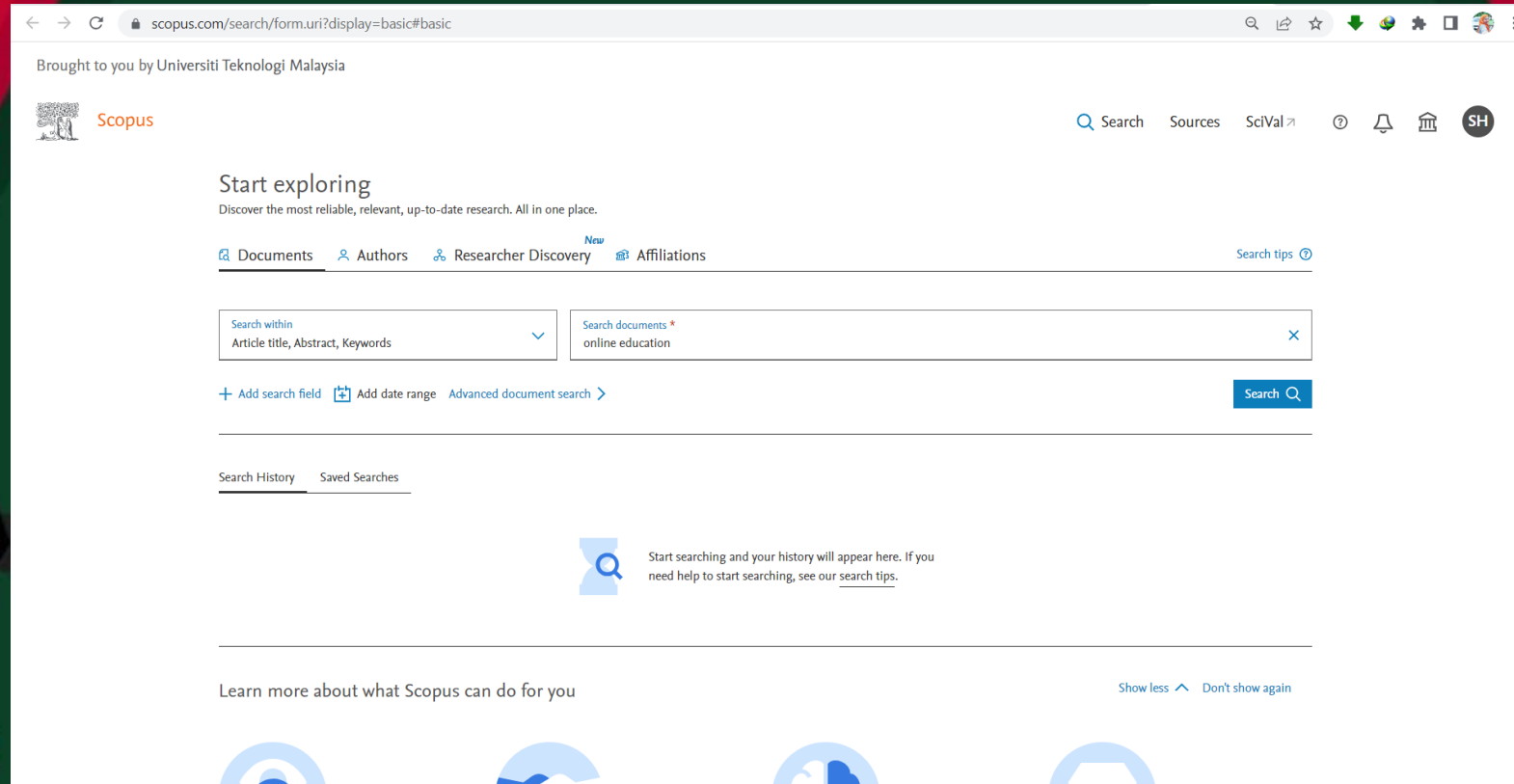
- 1) Creating FIGURES in a literature review can be a helpful way to visually present information, highlight key findings, or illustrate relationships between concepts.
- 2) Creating TABLES in a literature review can be a useful way to present summarized information, compare and contrast findings from different studies, or provide a structured overview of the literature.
- 3) Citing the references with the help of tools such as Mendeley and Endnote.

Examples on Plotting a Graph in Literature Review



How to plot the research trend from Scopus

1) Type the appropriate keyword related to your research topic



The screenshot shows the Scopus search page in a browser. The address bar displays the URL: `scopus.com/search/form.uri?display=basic#basic`. The page header includes the Scopus logo and navigation links for Search, Sources, SciVal, and user profile (SH). The main content area is titled "Start exploring" and contains a search bar with the text "Search documents * online education". Below the search bar are options to "Add search field", "Add date range", and "Advanced document search". A "Search" button is visible on the right. The page also features a "Search History" and "Saved Searches" section, which is currently empty, and a "Learn more about what Scopus can do for you" link at the bottom.

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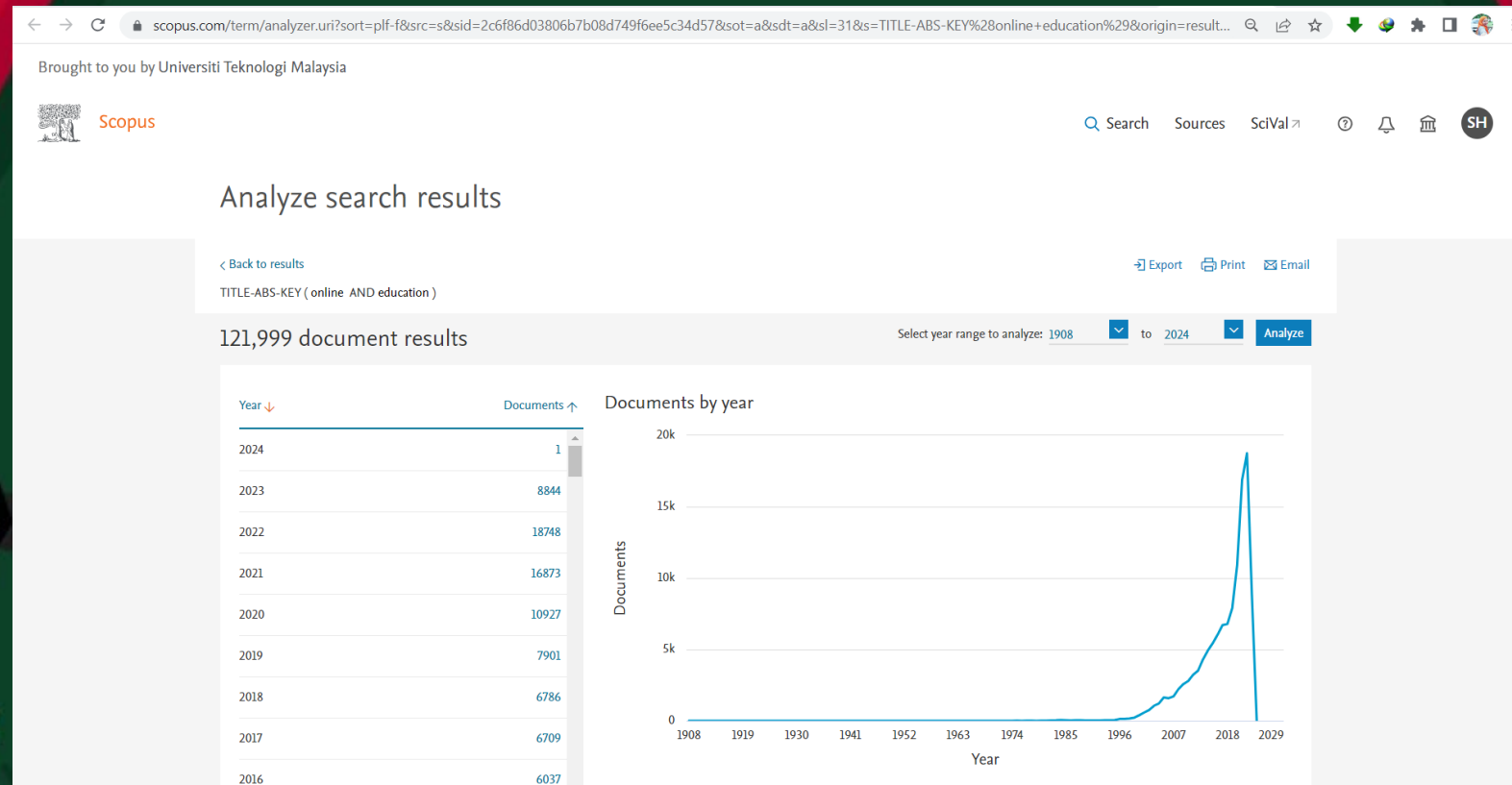
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Document title	Authors	Source	Year	Citations
1 <input type="checkbox"/> What we have learned from adult students' online learning experiences to enhance online learning of other students' groups?	Rotar, O.	Research and Practice in Technology Enhanced Learning, 19, 6	2024	0
2 <input type="checkbox"/> Profil of omega-3 food intake and its association with socioeconomic status in smoker on online motorcycle drivers	Lorensia, A., Suryadinata, R.V.	Healthcare in Low-Resource Settings, 11(S1), 11164	2023	0

How to plot the research trend from Scopus

3) Analyzed results were presented



What should DO in writing Literature Review ?

- 1) Define your research question or objective
- 2) Conduct a comprehensive literature search
- 3) Organize and manage your sources
- 4) Evaluate and select sources
- 5) Analyze and synthesize the literature
- 6) Structure your literature review
- 7) Provide a balanced and critical evaluation
- 8) Write clearly and cohesively
- 9) Cite and reference accurately
- 10) Revise and edit

What should NOT DO in writing Literature Review ?

- 1) Don't rely on a single source
- 2) Avoid being too descriptive
- 3) Don't cherry-pick sources
- 4) Avoid neglecting older sources
- 5) Don't neglect conflicting evidence
- 6) Avoid excessive quoting
- 7) Don't overgeneralize findings
- 8) Avoid a disorganized structure
- 9) Don't forget to critically evaluate the literature
- 10) Avoid neglecting recent literature

Literature Review as Case Study ??

Approaching a literature review as a case study involves conducting an in-depth analysis of a specific research question or problem by examining the existing literature. In this approach, the literature serves as the "case" that is systematically studied and evaluated. The process entails defining the research question, conducting a systematic literature search, analyzing and synthesizing the literature, and providing a critical evaluation of the findings. By treating the literature as a case study, researchers gain a comprehensive understanding of the topic, identify patterns and trends, and assess the strengths and limitations of the existing research. This approach allows for a focused examination of a specific research area, providing valuable insights and informing future research directions within the case study context.

Advantages of Writing Literature Review

- 1) **Knowledge synthesis:** Conducting a literature review allows you to gather and synthesize existing knowledge on a specific topic. It helps you gain a comprehensive understanding of the research landscape and identify key concepts, theories, methodologies, and findings in the field.
- 2) **Identifying gaps and research opportunities:** Through a literature review, you can identify gaps or unanswered questions in the existing research. This provides insights into areas where further investigation is needed, allowing you to identify research opportunities and contribute to the advancement of knowledge.

Advantages of Writing Literature Review

- 3) Informing research design and methodology:** A literature review helps you become familiar with the range of research designs, methods, and analytical approaches used in previous studies. This knowledge can guide the development of your own research design, ensuring that you build upon existing research and employ appropriate methodologies.
- 4) Enhancing critical thinking skills:** Conducting a literature review requires critically evaluating the quality, validity, and relevance of published works. It enhances your critical thinking skills by allowing you to assess the strengths, weaknesses, and limitations of different studies and identify biases or gaps in the literature.

Advantages of Writing Literature Review

- 5) **Supporting evidence-based decision making:** Literature reviews provide a solid foundation of evidence that can inform decision making in various fields, such as healthcare, policy-making, and business. By summarizing and synthesizing existing research, literature reviews offer a basis for evidence-based decision making and can guide practice and policy development.

- 6) **Building scholarly credibility:** Writing a literature review demonstrates your expertise and familiarity with the research in your field. It showcases your ability to critically analyze and synthesize information, contributing to your scholarly credibility and reputation within the academic community.

