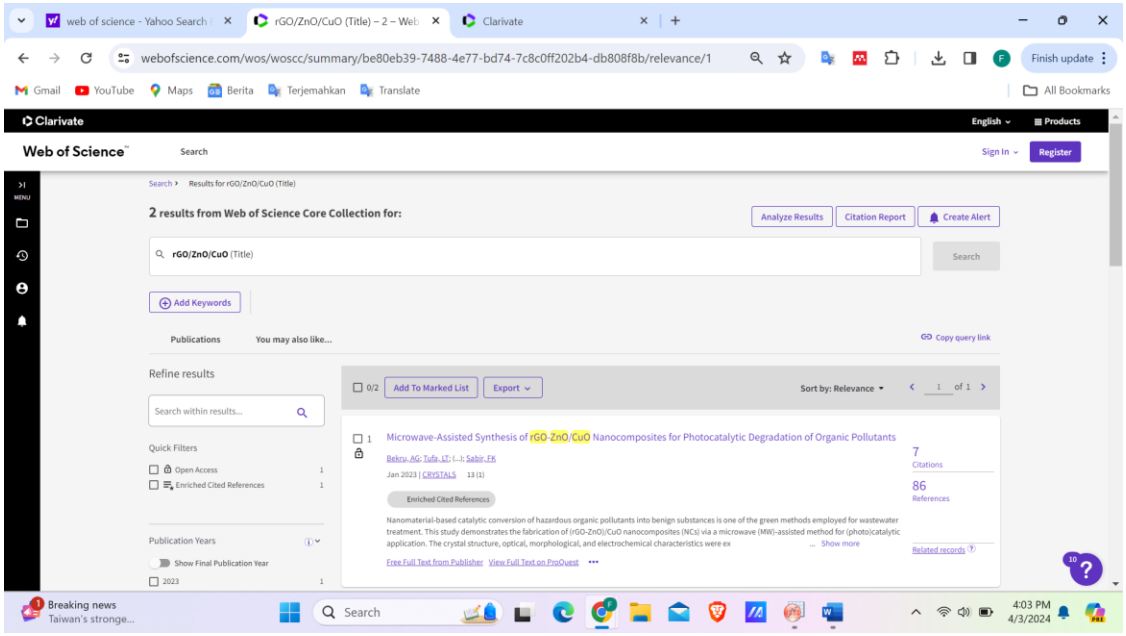
Fariz Irkham Muadhif | 28723005 | Teknologi Nano |

UTS NT6094 – Teknik Penulisan Jurnal Ilmiah

1. Tuliskan setidaknya empat layanan atau organisasi pengindeks jurnal dan cakupan bidang ilmu yang dilayaninya. Untuk masing-masing layanan tersebut sertakan screenshot dan alamamat webnya yang dapat ditelusuri lebih lanjut dengan single click.

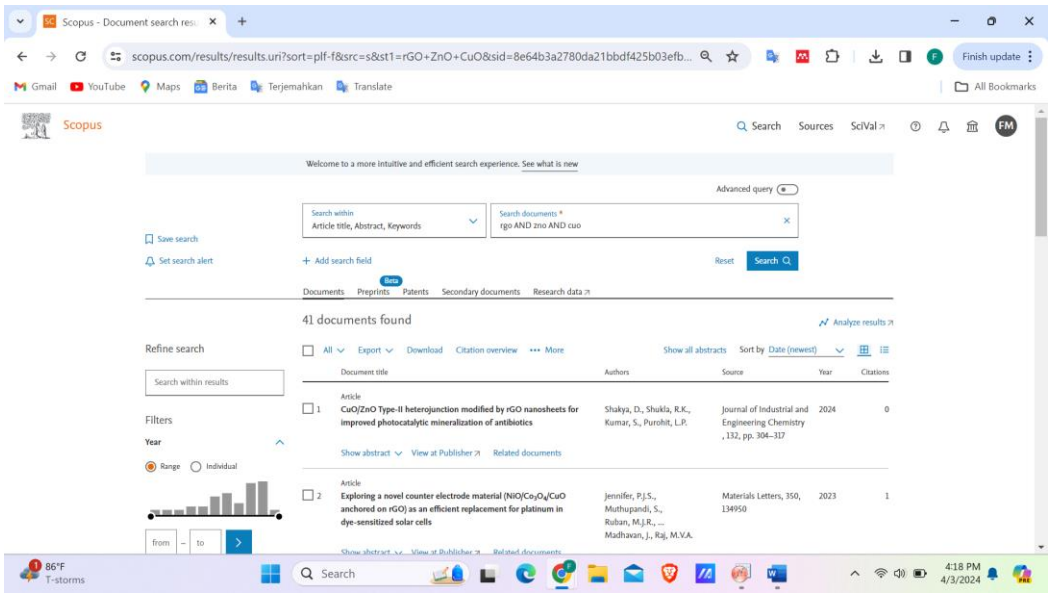
   Jawaban:

   a) **Web of Science (WoS)** merupakan salah satu layanan atau organisasi pengindeks jurnal terbesar didunia. Web of Science saat ini telah memiliki cakupan pengindeksan dari tahun 1900 sampai sekarang. Sejak 3 September 2014, Cakupan multidisiplin Web of Science mencakup lebih dari 50,000 buku ilmiah, 12,000 jurnal dan 160,000 prosiding konferensi. Pemilihan dilakukan berdasarkan penilaian dampak dan terdiri dari jurnal akses terbuka, yang mencakup beberapa disiplin akademis.
      - Cakupannya meliputi: sains, ilmu sosial, seni, dan humaniora, serta membahas berbagai disiplin ilmu.
      - https://www.webofscience.com/wos/woscc/basic-search



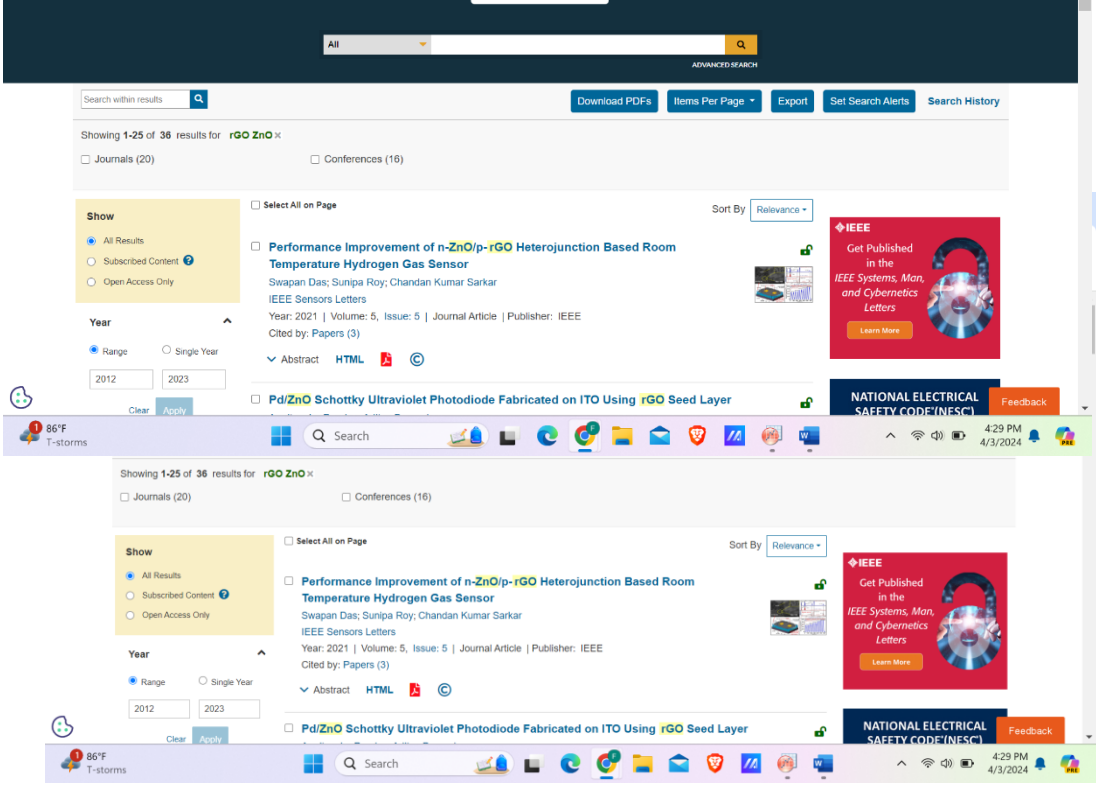
   b) **Scopus** merupakan layanan atau organisasi pengindeks jurnal milik Elsevier yang diluncurkan pada tahun 2004. Scopus mencakup hampir 36.377 judul (22.794 judul aktif dan 13.583 judul nonaktif) dari sekitar 11.678 penerbit. Scopus biasanya bersaing ketat dengan Web of Science (WOS) yang diterbitkan oleh Thomson Reuters yang juga menjadi pusat data terbesar di dunia. Meski WOS lebih dulu terbit dibandingkan Scopus, namun kenyataannya Scopus lebih banyak diminati dan menyediakan lebih banyak jurnal (20% lebih banyak) jika dibandingkan dengan WOS.
      - Cakupannya meliputi: berbagai disiplin ilmu, termasuk ilmu alam, ilmu sosial, teknik, kedokteran, dan humaniora.

- https://www.scopus.com/search/form.uri?display=basic#basic



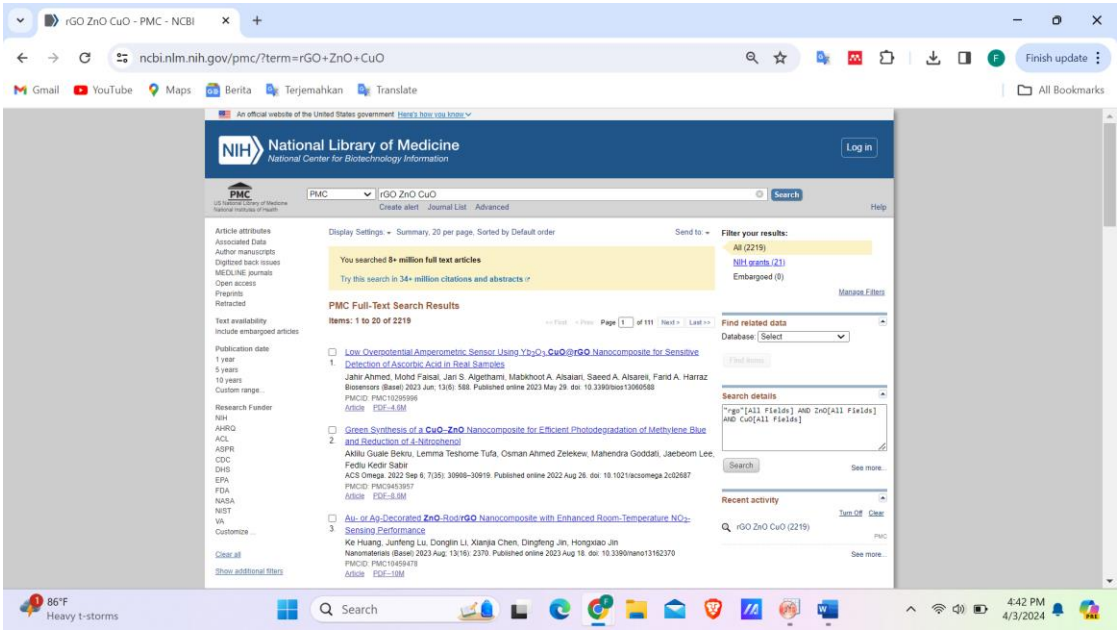
c) **IEEE Xplore** merupakan layanan atau organisasi pengindeks jurnal yang menampung berbagai publikasi dalam bidang teknik dan teknologi informasi. IEEE Xplore menyediakan akses ke jurnal-jurnal IEEE, konferensi, standar, dan literatur terkait teknologi informasi. Dokumen dan materi lainnya terdiri dari lebih dari 300 jurnal yang telah ditinjau oleh rekan sejawat, lebih dari 1.900 konferensi global, lebih dari 11.000 standar teknis, hampir 5.000 ebook, dan lebih dari 500 kursus daring.[4] Sekitar 20.000 dokumen baru ditambahkan setiap bulan.

- Cakupannya meliputi: ilmu komputer, teknik listrik, elektronika, telekomunikasi, dan teknologi terkait lainnya.
- https://ieeexplore.ieee.org/Xplore/home.jsp



d) **PubMed Central** adalah arsip digital gratis yang disediakan oleh National Library of Medicine (NLM). Fokus utamanya adalah pada literatur ilmiah dalam bidang biomedis dan kedokteran. PubMed Central mencakup jurnal ilmiah, artikel ulasan, dan literatur biomedis terkait lainnya.

- Cakupannya meliputi: bidang biomedis dan kedokteran
- https://www.ncbi.nlm.nih.gov/pmc/

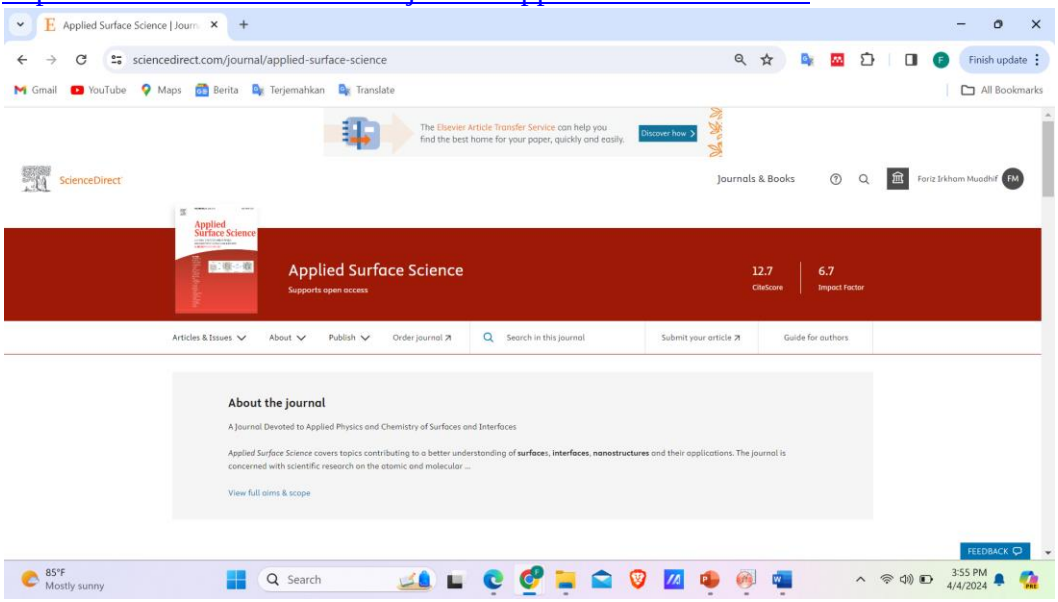


2. Jelaskan apa yang dimaksud dengan istilah-istilah sitasi, metrik, dan kuartil untuk jurnal, serta berikan ilustrasi dengan screenshot dari masing-masing istilah tersebut dengan alamat webnya yang dapat ditelusuri lebih lanjut dengan single click.

Jawaban:

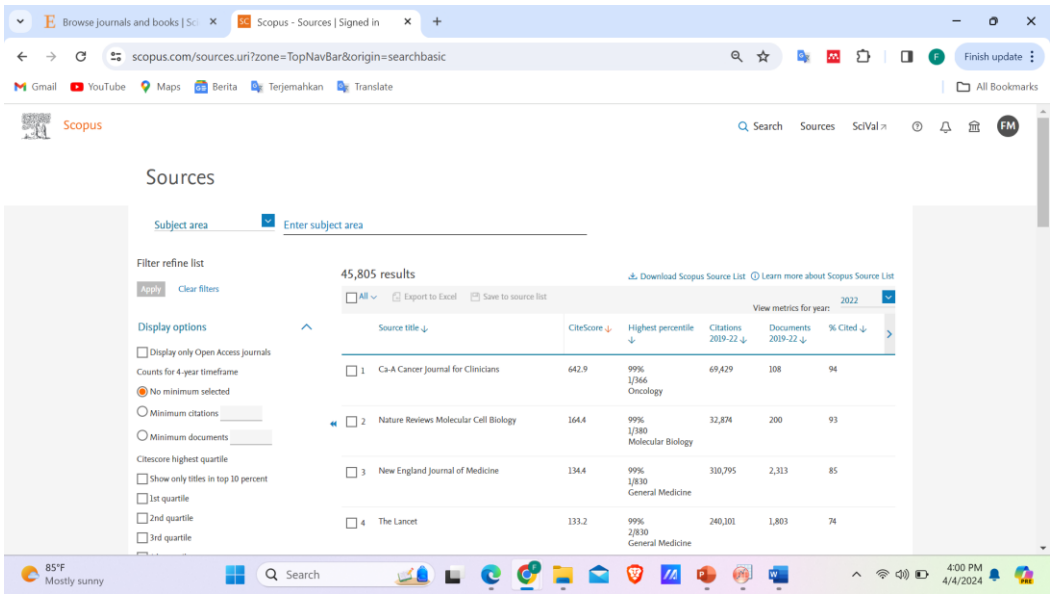
a) Sitasi merupakan suatu karya (buku, artikel, dsb.) disebutkan atau dikutip dalam karya lain, istilah "sitasi" digunakan untuk menunjukkan pengaruh dan relevansi suatu karya dalam literatur ilmiah.

- https://www.sciencedirect.com/journal/applied-surface-science

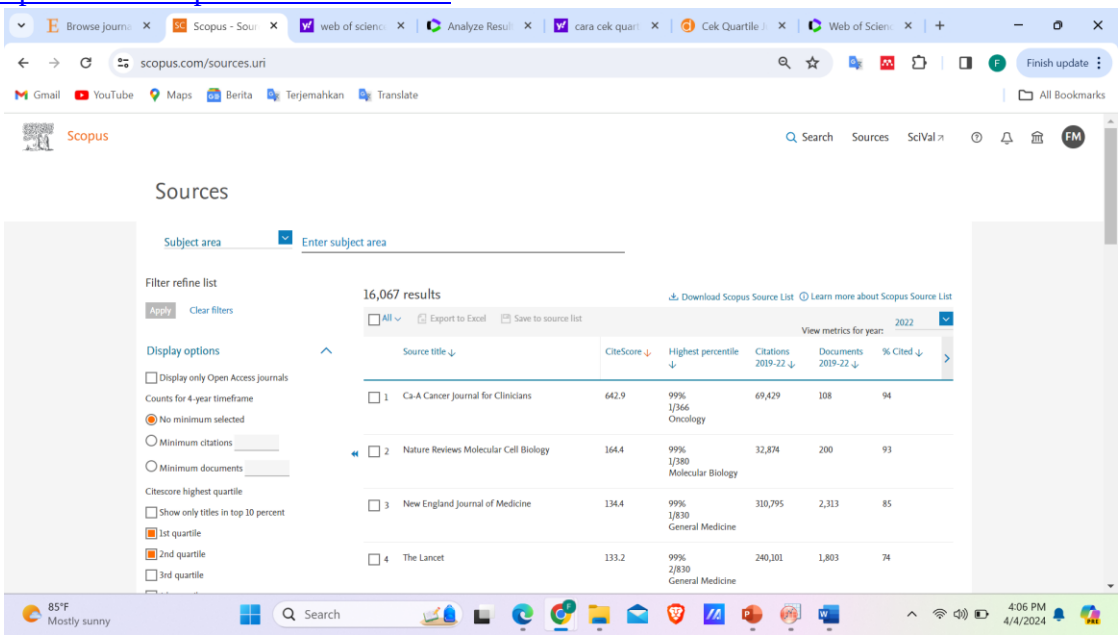


b) Metrik merupakan ukuran atau parameter yang digunakan untuk mengukur atau mengevaluasi kinerja atau karakteristik suatu jurnal, peneliti, atau artikel. Contoh metrik jurnal termasuk faktor dampak dan indeks sitasi.

- https://www.scopus.com/sources.uri?zone=TopNavBar&origin=searchbasic



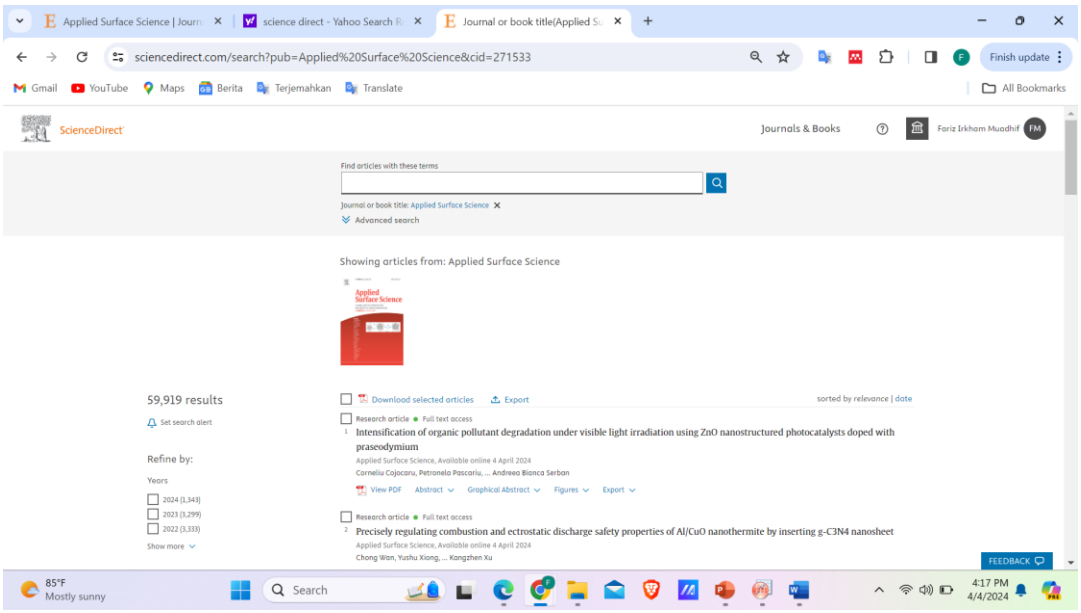
c) Kuartil merupakan klasifikasi jurnal ke dalam salah satu dari empat kelompok (quartile) berdasarkan peringkatnya dalam suatu metrik tertentu, seperti faktor dampak. Jurnal yang berada di kuartil atas (quartile 1) cenderung dianggap memiliki dampak yang lebih besar daripada yang berada di kuartil bawah.
https://www.scopus.com/sources.uri



3. Tuliskan jenis-jenis publikasi dari setidaknya empat sumber berbeda dengan memberikan screenshot dari masing-masing sumber, serta alamat webnya yang dapat ditelusuri lebih lanjut dengan single click

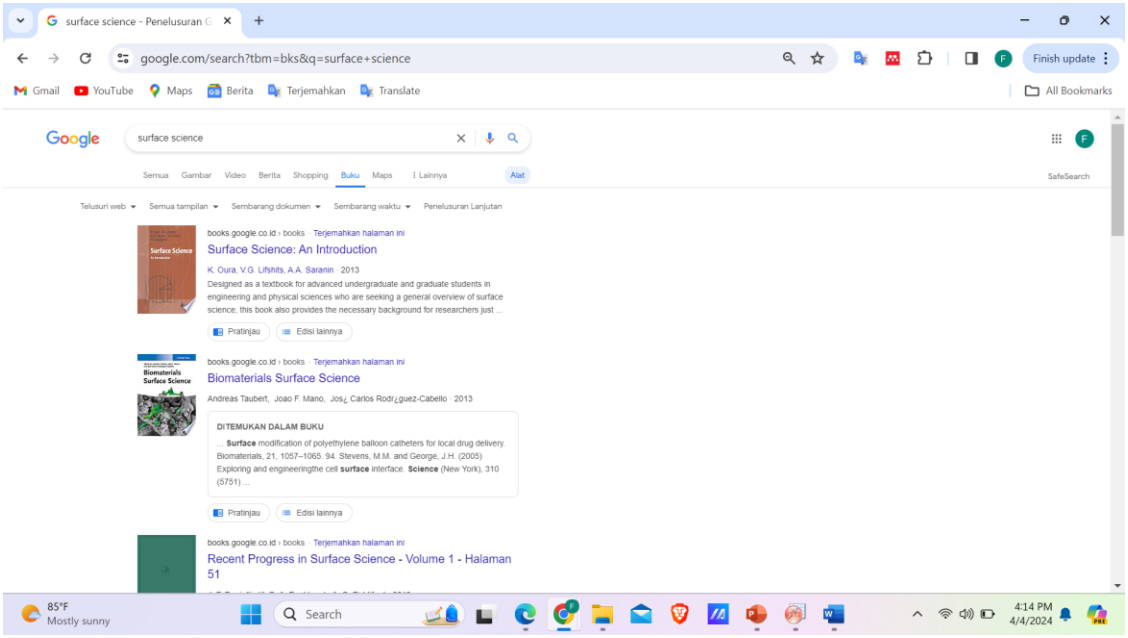
Jawaban:

a) Jurnal Ilmiah
- https://www.sciencedirect.com/



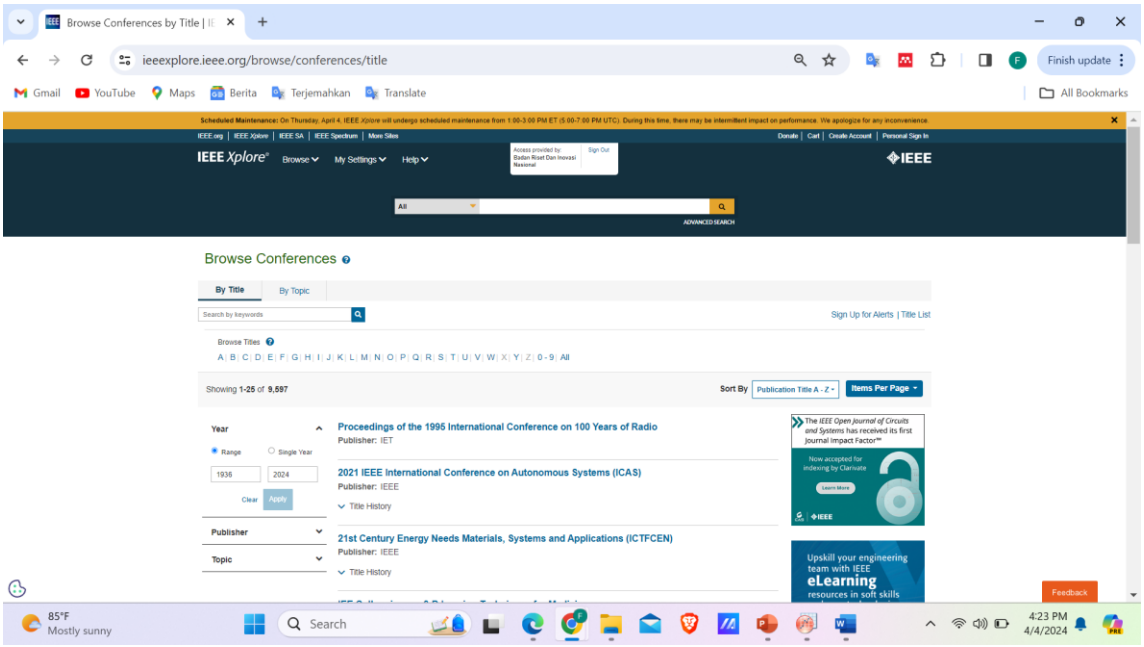
b) Buku

- https://books.google.com/



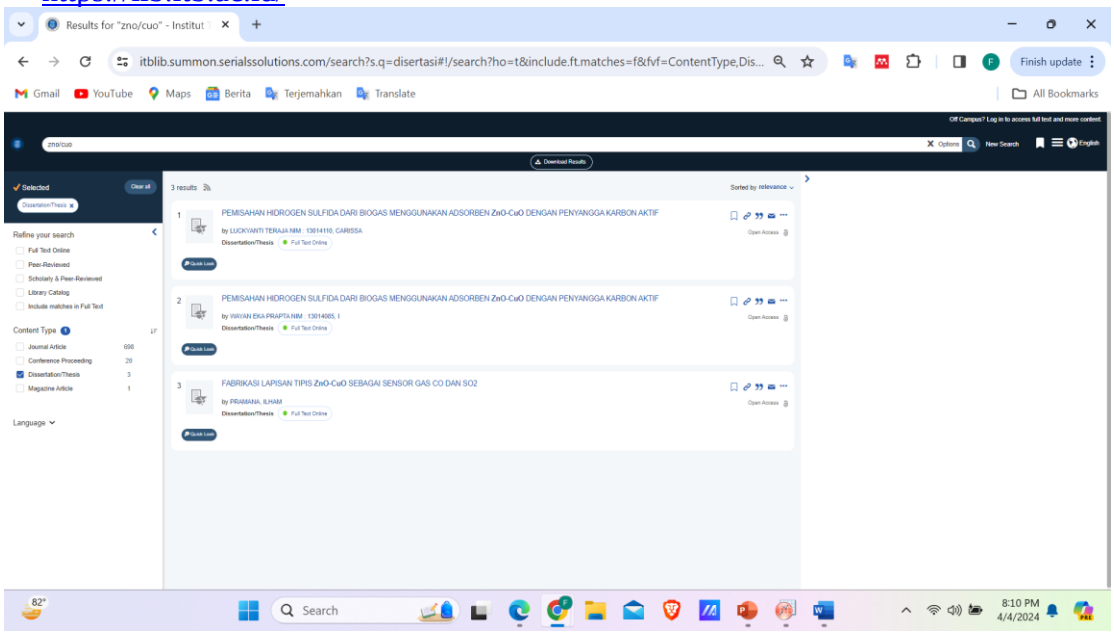
c) Konferensi Ilmiah

- https://ieeexplore.ieee.org/Xplore/home.jsp



d) Tesis/Disertasi

- https://lib.itb.ac.id/



4. Tuliskan struktur artikel ilmiah dan kriteria masing-masing bagian seperti jumlah kata, paragraf, ada tidaknya gambar, referensi, dan lain-lain. Sajikan dalam bentuk tabel. Berikan pula sumbernya dengan alamat web yang dapat ditelusuri lebih lanjut dengan single click.

Jawaban:

- https://journal.eu-jr.eu/engineering/about
- https://journal.eu-jr.eu/engineering/about/submissions#authorGuidelines

Requirements for the text	• Font - Times New Roman • Font size -14 • Margins - 20 mm • Interval - 1
Structure of the article	Please note that the article supplied to the editor should be strictly structured. Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (Section 1.1.1, 1.1.2, ...), 1.2 and so on. (Abstract and acknowledgements are not numbered). Use this numbering also for internal cross-references. Each subsection must be given a short title. Each title should begin with a new line.
Title	Title of the article should be short and informative, and fully reflects the essence of the research presented in the article, i.e. the names are often used in information retrieval systems. Avoid the use of acronyms, abbreviations and formulas in the title.
Abstract	The abstract should summarize the aim of the study, the main results and key findings. Abstracts are often presented separately from the article, so it should give a complete picture of the research presented in the article. Therefore, avoid using in abstracts: - references; - specific abbreviations and acronyms; if, however, it is necessary, they should be accompanied by an explanation at the first mention in the abstract.
Keywords	Keywords must be unique for this article. Use combinations for a more complete description of the study.
Authors info	pecify the full name of all authors, affiliation, address, place of work, contact information for each of the co-authors, ORCID. The author's ORCID ID is required. ORCID provides a unique and persistent digital identifier that distinguishes researchers from every other researcher, even those who share the same name, and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between researchers and their professional activities, ensuring that their work is recognized.
Contact person	Full name and contact information of the author, who will be correspond with the editorial.
Introduction	The section should include aim of the work and give «background» of research, avoiding detailed descriptions of the literature review and summary of the results.

Materials and Methods	Materials and methods should be presented in such detail that they can be reproduced. Methods that have been published should be given by reference. Only changes should be described.
Experimental procedures	The experimental procedures should be presented in such detail that they can be reproduced.
Results	Results should be clear and concise.
Discussion	In this section, you must explore the significance of Results, not repeat them. You should combine the sections "Results" and "Discussion" in the same section. Avoid comprehensive citations and discussion of the references in this section.
Conclusions	This section should briefly give the main conclusions of the study. These sections can be divided into subsections.
Conflict of interest	It is necessary to indicate the absence or presence of a conflict of interest. If there is a conflict of interest, it must be specified. When there is no conflict of interest, it is necessary to specify the phrase: The authors declare that there is no conflict of interest in relation to this paper, as well as the published research results, including the financial aspects of conducting the research, obtaining and using its results, as well as any non-financial personal relationships.
Financing	Sources of funding must be indicated. If there is no funding, it is necessary to indicate: The study was performed without financial support.
Data availability	Choose one of the options and indicate it in the text of the manuscript: • manuscript has associated data in a data repository; • manuscript has data included as electronic supplementary material; • data will be made available on reasonable request; • data cannot be made available for reasons disclosed in the data availability statement; • manuscript has no associated data.

Use of artificial intelligence	Choose one of the options and indicate it in the text of the manuscript: • The authors confirm that they did not use artificial intelligence technologies when creating the currrent work. • The authors have used artificial intelligence technologies within acceptable limits to provide their own verified data, which is described in the research methodology section. Images, photorealistic images, diagrams, drawings, figures that have been generated by artificial intelligence should be labeled "Imagined with AI".
Acknowledgments	List here the people / organizations that have assisted during the study (for example, provide language assistance, help with the experiments, financial assistance, etc.).
References	References must be completed according to the standard. Sources in the list of references and, accordingly, in the text of the manuscript should be located in the order of mention, not alphabetically. It is strongly recommended to specify the DOI (link) for all work (if any). *Links to programs that will help make references* Mendeley http://www.mendeley.com/features/reference-manager EndNote http://www.endnote.com/support/enstyles.asp
Citations in the text	Please make sure that all the links in the text present in the list of references (and vice versa). Unpublished results and personal contacts are not recommended to indicate in the list of references, but they can be mentioned in the text.

	Citation of references «inpress» imply that these articles have been accepted for publication.
Requirements for graphical abstract	A graphical abstract is an image that appears alongside the text abstract in the contents. This is a single, concise, pictorial and visual summary of the main findings of the article. A graphical abstract should allow readers to quickly gain an understanding of the take-home message of the paper and is intended to encourage browsing, promote interdisciplinary scholarship, and help readers identify more quickly which papers are most relevant to their research interests. Authors must provide an image that clearly represents the work described in the paper. It could either be the superposition of several figures from the article or a figure that is specially designed for the purpose. Any postage stamps, currency from any country, or trademarked items should not be included in it. Graphical abstracts should be submitted as a separate file. Requirements for graphical abstract: - Image size: the minimum required size for the graphical abstract is 560 × 1100 pixels (height × width) with minimum resolution of 300 dpi. If you are submitting a larger image, please use the same ratio. Please note that your image will be scaled proportionally to fit in the available window. - Font: please use font with a large enough font size as the image will be reduced in size for the table of contents to fit a window. - File type: .jpg, .jpeg, .png. - File size: no more than 5 Mb.

	No additional text, outline or synopsis should be included. Any text or label must be part of the image file. Please do not use unnecessary white space or a heading “graphical abstract” within the image file.
Figures	All the figures, which are given in the article, should have captions that are brief and informative describing the essence of the figure. Captions should explain all symbols and abbreviations given in the figure. Please note that the figures can be provided separately from the article on site of the journal. All lettering on the figures should be easy to read and comply with the font size 14. All figures must be accompanied by a reference in the text (for example, Fig. 1, etc.)
Format of figures	- EPS (or PDF): vector graphics. - TIFF (or JPEG): full-color or grayscale: always use a minimum of 300 dpi. - TIFF (or JPG): bitmaps: always use a minimum of 1000 dpi. - TIFF (or JPG): combined bitmap / halftone (color or grayscale): use at least 500 dpi. - Do not use PowerPoint. It gives too low resolution.
Tables	Please give the table as the editable text, not as an image. Ensure that the data presented in the tables don’t duplicate results described in the article. Please do not use vertical text. All tables must be accompanied by a reference in the text (e.g. Table 1 and so on)
Mathematical formulas	Please give mathematical equations as editable text, not in the form of images. Simple formulas are typed by the normal text, where possible, also use "/" instead of the horizontal line for small fractional expressions, for example, X / Y. Other formulas must be represented in the equation editor MathType (link). All formulas given in the text must be numbered, for example x=1+5 (1)
Abbreviations	Define all abbreviations and acronyms that are not standard in this subject area, at the first mention in the

	text. Ensure consistency of abbreviations throughout the article.
Supporting information	All supporting information (audio, video, statistics, and so on) should be sent in a separate file from the manuscript. These materials will be located in the archive on the website of the journal on the article page.
Changes in the authorship of articles	After the manuscript is accepted, any change in authorship, including adding, deleting or changing the order of the authors **is not allowed**.
SUBMISSION PREPARATION CHECKLIST	As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines. 1. The article is not plagiarism. 2. All the authors are included in the list of coauthors of the manuscript. 3. Took into account all the requirements of section "AUTHOR GUIDELINES".
Copyright Notice	Our journal abides by the Creative Commons CC BY copyright rights and permissions for open access journals. Authors, who are published in this journal, agree to the following conditions: 1. The authors reserve the right to authorship of the work and pass the first publication right of this work to the journal under the terms of a Creative Commons CC BY, which allows others to freely distribute the published research with the obligatory reference to the authors of the original work and the first publication of the work in this journal.

	2. The authors have the right to conclude separate supplement agreements that relate to non-exclusive work distribution in the form in which it has been published by the journal (for example, to upload the work to the online storage of the journal or publish it as part of a monograph), provided that the reference to the first publication of the work in this journal is included.
Privacy Statement	The names and email addresses entered in this journal site will be used exclusively for the stated purposes of this journal and will not be made available for any other purpose or to any other party.

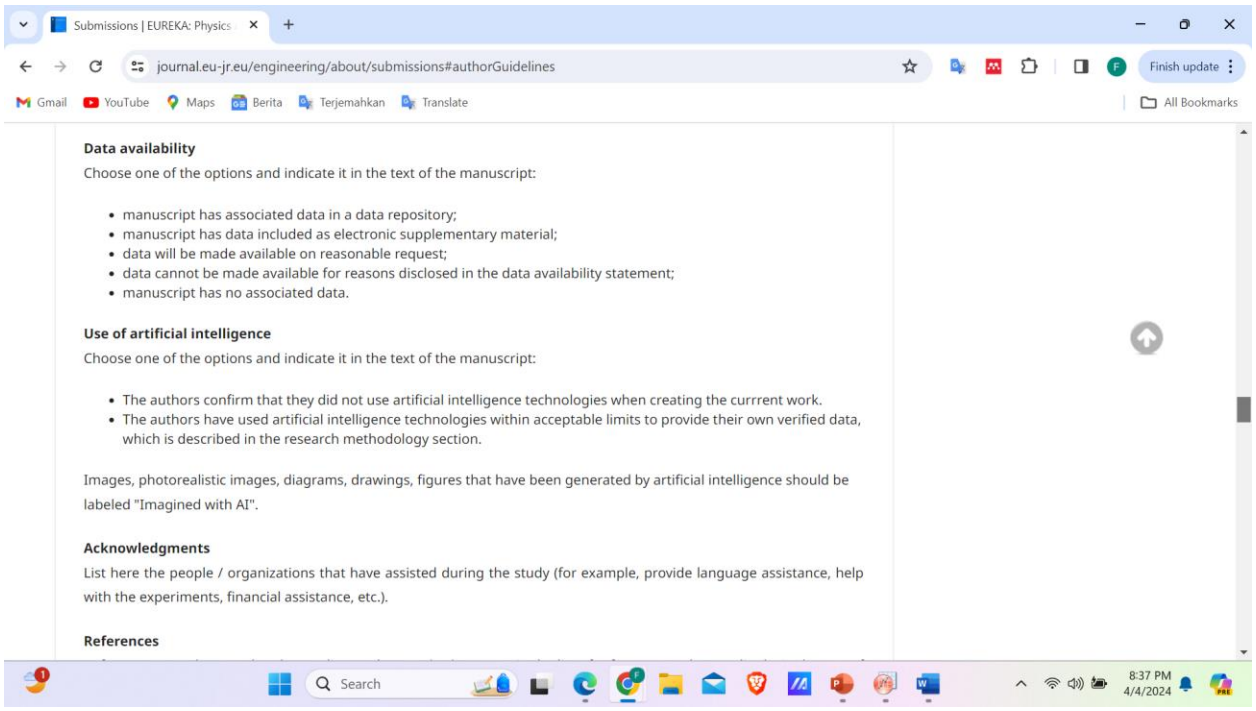
5. Tuliskan kebijakan dari setidaknya empat penerbit mengenai kebijakan penggunakan artificial intelligence (AI) dalam menulis artikel imiah, yang dilengkapi dengan screenshot dari masing-masing kebijakan, serta alamat webnya yang dapat ditelusuri lebih lanjut dengan single click.

Jawaban:

a) Scientific Route
- Alamat web: https://journal.eu-jr.eu/engineering/about
- Kebijakan:
  Choose one of the options and indicate it in the text of the manuscript:

  - The authors confirm that they did not use artificial intelligence technologies when creating the currrent work.
  - The authors have used artificial intelligence technologies within acceptable limits to provide their own verified data, which is described in the research methodology section.

  Images, photorealistic images, diagrams, drawings, figures that have been generated by artificial intelligence should be labeled "Imagined with AI".



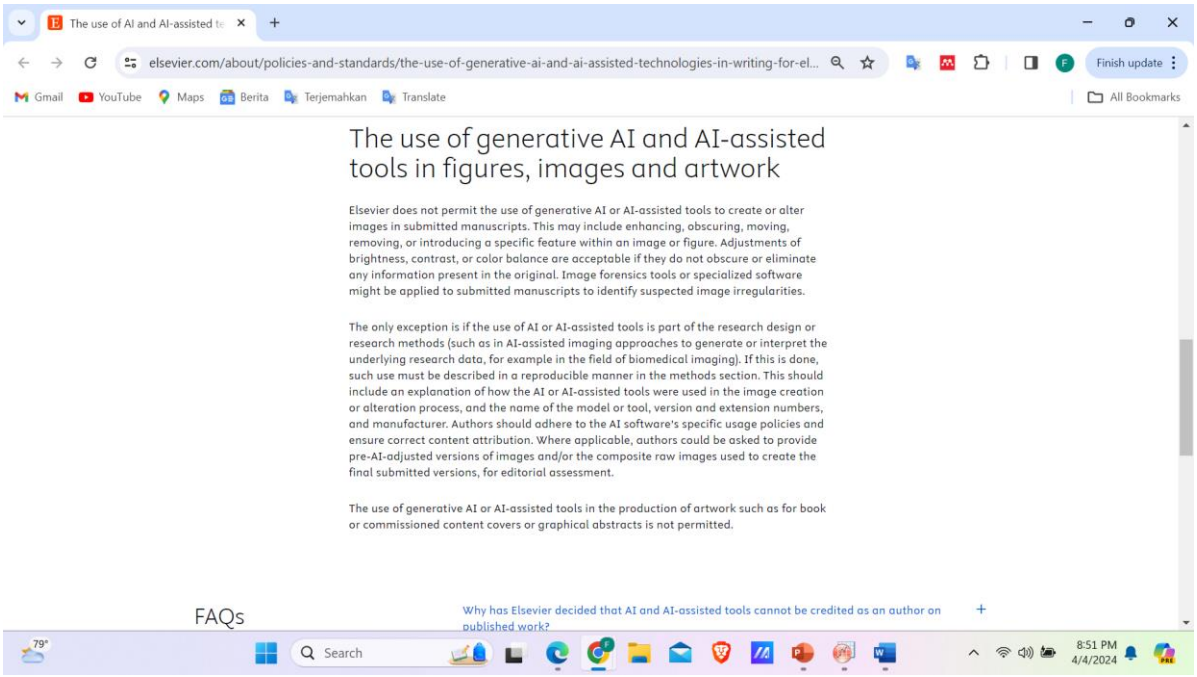
b) Elsevier

- Alamat web: https://www.elsevier.com/about/policies-and-standards/the-use-of-generative-ai-and-ai-assisted-technologies-in-writing-for-elsevier
- Kebijakan:

  Elsevier does not permit the use of generative AI or AI-assisted tools to create or alter images in submitted manuscripts. This may include enhancing, obscuring, moving, removing, or introducing a specific feature within an image or figure. Adjustments of brightness, contrast, or color balance are acceptable if they do not obscure or eliminate any information present in the original. Image forensics tools or specialized software might be applied to submitted manuscripts to identify suspected image irregularities.

  The only exception is if the use of AI or AI-assisted tools is part of the research design or research methods (such as in AI-assisted imaging approaches to generate or interpret the underlying research data, for example in the field of biomedical imaging). If this is done, such use must be described in a reproducible manner in the methods section. This should include an explanation of how the AI or AI-assisted tools were used in the image creation or alteration process, and the name of the model or tool, version and extension numbers, and manufacturer. Authors should adhere to the AI software's specific usage policies and ensure correct content attribution. Where applicable, authors could be asked to provide pre-AI-adjusted versions of images and/or the composite raw images used to create the final submitted versions, for editorial assessment.

  The use of generative AI or AI-assisted tools in the production of artwork such as for book or commissioned content covers or graphical abstracts is not permitted.

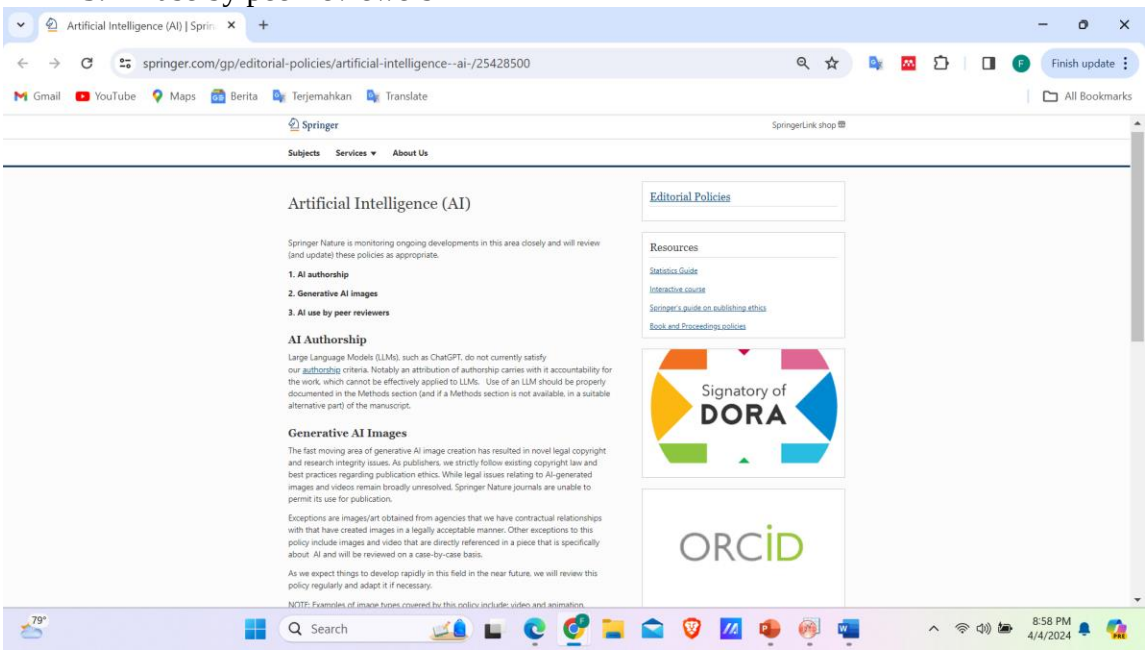


c) Springer Nature

- Alamat web: https://www.springer.com/gp/editorial-policies/artificial-intelligence--ai-/25428500
- Kebijakan:

  Springer Nature is monitoring ongoing developments in this area closely and will review (and update) these policies as appropriate.

  1. AI authorship
  2. Generative AI images
  3. AI use by peer reviewers

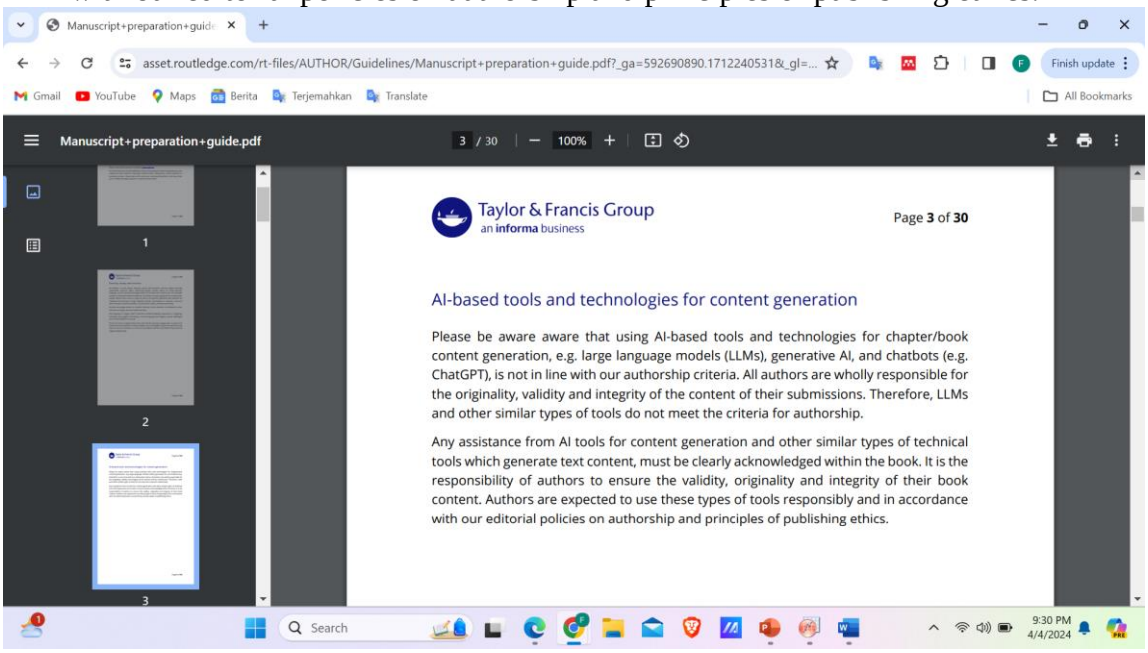


d) Taylor & Francis

- Alamat web:
  https://newsroom.taylorandfrancisgroup.com/taylor-francis-clarifies-the-responsible-use-of-ai-tools-in-academic-content-creation/

  https://asset.routledge.com/rt-files/AUTHOR/Guidelines/Manuscript+preparation+guide.pdf?_ga=592690890.1712240531&_gl=1*19vufs4*_ga*NTkyNjkwODkwLjE3MTIyNDA1MzE.*_ga_0HYE8YG0M6*MTcxMjI0MDUzMy4xLjEuMTcxMjI0MDg3Mi4wLjAuMA..*_gcl_au*OTcwMTM3MTY5LjE3MTIyNDA1MzM.

- Kebijakan:
  Please be aware aware that using AI-based tools and technologies for chapter/book content generation, e.g. large language models (LLMs), generative AI, and chatbots (e.g. ChatGPT), is not in line with our authorship criteria. All authors are wholly responsible for the originality, validity and integrity of the content of their submissions. Therefore, LLMs and other similar types of tools do not meet the criteria for authorship. Any assistance from AI tools for content generation and other similar types of technical tools which generate text content, must be clearly acknowledged within the book. It is the responsibility of authors to ensure the validity, originality and integrity of their book content. Authors are expected to use these types of tools responsibly and in accordance with our editorial policies on authorship and principles of publishing ethics.



6. Buat bagian pendahuluan dari suatu artikel ilmiah dengan berbantuan AI, misalnya ChatGPT, yang dilengkapi dengan referensi. Analisa dan validasi hasilnya, misalnya dengan membandingkan dengan model hour glass. Berbekal observasi ini jelaskan batasan-batasan AI yang perlu diperhatikan. Sertakan alamat web ke hasil diskusi dengan AI

Jawaban:

Sintesis Nanomaterial MgO dari Dolomit sebagai Agen Antibakteri

Pendahuluan

Infeksi bakteri yang resisten terhadap antibiotik telah menjadi tantangan serius dalam dunia medis modern. Pencarian akan agen antibakteri baru yang efektif dan berkelanjutan telah menjadi fokus utama dalam upaya untuk mengatasi ancaman kesehatan global yang ditimbulkan oleh bakteri patogen. Dalam konteks ini, penggunaan mineral alami sebagai sumber potensial untuk agen antimikroba telah menarik perhatian para peneliti.

Salah satu mineral yang menjanjikan adalah magnesium oksida (MgO), yang dapat diperoleh dari dolomit. Dolomit, yang merupakan batuan sedimen yang mengandung magnesium karbonat dan kalsium, menawarkan sumber yang melimpah untuk sintesis MgO. MgO telah dikenal memiliki sifat antimikroba yang kuat, yang telah terbukti efektif dalam menghambat pertumbuhan berbagai bakteri patogen. Penelitian-penelitian sebelumnya telah memberikan bukti awal tentang potensi MgO dari dolomit sebagai agen antibakteri. Namun, pemahaman kita tentang mekanisme aksi antibakteri MgO dan potensinya dalam aplikasi klinis masih memerlukan penelitian yang lebih mendalam.

Dalam penelitian ini, kami bertujuan untuk mengeksplorasi potensi MgO yang berasal dari dolomit sebagai agen antibakteri. Kami akan melakukan serangkaian eksperimen dan analisis untuk mengevaluasi aktivitas antimikroba MgO terhadap berbagai bakteri patogen. Selain itu, kami akan menginvestigasi mekanisme aksi antibakteri MgO serta potensi aplikasinya dalam berbagai bidang, termasuk pengobatan, pencegahan infeksi, dan pengolahan air. Melalui penelitian ini, kami berharap dapat meningkatkan pemahaman kita tentang potensi MgO dari dolomit sebagai agen antibakteri yang efektif. Hasil penelitian kami diharapkan dapat memberikan landasan yang kokoh untuk pengembangan terapi antimikroba baru yang inovatif dan berkelanjutan.

Referensi:

1. Li, Q., et al. (2017). Antibacterial properties of magnesium oxide (MgO) nanoparticles against foodborne pathogens. Journal of Nanoparticle Research, 19(11), 370.
2. Wang, Y., et al. (2019). Synthesis and antibacterial activity of magnesium oxide nanoparticles against foodborne pathogens. Food Control, 101, 78-86.
3. Zhang, L., et al. (2020). Dolomite-Derived Magnesium Oxide Nanoparticles: Synthesis, Characterization, and Antibacterial Activity. ACS Omega, 5(9), 4381-4387.
4. Smith, A. B., et al. (2018). Magnesium oxide nanoparticles: synthesis, characterization, and antibacterial activity. Journal of Nanoparticle Research, 20(3), 64.
5. Chen, X., et al. (2019). Antibacterial activity of magnesium oxide nanoparticles against drug-resistant bacteria. Nanomedicine, 14(13), 1729-1746.
6. Liu, H., et al. (2020). Dolomite-derived magnesium oxide nanoparticles: synthesis, characterization, and applications in antibacterial coatings. Applied Surface Science, 505, 144618.
7. Gupta, A., et al. (2017). Evaluation of antibacterial activity of magnesium oxide nanoparticles synthesized from dolomite. Materials Chemistry and Physics, 198, 124-130.

8. Li, J., et al. (2019). Antimicrobial mechanisms of magnesium oxide nanoparticles against Escherichia coli, Bacillus subtilis, and Staphylococcus aureus. Journal of Nanoparticle Research, 21(2), 24.
9. Kumar, S., et al. (2018). Synthesis, characterization, and antibacterial activity of magnesium oxide nanoparticles prepared by green route. Journal of Nanostructure in Chemistry, 8(4), 385-392.
10. Mishra, A., et al. (2020). Dolomite-mediated synthesis of magnesium oxide nanoparticles and their antibacterial activity against multidrug-resistant bacteria. Environmental Science and Pollution Research, 27(17), 21443-21454.

Analisa dan Validasi Hasil

Berdasarkan hasil tersebut dengan berbekal analisis model hour glass dapat diketahui bahwasan pendahuluan yang dibuat oleh AI terbukti cukup sesuai dengan apa yang kita inginkan, dan tentu dapat dilakukan secara instan.

1. **Pendekatan Teoritis:** Pendahuluan menyajikan gambaran umum tentang masalah (infeksi bakteri resisten terhadap antibiotik) dan memberikan konteks untuk penelitian (penggunaan mineral alami sebagai agen antibakteri). Ini sesuai dengan tahap pertama model hour glass yang mengidentifikasi masalah dan memberikan latar belakang teoritis.
2. **Eksperimen:** Penelitian tersebut disusun untuk melakukan serangkaian eksperimen dan analisis terhadap MgO yang berasal dari dolomit sebagai agen antibakteri. Ini mencakup evaluasi aktivitas antimikroba, investigasi mekanisme aksi antibakteri, dan potensi aplikasinya. Tahap ini mencerminkan bagian tengah dari model hour glass, yang melibatkan proses eksperimental dan analisis data untuk menguji hipotesis dan mendapatkan pemahaman yang lebih dalam tentang fenomena yang diamati.
3. **Sintesis:** Pendahuluan mengakhiri dengan harapan bahwa penelitian ini akan meningkatkan pemahaman kita tentang potensi MgO dari dolomit sebagai agen antibakteri yang efektif dan memberikan landasan untuk pengembangan terapi antimikroba baru yang inovatif dan berkelanjutan. Ini sesuai dengan tahap terakhir dari model hour glass, di mana temuan dari eksperimen disintesis menjadi kesimpulan yang dapat digunakan untuk menginformasikan pengembangan selanjutnya dan aplikasi praktis.

Namun, hasil pendahuluan ternyata masih mempunyai kekurangan, sehingga perlu dicatat pula Batasan-batasannya, antara lain:

Meskipun hasil penelitian tersebut menjanjikan dalam mengeksplorasi potensi MgO dari dolomit sebagai agen antibakteri, ada beberapa batasan AI yang perlu diperhatikan:

1. **Keterbatasan Data Pelatihan:** Model AI yang digunakan dalam analisis dan validasi eksperimental dapat terpengaruh oleh keterbatasan data pelatihan. Variasi dalam data pelatihan dapat memengaruhi kemampuan model untuk menggeneralisasi hasilnya dengan baik. Oleh karena itu, penting untuk memperhatikan keberagaman data pelatihan dan memastikan representasi yang tepat dari fenomena yang diamati.
2. **Generalisasi yang Terbatas:** Temuan dari penelitian mungkin memiliki keterbatasan dalam generalisasi, terutama jika eksperimen dilakukan dalam kondisi laboratorium yang sangat terkendali. Kondisi lingkungan yang berbeda atau variasi dalam komposisi mineral dapat

memengaruhi kinerja MgO sebagai agen antibakteri di lapangan. Oleh karena itu, hasil penelitian perlu ditafsirkan dengan hati-hati dan disesuaikan dengan konteks aplikatif yang relevan.

3. **Interpretasi Hasil yang Kompleks:** Analisis hasil eksperimen dengan menggunakan model AI mungkin menghasilkan interpretasi yang kompleks dan memerlukan pemahaman yang mendalam tentang teori dan metode yang digunakan. Kesalahan interpretasi dapat terjadi jika tidak memperhitungkan faktor-faktor kompleks seperti variabilitas alami dalam data atau asumsi yang tidak tepat tentang hubungan antara variabel yang diamati.
4. **Pertimbangan Etika:** Penggunaan teknologi AI dalam penelitian juga perlu memperhatikan pertimbangan etika yang relevan, terutama terkait dengan privasi data, keamanan informasi, dan dampak sosial yang mungkin timbul dari hasil penelitian tersebut. Perlindungan privasi subjek penelitian dan transparansi dalam penggunaan teknologi AI adalah hal-hal yang penting untuk diperhatikan.

Sumber/Alamat Web:
https://chat.openai.com/c/5f6177bb-a8f5-4853-b2cd-4ca1cb908157